

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Marathon Pipe Line, LLC
Attn: Gary Wilson
539 South Main Street
Findlay, Ohio 54840

<u>Application No.:</u> 73021439	<u>I.D. No.:</u> 121810AAB
<u>Applicant's Designation:</u>	<u>Date Received:</u> June 15, 2005
<u>Subject:</u> Crude Oil Transportation Station	
<u>Date Issued:</u> January 30, 2012	<u>Expiration Date:</u> January 30, 2017
<u>Location:</u> 8762 US Highway 51, Vernon, Marion County	

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

Eight (8) 150,000-bbl External Floating Roof Crude Oil Storage Tanks (11, 12, 13, 637, 1281, 1282, 1284, and 1285);
Two (2) 268,000-bbl External Floating Roof Crude Oil/Gas Oil Storage Tanks (638 and 657)
Two (2) Internal Floating Roof Crude Oil Storage Tanks (1301 and 1302);
One (1) 6,000 Gallon Fixed Roof Flow Improver Additive Storage Tank;
Nine (9) Electric Transfer Pumps;
One (1) 2,590 Gallon Under Ground Sump Recovery Tank; and
One (1) 260 Gallon Above Ground Gasoline Tank

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:
 - i. 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 of any combination of such HAPs). As a result, the source is excluded from the requirements 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.
 - ii. To establish 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 so that the source

is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Organic Liquids Distribution (Non-Gasoline), 40 CFR 63 Subpart EEEE.

- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
 - c. This permit supersedes all operating permits issued for this location.
- 2a. Storage Tanks 637, 638, and 657 are subject to the New Source Performance Standards (NSPS) for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 11, 1973 and prior to May 19, 1978, 40 CFR 60 Subparts A and K. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 60.110(a), except as provided in 40 CFR 60.110(b), the affected facility to which 40 CFR 60 Subpart K applies is each storage vessel for petroleum liquids which has a storage capacity greater than 151,412 liters (40,000 gallons).
- b. Pursuant to 40 CFR 60.112(a)(1), the owner or operator of any storage vessel to which 40 CFR 60 Subpart K applies shall store petroleum liquids as follows: If the true vapor pressure of the petroleum liquid, as stored, is equal to or greater than 78 mm Hg (1.5 psia) but not greater than 570 mm Hg (11.1 psia), the storage vessel shall be equipped with a floating roof, a vapor recovery system, or their equivalents.
- 3a. Storage Tanks 11, 1301, and 1302 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 the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 60.110b(a), except as provided in 40 CFR 60.110b(b), the affected facility to which 40 CFR 60 Subpart Kb applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m³) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.
- b. Pursuant to 40 CFR 60.112b(a), the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ (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 m³ (19,815.75 gallons) but less than 151 m³ (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 one of the following:

- i. A fixed roof in combination with an internal floating roof meeting the following specifications:
 - A. 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.
 - B. 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:
 - I. 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;
 - II. 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; and
 - III. 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.
 - C. 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.
 - D. 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.

- E. 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.
 - F. 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.
 - G. 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.
 - H. 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.
 - I. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- ii. An external floating roof. An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Each external floating roof must meet the following specifications
- A. Each 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.
 - I. The primary seal shall be either a mechanical shoe seal or a liquid-mounted 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.
 - II. 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).
 - B. 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.

- C. 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.
- 4. The 250 gallon gasoline storage tank is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Category: Gasoline Dispensing Facilities, 40 CFR 63, Subparts A and CCCCC. The Illinois EPA is administrating the NESHAP on behalf of USEPA under a delegation agreement.
- 5a. Storage Tanks 11, 12, 13, 637, 638, 657, 1281, 1282, 1284, 1285, 1301, and 1302 are subject to 35 Ill. Adm. Code 215.121 (Storage Containers of VPL). Pursuant to 35 Ill. Adm. Code 215.121(b)(1), no person shall cause or allow the storage of any volatile petroleum liquid 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 gal) capacity unless such tank, reservoir or other container is designed and equipped with 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. 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 throughput 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.

- c. 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 liters (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 35 Ill. Adm. Code 215.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 215.121(b)(2).
 - d. Pursuant to 35 Ill. Adm. Code 215.142, no person shall cause or allow the discharge of more than 32.8 ml (2 cu in) of volatile organic liquid 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.
- 6a. This permit is issued based upon the storage tanks at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Organic Liquids Distribution (Non-Gasoline), 40 CFR 63 Subpart EEEE, because the organic liquids distribution (OLD) (non-gasoline) operation is not located at, or is part of, a major source of HAP emissions.
- b. This permit is issued based on the storage tanks at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities, 40 CFR 63 Subpart BBBBBB, because the source is not a bulk gasoline terminal, pipeline breakout station, pipeline pumping station, or bulk gasoline plant.
- 7a. Pursuant to 35 Ill. Adm. Code 215.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 215.122 shall only apply to the loading of volatile organic liquid 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 215.123(a), the requirements of 35 Ill. Adm. Code 215.123(b) (Petroleum Liquid Storage Tanks) shall not apply to any stationary storage tank:
 - i. With a capacity of less than 151.42 cubic meters;
 - ii. 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, as amended; or
 - iii. In which volatile petroleum liquid is not stored.

