

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Marathon Petroleum Company LLC  
Attn: HES & S Compliance Manager  
539 South Main Street  
Findlay, Ohio 45840

Application No.: 05070020

I.D. No.: 119050AAD

Applicant's Designation:

Date Received: July 8, 2005

Subject: Petroleum Terminal

Date Issued: September 4, 2009

Expiration Date: September 4, 2014

Location: 1402 South Delmar, Hartford, Madison County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Bulk Petroleum Terminal Comprised of:

- One (1) Two-Bay Truck Loading Rack Controlled by a Vapor Combustion Unit (VCU);
- One (1) 3,000 bbl Gasoline/Ethanol/Distillate/Transmix Storage Tank with Internal Floating Roof (Tank O-3-2);
- One (1) 20,000 bbl Gasoline/Ethanol/Distillate/Transmix Storage Tank with Internal Floating Roof (Tank 20-4);
- Three (3) 42,00 bbl Gasoline/Ethanol/Distillate/Transmix Storage Tanks with Internal Floating Roofs (Tanks 42-3, 42-5, 42-7);
- One (1) 120,000 bbl Gasoline/Ethanol/Distillate/Transmix Storage Tank with Internal Floating Roof (Tank 120-1);
- One (1) 5,000 gal Diesel Additive Storage Tank (Tank AA-8-1);
- One (1) 7,900 gal Gasoline Additive Storage Tank (Tank AA-8-2); and
- One (1) 19,400 gal Transmix Storage Tank (T-2);

pursuant to 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 to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Volatile Organic Material (VOM) and 10 tons/year for any single hazardous air pollutant (HAP) and 25 tons/year for 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. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. For purposes of this FESOP, Marathon Petroleum Company LLC is not considered to be a single source with Marathon Ashland Pipeline LLC, I.D. No. 119115AAJ, located at Foot of 7th Street, Hartford and South 6th Street, Wood River. These two locations (combined) do not meet the definition of either "source" or "support facility" under Section 39.5(1) of the Illinois Environmental Protection Act (Act).

- c. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
  - d. This permit supersedes all operating permit(s) for this location.
- 2a. Tank 120-1 is subject to New Source Performance Standards (NSPS) for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984, 40 CFR 60, Subparts A and Ka. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Pursuant to 40 CFR 60.112a(a)(2), the owner or operator of each storage vessel to which 40 CFR 60 Subpart Ka applies which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, 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. Automatic bleeder vents are to be closed at all times when the cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.
- 3a. Tanks O-3-2, 20-4, and 42-3, 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 Subparts A and Kb. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Pursuant to 40 CFR 60.112b(a)(1), the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m<sup>3</sup> (39,889.67 gallons) containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa (0.75 psia) but less than 76.6 kPa (11.1 psia) or with a design capacity greater than or equal to 75 m<sup>3</sup> (19,815.75 gallons) but less than 151 m<sup>3</sup> (39,889.67 gallons) containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa (4.00 psia) but less than

76.6 kPa (11.11 psia), shall equip each storage vessel 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 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 continuous and shall be accomplished as rapidly as possible.
- ii. 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 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 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.
- 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.
4. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- 5a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meters (1000 feet) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other

similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

6. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.
- 7a. Pursuant to 35 Ill. Adm. Code 219.121(b)(1), no person shall cause or allow the storage of any volatile petroleum liquid (VPL) with a vapor pressure of 10.34 kPa (1.5 psia) or greater at 294.3°K (70°F) or any gaseous organic material 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 which rests on the surface of the VPL 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 VPL 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. Pursuant to 35 Ill. Adm. Code 219.122(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 area 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 area is equipped with submerged loading pipes or a device that is equally effective in controlling emissions and is approved by the Agency according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 219.108.
- c. Pursuant to 35 Ill. Adm. Code 219.122(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 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 219.108, or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 219.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 219.121(b)(2).
- d. Pursuant to 35 Ill. Adm. Code 219.123(b), subject to 35 Ill. Adm. Code 219.123(a) no owner or operator of a stationary storage tank shall cause or allow the storage of any VOL in the tank unless:
  - i. The tank is equipped with one of the vapor loss control devices specified in 35 Ill. Adm. Code 219.121(b);
  - ii. There are no visible holes, tears or other defects in the seal or any seal fabric or material of any floating roof;

