

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE - RENEWAL

PERMITTEE

Buckeye Terminals, LLC, Peoria Terminal
Attn: Jason L. Mengel
Post Office Box 368, 5002 Buckeye Road
Emmaus, Pennsylvania 18049

Application No.: 98070004

I.D. No.: 143810AAF

Applicant's Designation: PEORIATERMINAL

Date Received: August 30, 2004

Subject: Bulk Products Terminal

Date Issued: March 20, 2007

Expiration Date: March 20, 2012

Location: 14410 North Galena Road, Chillicothe, Peoria County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of a bulk products terminal including 12 storage tanks with a loading rack controlled by an enclosed flare as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
 - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year of volatile organic material 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs. As a result, the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit.
 - ii. This permit is issued based upon the plant not being subject to the requirements of 40 CFR 63 Subpart R: National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations. This is consequence of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs 25 tons per year.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.
- 2a. This permit is issued based upon storage tank 3 not being subject to the requirements of New Source Performance Standard (NSPS), 40 CFR 60, Subparts A and Kb, Standards of Performance for Volatile Organic Liquid Storage Tanks (Including Petroleum Liquid Storage Tanks). This is consequence of the federally enforceable operating limitation, which restrict storage tank 3 to only storing liquids with a maximum true vapor pressure of less than 3.5 kPa (for tanks with a capacity greater than or equal to 151 m³).

- b. Storage Tanks 1 through 9 are subject to a New Source Performance Standard (NSPS), 40 CFR 60, Subparts A and Kb, Standards of Performance for Volatile Organic Liquid Storage Tanks (Including Petroleum Liquid Storage Tanks). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- c. Pursuant to 40 CFR 60.112b(a)(1), the Permittee shall equip Storage Tanks 1, 2, 4, 5, 6, 7, 8 and 9 with a fixed roof in combination with an internal floating roof meeting the following specifications:
 - i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage tank 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 tank 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 continuous and shall be accomplished as rapidly as possible.
 - ii. Each internal floating roof shall be equipped with the following closure devices between the wall of the storage tank 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. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
 - C. 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.
 - iii. Each opening in a non-contact 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.
 - iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped

with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

- v. Automatic bleeder vents shall be equipped with a gasket and 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.
 - vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
 - vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
 - viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
 - ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- d. The Permittee shall not store a VOL that, as stored, has a maximum true vapor pressure greater than or equal to 76.6 kPa (11.1 psi). Such storage shall require each such storage tank to be equipped with a closed vent system and control device, as specified in 40 CFR 60.112b(a)(3). Such a modification shall require a revision of the construction and operating permits.
- 3a. The loading racks are subject to a New Source Performance Standard (NSPS), 40 CFR 60, Subparts A and XX, Standards of Performance for Bulk Gasoline Terminals. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Pursuant to 40 CFR 60.502, on and after the date on which 40 CFR 60.8(a) requires a performance test to be completed, the Permittee shall comply with the following requirements for the loading rack:
- i. Each loading rack shall be equipped with a vapor collection system designed to collect the total organic compounds vapors displaced from tank trucks during product loading, and vent them to an enclosed flare.
 - ii. The emissions to the atmosphere from the vapor collection system with enclosed flare, due to the loading of liquid product into gasoline tank trucks, are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded.

- iii. The vapor collection system shall be designed to prevent any total organic compounds vapors collected at one loading rack from passing to another loading rack.
- iv. Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:
 - A. The Permittee shall obtain the vapor tightness documentation described in 40 CFR 60.505(b) for each gasoline tank truck that is to be loaded at the gasoline loading racks.
 - B. The Permittee shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the gasoline loading racks.
 - C. The Permittee shall cross-check each tank identification number obtained above with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded.
 - D. The Permittee shall notify the gasoline tank truck owner or operator, of each non-vapor-tight gasoline tank truck loaded at the loading rack within 3 weeks after the loading has occurred.
 - E. The Permittee shall take steps assuring that the non-vapor-tight gasoline tank truck will not be reloaded at the loading rack until vapor tightness documentation for that tank is obtained.
- v. The Permittee shall act to assure that loading of gasoline tank trucks at the loading rack are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.
- vi. The Permittee 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 at the gasoline loading racks. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks.
- vii. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 kPa (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures that are specified in 40 CFR 60.503(d).

- viii. No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 kPa (450 mm of water).
 - ix. Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded, and the source of the leak repaired within 15 calendar days after it is detected.
- 4a. Pursuant to 35 Ill. Adm. Code 215.122(a), no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading facility having through-put of greater than 151 cubic meters per day (40,000 gallons/day) into any railroad tank car, tank truck or trailer unless such loading facility is equipped with submerged loading pipes, submerged fill, or a device that is equally effective in controlling emissions and is approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201
- b. Pursuant to 35 Ill. Adm. Code 215.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gallons), unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201 or unless such tank is a pressure tank as described in Section 218.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 218.121(b)(2).
- c. Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 215 Subpart K: Use of Organic Material, shall apply only to photochemically reactive material.
5. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

- 6a. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Throughput (Gal/Year)</u>	<u>Volatile Organic Material Emissions (Tons/Mo)</u>	<u>Emissions (Tons/Yr)</u>
Storage Tanks	300,000,000	1.92	23.03
Loading Rack	300,000,000	3.66	43.92
Total Fugitives	300,000,000	1.36	16.29

These limits are based on standard emission factors (AP-42, TANKS 3.1) using the maximum throughput and the respective vapor pressure of the materials to be stored. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. Emissions and operation of all equipment shall not exceed the following limits:

<u>HAP Content (% of VOM)</u>		<u>HAP Emissions (Tons/Year)</u>	
<u>Individual</u>	<u>Total</u>	<u>Individual</u>	<u>Total</u>
4.43%	6.36%	3.69	5.29

These limits are based on the HAP content from a USEPA document (Radian 8/10/93). Compliance with annual limits shall be determined from a running total of 12 months of data.

7. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a Clean Air Act Permit Program permit from the Illinois EPA.
8. The Permittee shall meet the following requirements for Storage Tanks 1, 2, 4, 5, 6, 7, 8 and 9. Pursuant to 40 CFR 60.113b(a), after installing the control equipment required to meet 40 CFR 60.112b(a)(1), (permanently affixed roof and internal floating roof), the Permittee shall:
- Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage tank with VOL. 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 tank.
 - For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the

primary seal or the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) 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 surface of the VOL inside the storage vessel, 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 or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph 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 Illinois EPA or USEPA in the inspection report required in 40 CFR 60.115b(a)(3). 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.

- c. For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(1)(ii)(B):
 - i. Visually inspect the vessel as specified in 40 CFR 60.113b(a)(4) at least every 5 years; or
 - ii. Visually inspect the vessel as specified in 40 CFR 60.113b(a)(2).
 - d. 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 and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the 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 or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in 40 CFR 60.113b(a)(2) and (a)(3(ii)) and at intervals no greater than 5 years in the case of vessels specified in 40 CFR 60.113b(a)(3)(i).
- 9a. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not

subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

- b. The Permittee shall keep copies of the following records required by the NSPS for the life of the source:
 - i. The Permittee shall keep readily accessible records showing the dimensions and an analysis demonstrating the capacity, of each storage tank, as specified in 40 CFR 60.110b(a).
 - ii. The Permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period of each storage tank.
 - iii. The tank truck vapor tightness documentation required in 40 CFR 60.502(e)(1) shall be kept on file at the terminal in a permanent form available for inspection.
 - iv. The documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by 40 CFR 60, Appendix A, Method 27. This documentation shall include, as a minimum, the following information:
 - A. Test title: Gasoline Delivery Tank Pressure Test-EPA Reference Method 27.
 - B. Tank owner and address.
 - C. Tank identification number.

- D. Testing location.
 - E. Date of test.
 - F. Tester name and signature.
 - G. Witnessing inspector, if any: name, signature, and affiliation.
 - H. Test results: actual pressure change in 5 minutes, mm of water (average for 2 runs).
- v. A record of each monthly leak inspection as required under 40 CFR 60.502(j) shall be kept on file at the terminal for at least 2 years. Inspection records shall include, as a minimum, the following information:
- A. Date of inspection.
 - B. Findings (may indicate no leaks discovered; or location, nature, and severity of each leak).
 - C. Leak determination method.
 - D. Corrective actions (date each leak repaired; reasons for any repair interval in excess of 15 days).
 - E. Inspector name and signature.
- vi. The Permittee shall keep documentation of all notifications required under 40 CFR 60.502(e)(4) on file at the terminal for at least 3 years.
- c. The Permittee shall maintain monthly records of the following items:
- i. Name of solvents contained in each tank, the vapor pressures and throughputs;
 - ii. Storage tank throughput (gallons/month);
 - iii. Name and amount of VOM and HAP containing materials used including VOM and HAP content (% by weight and lbs/month);
 - iv. Process equipment material throughput (tons/month);
 - v. Monthly and annual emissions of NO_x, PM, PM₁₀, VOM, and HAPs (tons/month and tons/year) with supporting calculations in order to demonstrate compliance with the emission limitations included within this Permit.

- vi. Maintain a leak and repair log including date and time of preventative maintenance, date and time of leak, and date, time, and nature of corrective actions take; and
10. 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.
11. The Permittee of shall keep records and furnish reports as required by 40 CFR 60.115b(a). After installing control equipment in accordance with 40 CFR 60.112b(a)(1) (fixed roof and internal floating roof), the Permittee shall meet the following requirements:
- a. Furnish the Illinois EPA with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).
 - b. Keep a record of each inspection performed as required by 40 CFR 60.113b (a)(1), (a)(3), and (a)(4). Each record shall identify the storage tank on which the inspection was performed and shall contain the date the tank was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
 - c. If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the Illinois EPA within 30 days of the inspection. Each report shall identify the storage tank, the nature of the defects, and the date the storage tank was emptied or the nature of and date the repair was made.
 - d. After each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the Illinois EPA within 30 days of the inspection. The report shall identify the storage tank and the reason it did not meet the specifications of 40 CFR 61.112b(a)(1) or 40 CFR 60.113b(a)(3) and list each repair made.
- 12a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the

recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or deviation and efforts to reduce emissions and future occurrences.

- b. The Permittee shall notify the Illinois EPA within 30 days, whenever the maximum true vapor pressure of the liquid, in any storage tank, has exceeded the respective allowable true vapor pressure values for each volume range, as specified in the NSPS.
 - c. The Permittee shall notify the Illinois EPA of any new materials stored in the tanks if the vapor pressure exceeds that listed in above conditions.
13. Two (2) 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 (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

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

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

ECB:ELK:psj

cc: IEPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emission from the bulk gasoline terminal operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario that results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, e.g., 100 tons per year of VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP at which this source would be considered a major source for purposes of the Clean Air Act Permit Program.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)					
	<u>CO</u>	<u>NO_x</u>	<u>PM₁₀</u>	<u>VOM</u>	<u>Single HAP</u>	<u>Combined HAPs</u>
Storage Tanks				23.03	*	*
Loading Racks				43.92	*	*
Total Fugitives	0	0		16.29	*	*
Total Emissions				82.61	< 10	< 25

* HAP emissions from all operations are limited to < 10 tpy for single HAP and < 25 tpy for combined HAPs

ELK:psj