- c. Pursuant to 35 Ill. Adm. Code 215.124(b), 35 Ill. Adm. Code 215.124(a) (External Floating Roofs) does not apply to any stationary storage tank equipped with an external floating roof:
 - i. Exempted under 35 Ill. Adm. Code 215.123(a)(2) through 215.123(a)(6);
 - ii. Of welded construction equipped with a metallic-type shoe seal having a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal);
 - iii. Of welded construction equipped with a metallic-type shoe seal, a liquid-mounted foam seal, or a liquid-mounted liquid-filled-type seal, or other closure device of equivalent control efficiency approved by the Illinois EPA in which a petroleum liquid with a true vapor pressure less than 27.6 kPa (4.0 psia) at 294.3°K (70°F) is stored; or
 - iv. Used to store crude oil.
- 8. 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.
- 9a. Pursuant to 40 CFR 63.6(e)(1)(i), at all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation 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, review of operation and maintenance procedures (including the startup, shutdown,

and malfunction plan required in 40 CFR 63.6(e)(3)), review of operation and maintenance records, and inspection of the source.

- b. Pursuant to 40 CFR 63.6(e)(1)(ii), malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.
- 10a. Pursuant to 40 CFR 63.11116(a), the Permittee must 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:
- i. Minimize gasoline spills;
 - ii. Clean up spills as expeditiously as practicable;
 - iii. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasket seal when not in use; and
 - iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- b. Pursuant to 40 CFR 63.11116(c), you must comply with the requirements of 40 CFR 63 Subpart CCCCCC by the applicable dates specified in 40 CFR 63.11113.
- 11a. Pursuant to 35 Ill. Adm. Code 215.123(b), subject to 35 Ill. Adm. Code 215.123(a) no owner or operator of a stationary storage tank shall cause or allow the storage of any volatile petroleum liquid in the tank unless:
- i. The tank is equipped with one of the vapor loss control devices specified in 35 Ill. Adm. Code 215.121(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;
 - iv. Routine inspections of floating roof seals are conducted through roof hatches once every six months;
 - v. 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
12. 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.
- 13a. Emissions from fourteen storage tanks shall not exceed the following limits:

<u>Process</u>	<u>Throughput</u>		<u>VOM Emissions</u>	
	<u>(bbl/Month)</u>	<u>(bbl/Year)</u>	<u>(lb/Month)</u>	<u>(Ton/Year)</u>
Crude Oil Storage	20,000,000	117,000,000	30,100	88.00
Crude Oil/Gas Oil Storage	2,000,000	24,000,000	115	<u>0.70</u>
			Total:	88.70

These limits are based on standard AP-42 emission factors, gas oil having a vapor pressure of less than 0.0001 psia, and standard emission factors and formulas (Section 5.2.2.1.1, AP-42, Fifth Edition, Volume I, June 2008 for the loading losses and Section 7.1, AP-42, Fifth Edition, Volume I, November 2006 or TANKS Emissions Estimation Software, Version 4.09D, October 5, 2006).

- b. Fugitive emissions of volatile organic material (VOM) from pumps, seals, valves, connectors, and other fugitive sources shall not exceed 5 tons/year.
- c. This permit is issued based on negligible emissions of Volatile Organic Material (VOM) from the 6,000 gallon fixed roof flow improver additive storage tank, 2,590 gallon underground sump recovery tank, and 260 gallon above ground gasoline tank. For this purpose, emissions from each emission unit shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- d. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not exceed 0.79 tons/month and 7.9 tons/year of any single HAP and 1.99 tons/month and 19.90 tons/year of any combination of such HAPs. 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 CAAPP permit from the Illinois

EPA and the NESHAP for Organic Liquids Distribution (Non-Gasoline), 40 CFR 63 Subpart EEEEE.

- e. 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 months total).
- 14a. 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 15 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 15a. Pursuant to 35 Ill. Adm. Code 215.127(a), any tests of organic material emissions, including tests conducted to determine control equipment efficiency, shall be conducted in accordance with the methods and procedures specified in 35 Ill. Adm. Code 215.102.
- b. Pursuant to 35 Ill. Adm. Code 215.127(b), upon a reasonable request by the Illinois EPA, the owner or operator of an organic material emission source required to comply with 35 Ill. Adm. Code 215 Subpart B shall conduct emissions testing, at such person's own expense, to demonstrate compliance.