- iii. All openings of any floating roof deck, except stub drains, are equipped with covers, lids or seals such that:
  - A. The cover, lid or seal is in the closed position at all times except when petroleum liquid is transferred to or from the tank;
  - B. Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and
  - C. 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;
- e. Pursuant to 35 Ill. Adm. Code 219.141(a), no person shall use any single or multiple compartment effluent water separator which receives effluent water containing 757 liters/day (200 gallons/day) or more of organic material from any equipment processing, refining, treating, storing or handling organic material unless such effluent water separator is equipped with air pollution control equipment capable of reducing by 85 percent or more the uncontrolled organic material emitted to the atmosphere. Exception: If no odor nuisance exists the limitations of this subsection shall not apply if the vapor pressure of the organic material is below 17.24 kPa (2.5 psia) at 294.3°K (70°F).
- f. Pursuant to 35 Ill. Adm. Code 219.142, no person shall cause or allow the discharge of more than 32.8 ml (2 cu in) of VOL with vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) into the atmosphere from any pump or compressor in any 15 minute period at standard conditions.
- g. Pursuant to 35 Ill. Adm. Code 219.301, 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 unit, except as provided in 35 Ill. Adm. Code 219.302, 219.303, 219.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 219 Subpart G shall apply only to photochemically reactive material.
- h. Pursuant to 35 Ill. Adm. Code 219.582(a), no person shall cause or allow the transfer of gasoline into any delivery vessel from any bulk gasoline terminal unless:
  - i. The bulk gasoline terminal is equipped with a vapor control system that limits emission of VOM to 80 mg/liter (0.00067 lbs/gallon) of gasoline loaded;
  - ii. The vapor control system is operating and all vapors displaced in the loading of gasoline to the delivery vessel are vented only to the vapor control system;

- iii. There is no liquid drainage from the loading device when it is not in use;
  - iv. All loading and vapor return lines are equipped with fittings which are vapor tight; and
  - v. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 Ill. Adm. Code 219.584(b) or (d); or, if the terminal is driver-loaded, the terminal owner or operator shall be deemed to be in compliance with 35 Ill. Adm. Code 219.582 when terminal access authorization is limited to those owners and/or operators of delivery vessels who have provided a current certification as required by 35 Ill. Adm. Code 219.584(c)(3).
- 8a. Pursuant to 35 Ill. Adm. Code 219.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 219.122 shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
- b. Pursuant to 35 Ill. Adm. Code 219.123(a)(5), the requirements of 35 Ill. Adm. Code 219.123(b) shall not apply to any stationary storage tank subject to new source performance standards for storage vessels of petroleum liquid, 40 CFR 60, as regulations promulgated by the U.S. Environmental Protection Agency under Section 111 of the Clean Air Act (42 USC 7411), as amended.
- 9a. Pursuant to 35 Ill. Adm. Code 219.582(b)(1), the operator of a bulk gasoline terminal shall operate the terminal vapor collection system and gasoline loading equipment in a manner that prevents:
- i. Gauge pressure from exceeding 18 inches of water and vacuum from exceeding 6 inches of water as measured as close as possible to the vapor hose connection; and
  - ii. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B; and
  - iii. Avoidable leaks of liquid during loading or unloading operations.
- b. Pursuant to 35 Ill. Adm. Code 219.582(b)(2), the operator of a bulk gasoline terminal shall provide a pressure tap or equivalent on the terminal vapor collection system in order to allow the determination of compliance with 35 Ill. Adm. Code 219.582(d)(1)(A); and
- c. Pursuant to 35 Ill. Adm. Code 219.582(b)(3), the operator of a bulk gasoline terminal shall within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA repair and retest a vapor collection system which exceeds the limits of 35 Ill. Adm. Code 219.582(c)(1)(A) or (B).

- d. Pursuant to 35 Ill. Adm. Code 219.585(a), no person shall sell, offer for sale, dispense, supply, offer for supply, or transport for use in Illinois gasoline whose Reid vapor pressure exceeds the applicable limitations set forth in 35 Ill. Adm. Code 219.585(b) and (c) below during the regulatory control periods, which shall be June 1 to September 15.
  - e. Pursuant to 35 Ill. Adm. Code 219.585(b), the Reid vapor pressure of gasoline, a measure of its volatility, shall not exceed 7.2 psi (49.68 kPa) during the regulatory control period in 1995 and each year thereafter.
  - f. Pursuant to 35 Ill. Adm. Code 219.585(c), the Reid vapor pressure of ethanol blend gasolines having at least nine percent (9%) but not more than ten percent (10%) ethyl alcohol by volume of the blended mixture, shall not exceed the limitations for gasoline set forth in 35 Ill. Adm. Code 219.585(b) by more than 1.0 psi (6.9 kPa). Notwithstanding this limitation, blenders of ethanol blend gasolines whose Reid vapor pressure is less than 1.0 psi above the base stock gasoline immediately after blending with ethanol are prohibited from adding butane or any product that will increase the Reid vapor pressure of the blended gasoline.
- 10a. In the event that the operation of this source 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.
- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the vapor combustion unit (VCU) and the backup portable control devices such that the vapor combustion unit and backup portable control devices are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
  - c. The vapor combustion unit (VCU) shall be designed for and operated with no visible emissions and with a flame present at all times, except during the loading of distillate product allowed in Condition 12(a)(i).
- 11a. Emissions and operation of the loading rack with VCU control shall not exceed the following:
- i. Material throughput:

<u>Material</u>	<u>Throughput</u>	
	<u>(Gallons/Month)</u>	<u>(Gallons/Year)</u>
Transmix, Ethanol, & Gasoline	37,000,000	370,000,000
Distillate (Controlled)	53,000,000	530,000,000
Distillate (Uncontrolled)	20,000	200,000

- ii. VOM and HAP emissions from the loading rack:

<u>Material</u>	<u>VOM Emissions</u>			<u>Total HAP Emissions</u>		
	<u>(lb/10<sup>3</sup> gal)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(lb/10<sup>3</sup> gal)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Transmix, ethanol, & gasoline	0.292	5.40	54.02	0.015	0.28	2.81
Distillate (controlled)	0.0007	0.02	0.19	0.000012	0.01	0.01
Distillate (uncontrolled)	0.014	0.01	<u>0.01</u>	0.000237	0.01	<u>0.01</u>
		Totals:	54.22			2.83

These limits are based on the maximum material throughput, standard emission factors (Table 5.2-5, AP-42, Fifth Edition, Volume I, July 2008), a vendor guaranteed emissions for the vapor combustion unit (VCU) of 35 mg VOM/1 gallon of gasoline loaded, and a control efficiency of 95% for the VCU.

- iii. The emissions of combustion related pollutants from the VCU shall not exceed the following:

<u>Pollutant</u>	<u>VCU Emission Factor</u>	<u>Emissions</u>	
	<u>(lbs/mmBtu)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
CO	0.37	1.75	17.54
NO <sub>x</sub>	0.068	0.32	3.22

These limits are based on the maximum 900,000,000 gallon/year of product throughput for the loading rack, firing rate of the VCU (5 lb/10<sup>3</sup> gallons of gasoline ducted to the flare, gasoline heat content of 130,000 Btu/gal, and a gasoline density of 6.17 lbs/gallon), and standard emissions factors (Table 13.5, AP-42, Fifth edition, September 1991).