- c. Pursuant to 35 Ill. Adm. Code 215.128(a), any measurements of secondary seal gaps shall be conducted in accordance with the methods and procedures specified in 40 CFR 60, Subpart Kb.
- 16a. 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), each owner or operator shall:
 - i. 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.
 - ii. 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.
 - iii. For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(1)(ii)(B):
 - A. Visually inspect the vessel as specified in 40 CFR 60.113b(a)(4) at least every 5 years; or
 - B. Visually inspect the vessel as specified in 40 CFR 60.113b(a)(2).
 - iv. 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).

- b. Pursuant to 40 CFR 60.113b(b), after installing the control equipment required to meet 40 CFR 60.112b(a)(2) (external floating roof), the owner or operator shall:
 - i. Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency.
 - A. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.
 - B. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.
 - C. If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of 40 CFR 60.113b(b)(1)(i) and (b)(1)(ii).
 - ii. Determine gap widths and areas in the primary and secondary seals individually by the following procedures:
 - A. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.
 - B. Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.
 - C. The total surface area of each gap described in 40 CFR 60.113b(b)(2)(ii) shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

- iii. Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4).
- iv. Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii):
 - A. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm² per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.
 - I. One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.
 - II. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
 - B. The secondary seal is to meet the following requirements:
 - I. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 40 CFR 60.113b(b)(2)(iii).
 - II. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm² per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.
 - III. There are to be no holes, tears, or other openings in the seal or seal fabric.
 - C. If a failure that is detected during inspections required in 40 CFR 60.113b(b)(1) 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(b)(4). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
- v. Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external 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, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL.

- 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 performance evaluations; 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.
- 18a. Pursuant to 40 CFR 60.113(a), except as provided in 40 CFR 60.113(d), the owner or operator subject to 40 CFR 60 Subpart K 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.
- b. Pursuant to 40 CFR 60.113(b), available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Illinois EPA or USEPA specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
- c. Pursuant to 40 CFR 60.113(c), the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).
- d. Pursuant to 40 CFR 60.113(d)(1), each owner or operator of each affected facility which stores petroleum liquids with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia) are exempt from the requirements of 40 CFR 60.113.

- 19a. Pursuant to 40 CFR 60.115b, the owner or operator of each storage vessel as specified in 40 CFR 60.112b(a) shall keep records and furnish reports as required by 40 CFR 60.115b(a), (b), or (c) depending upon the control equipment installed to meet the requirements of 40 CFR 60.112b. The owner or operator shall keep copies of all reports and records required by 40 CFR 60.115b, except for the record required by 40 CFR 60.115b(c)(1), for at least 2 years. The record required by 40 CFR 60.115b(c)(1) will be kept for the life of the control equipment.
- b. 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).
- c. Pursuant to 40 CFR 60.115b(b)(3), after installing control equipment in accordance with 40 CFR 60.112b(a)(2) (external floating roof), the owner or operator shall keep a record of each gap measurement performed as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:
 - i. The date of measurement.
 - ii. The raw data obtained in the measurement.
 - iii. The calculations described in 40 CFR 60.113b (b)(2) and (b)(3).
- d. Pursuant to 40 CFR 60.116b(a), the owner or operator shall keep copies of all records required by 40 CFR 60.116b, except for the record required by 40 CFR 60.116b(b), for at least 2 years. The record required by 40 CFR 60.116b(b) will be kept for the life of the source.
- e. 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.
- f. Pursuant to 40 CFR 60.116b(c), except as provided in 40 CFR 60.116b(f) and (g), the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa 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.

- 20a. Pursuant to 40 CFR 63.7(g)(3), for a minimum of 5 years after a performance test is conducted, the owner or operator shall retain and make available, upon request, for inspection by the Illinois EPA or USEPA the records or results of such performance test and other data needed to determine emissions from an affected source.
- b. Pursuant to 40 CFR 63.10(b)(1), the owner or operator of an affected source subject to the provisions of 40 CFR Part 63 shall maintain files of all information (including all reports and notifications) required by 40 CFR Part 63 recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.
- c. Pursuant to 40 CFR 63.10(b)(2), the owner or operator of an affected source subject to the provisions of 40 CFR Part 63 shall maintain relevant records for such source of:
- i. All required maintenance performed on the air pollution control and monitoring equipment;
 - ii. All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
- c. 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 40 CFR 63.11116(b), you are not required to submit notifications or reports, but you must have records available within 24 hours of a request by the Illinois EPA or USEPA to document your gasoline throughput.