- b. Truck Loading Fugitive Losses shall not exceed 20.07 tons VOM/year. Gasoline tank truck fugitive emissions are based on emission rate of 13 mg/L (0.1085 lb VOC / 1000 gal loaded).
- c. Emissions and operation of the storage tanks shall not exceed the following:

## i. Material throughput:

<u>Tank</u>	<u>Materials</u>	<u>Throughput</u>	
		<u>(10<sup>3</sup> Gal/Mo)</u>	<u>(10<sup>3</sup> Gal/Yr)</u>
Tank O-3-2, Tank 20-4, Tank 42-3, Tank 42-5, Tank 42-7, Tank 120-1, Landing Losses, Totes, Tank AA-8-1, Tank AA-8-2, Tank T-2, Frac Tanks	Gasoline, distillate, ethanol, transmix, additives and dyes	164,200	985,4000

## ii. VOM and HAP emissions from the storage tanks:

<u>Tank</u>	<u>VOM Emissions</u>		<u>Total HAP Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Tank O-3-2	3.79	22.74	0.20	1.82
Tank 20-4				
Tank 42-3				
Tank 42-5				
Tank 42-7				
Tank 120-1				
Landing Losses				
Totes				
Tank AA-8-1				
Tank AA-8-2				
Tank T-2				
Frac Tanks				

These limits are based on maximum material throughput and standard emission estimation formulas and factors (Section 7.1, AP 42, Fifth Edition, Volume I November 2006) or the TANKS Emissions Estimation Software (Version 4.09D, October 3, 2005).

- d. Fugitive emissions of VOM from leaking components (i.e., valves, flanges, pumps, compressor, etc.), vacuum trucks and water treatment shall not exceed 0.21 tons/month and 2.05 tons/year.
- e. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from this source shall be less than 0.79 tons/month and 7.9 tons/year of any single HAP and 1.99 tons/month and 19.9 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements of Section 112(g) of the Clean Air Act.
- f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

- 13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
  - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Condition 14 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
14. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 15a. Pursuant to 40 CFR 60.113b(a)(1), after installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel 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 vessel.

- b. Pursuant to 40 CFR 60.113b(a)(2), after installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall 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) 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. Pursuant to 40 CFR 60.113b(a)(3), after installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall 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. Pursuant to 40 CFR 60.113b(a)(4), after installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or 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 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).

- 16a. Pursuant to 35 Ill. Adm. Code 219.128(c)(1), the owner or operator of each vessel storing a mixture of indeterminate or variable composition shall Prior to the initial filling of the vessel, the maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in 35 Ill. Adm. Code 219.128(b).
- b. Pursuant to 35 Ill. Adm. Code 219.128(c)(2), the owner or operator of each vessel storing a mixture of indeterminate or variable composition shall For vessels in which the vapor pressure of the anticipated liquid composition is 0.5 psia or greater but less than 0.75 psia, an initial physical test of the vapor pressure is required; a physical test at least once every 6 months thereafter is required as determined by the following methods:
  - i. ASTM Method D2879-83;
  - ii. ASTM Method D323-82; or
  - iii. As measured by an appropriate method approved by the Illinois EPA.
- 17a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
18. Pursuant to 40 CFR 60.115a(a), except as provided in 40 CFR 60.115a(d), the owner or operator subject to 40 CFR 60 Subpart Kb shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.
- 19a. Pursuant to 40 CFR 60.115b(a)(2), after installing control equipment in accordance with 40 CFR 60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall keep a record of each inspection

- performed as required by 40 CFR 60.113b(a)(1), (a)(2), (a)(3), and (a)(4). 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).
- b. Pursuant to 40 CFR 60.116b (b), the owner or operator of each storage vessel as specified in 40 CFR 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
20. 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.
21. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 22a. Pursuant to 35 Ill. Adm. Code 219.128(a), except as provided in 35 Ill. Adm. Code 219.128(d), the owner or operator of each storage vessel with a design capacity greater than or equal to 40,000 gallons storing a liquid with a maximum true vapor pressure that is normally less than

0.75 psia shall notify the Illinois EPA within 30 days when the maximum true vapor pressure of the liquid exceeds 0.75 psia.

- b. Pursuant to 35 Ill. Adm. Code 219.585(h)(1), each refiner or supplier that distributes gasoline or ethanol blends shall:
  - i. During the regulatory control period, state that the Reid vapor pressure of all gasoline or ethanol blends leaving the refinery or distribution facility for use in Illinois complies with the Reid vapor pressure limitations set forth in 35 Ill. Adm. Code 219.585(b) and (c). Any source receiving this gasoline shall be provided with a copy of an invoice, bill of lading, or other documentation used in normal business practice stating that the Reid vapor pressure of the gasoline complies with the State Reid vapor pressure standard.
  - ii. Maintain records for a period of three years on the Reid vapor pressure, quantity shipped and date of delivery of any gasoline or ethanol blends leaving the refinery or distribution facility for use in Illinois. The Illinois EPA shall be provided with copies of such records if requested.
- c. Pursuant to 35 Ill. Adm. Code 219.585(h)(2), records and reports required by 35 Ill. Adm. Code 219.585(h)(2)(A) and (h)(2)(B) below shall be made available to the Illinois EPA upon request. During the regulatory control period, the owner or operator of a gasoline dispensing operation subject to 35 Ill. Adm. Code 219.585 shall:
  - i. Retain a copy of an invoice, bill of lading, or other documentation used in normal business practice stating that the Reid vapor pressure of the gasoline complies with the State Reid vapor pressure standard as provided in 35 Ill. Adm. Code 219.585(h)(1)(A) above; and
  - ii. Maintain records for a period of three years on the Reid vapor pressure, quantity received and date of delivery of any gasoline or ethanol blends arriving at the gasoline operation.
- 23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
  - i. Records addressing use of good operating practices for the vapor combustion unit (VCU) and the backup portable control devices:
    - A. Records for periodic inspection of the vapor combustion unit (VCU) and the backup portable control devices with date, individual performing the inspection, and nature of inspection; and
    - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

- ii. Material type and throughput of each storage tank (gallons/month and gallons/year);
  - iii. Material type and throughput of the loading rack (gallons/month and gallons/year);
  - iv. Amount of distillate product loaded without the use of the vapor combustion unit (VCU) or the backup portable control devices; (gallons/month and gallons/year);
  - v. Monthly and annual CO, NO<sub>x</sub>, VOM and HAP emissions, with supporting calculations (tons/month and tons/year).
- b. 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.
- 24a. Pursuant to 40 CFR 60.113b(a)(5), after installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall notify the Illinois EPA or USEPA in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(a)(1) and (a)(4) to afford the Illinois EPA or USEPA the opportunity to have an observer present. If the inspection required by 40 CFR 60.113b(a)(4) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Illinois EPA or 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 Illinois EPA or USEPA at least 7 days prior to the refilling.
- b. Pursuant to 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 owner or operator shall meet the following requirements.
- i. Furnish the Illinois EPA or USEPA 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).

- ii. 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 or 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 of and date the repair was made.
  - iii. 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 or USEPA within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR 60.112b (a)(1) or 40 CFR 60.113b (a)(3) and list each repair made.
25. Pursuant to 35 Ill. Adm. Code 219.123(b), Subject to 35 Ill. Adm. Code 219.123(a) no owner or operator of a stationary storage tank shall cause or allow the storage of any VOL in the tank unless:
- a. Routine inspections of floating roof seals are conducted through roof hatches once every six months;
  - b. A complete inspection of the cover and seal of any floating roof tank is made whenever the tank is emptied for reasons other than the transfer of petroleum liquid during the normal operation of the tank, or whenever repairs are made as a result of any semi-annual inspection or incidence of roof damage or defect; and
26. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 27a. 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 or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.

- b. 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  
209 Mall Street  
Collinsville, Illinois 62234

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

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

Date Signed: \_\_\_\_\_

ECB:BDB:psj

cc: Illinois EPA, FOS Region 3  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from a 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 which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels (e.g., 100 tons/year of VOM, 10 tons/year for a single HAP, and 25 tons/year for any combination of such HAPs) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

<u>Process</u>	E M I S S I O N S (Tons/Year)				
	<u>CO</u>	<u>NO<sub>x</sub></u>	<u>VOM</u>	<u>Single HAPs</u>	<u>Total HAPs</u>
Truck loading Rack			54.22		2.83
Truck Loading Fugitive Losses			20.07		
Vapor Combustion Unit (VCU)	17.54	3.22			
Storage Tanks			22.74		1.82
Leaking Components, Vacuum					
Trucks and Water Treatment	-----	-----	2.05	-----	-----
Total	17.54	3.22	99.08	7.9	19.9

BDB:psj