22. Pursuant to 35 Ill. Adm. Code 215.123(b)(6), subject to 35 Ill. Adm. Code 215.123(a) no owner or operator of a stationary storage tank shall cause or allow the storage of any volatile petroleum liquid in the tank unless a record of the results of each inspection conducted under 35 Ill. Adm. Code 215.123(b)(4) or (b)(5) is maintained.

23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

- i. Storage tank throughput of each tank (gallons/day and gallons/year);
- ii. Name or identification of material stored in each tank;
- iii. Name or identification of material and throughput through each loading rack;
- iv. Vapor pressure of each material (psia);
- v. The throughput of the gasoline storage tank (gallons/month and gallons/year); and
- vi. Monthly and annual emissions of VOM and HAPS from the source 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 storage device) 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 60.7(a), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

- i. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

- ii. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.
- 25a. 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) is not planned and the owner or operator could not have known about the inspection 30 days in advance or 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 60.113b(b)(5), after installing the control equipment required to meet 40 CFR 60.112b(a)(2) (external floating roof), the owner or operator shall notify the Illinois EPA or USEPA 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford the Illinois EPA or USEPA the opportunity to have an observer present.
 - c. Pursuant to 40 CFR 60.113b(b)(6)(ii), for all the inspections required by 40 CFR 60.113b(b)(6), the 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 to afford the Illinois EPA or USEPA the opportunity to inspect the storage vessel prior to refilling. If the inspection required by 40 CFR 60.113b(b)(6) 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.

- d. 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.
- e. Pursuant to 40 CFR 60.115b(b), after installing control equipment in accordance with §60.112b(a)(2) (external 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)(2) and 40 CFR 60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).
 - ii. Within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1), furnish the Illinois EPA or USEPA with a report that contains:
 - A. The date of measurement.
 - B. The raw data obtained in the measurement.
 - C. The calculations described in 40 CFR 60.113b(b)(2) and (b)(3).

- iii. After each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4), submit a report to the Illinois EPA or USEPA within 30 days of the inspection. The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair.
 - f. Pursuant to 40 CFR 60.116b(d), except as provided in 40 CFR 60.116b(g), the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Illinois EPA or USEPA within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.
- 26a. Pursuant to 40 CFR 63.7(b)(1), the owner or operator of an affected source must notify the Illinois EPA or USEPA in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Illinois EPA or USEPA, upon request, to review and approve the site-specific test plan required under 40 CFR 63.7(c) and to have an observer present during the test.
- b. Pursuant to 40 CFR 63.7(b)(2), in the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in 40 CFR 63.7(b)(1) due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Illinois EPA or USEPA as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of 40 CFR Part 63 or with any other applicable Federal, State, or local requirement, nor will it prevent the Illinois EPA or USEPA from implementing or enforcing 40 CFR Part 63 or taking any other action under the Clean Air Act.
 - c. Pursuant to 40 CFR 63.10(d)(1), notwithstanding the requirements in this paragraph or 40 CFR 63.10(e), and except as provided in 40 CFR 63.16, the owner or operator of an affected source subject to reporting requirements under 40 CFR Part 63 shall submit reports to the Illinois EPA or USEPA in accordance with the reporting requirements in the relevant standard(s).
- 27a. Pursuant to 35 Ill. Adm. Code 215.127(c), a person planning to conduct an organic material emission test to demonstrate compliance with 35 Ill. Adm. Code 215 Subpart B shall notify the Illinois EPA of that intent not less than 30 days before the planned initiation of the tests so the Illinois EPA may observe the test.

- b. Pursuant to 35 Ill. Adm. Code 215.128(b), a person planning to conduct a measurement of seal gaps to demonstrate compliance with 35 Ill. Adm. Code 215 Subpart B shall notify the Illinois EPA of that intent not less than 30 days before the planned performance of the tests so the Illinois EPA may observe the test.

- 28a. 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
2009 Mall Street
Collinsville, Illinois 62234

If you have any questions on this, please call Mike Dragovich at 217/785-1705.

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

Date Signed: _____

ECB:MJD:jws

cc: Illinois EPA, FOS Region 3
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Crude Oil Transportation Station 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 for VOM, 10 tons per year for a single HAP, and 25 tons per 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 product material is handled and control measures are more effective than required in this permit.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)		
	<u>VOM</u>	<u>Single HAP</u>	<u>Combined HAPs</u>
Crude Oil Storage Tank	88.00		
350,000 bbl Storage Tanks	0.07		
Fugitive Emissions of Volatile Organic Material (VOM) from Pumps, Seals, Valves, Connectors, and Other Fugitive Sources	5.00		
Flow Improver Tank	0.44		
Sump Recovery Tank	0.44		
Gasoline Tank	<u>0.44</u>	<u>-----</u>	<u>-----</u>
Totals	94.39	9.0	22.5