

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

ConocoPhillips Pipe Line Company
Attn: D. C. Gill, Jr.
354 Adams Building
Bartlesville, Oklahoma 74004

Application No.: 73010178

I.D. No.: 091805AAD

Applicant's Designation: KAN DIST T

Date Received: December 12, 2005

Subject: Bulk Terminal

Date Issued:

Expiration Date:

Location: 275 North 2750 West Road, Kankakee, Kankakee County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of four external floating roof storage tanks (Tanks T-151, T-152, T-153, and T-053), ten fixed roof storage tanks (Tanks T-501, T-A1, T-A2, T-A3, T-A4, T-001, T-002, T-003, T-004, and one lubricity additive tank), two internal floating roof storage tanks (Tanks T-301 and T-421), two oil-water separators, associated pumps, one air stripper with oxidizer, maintenance and cleaning activities, and one truck loading rack equipped with a carbon adsorption vapor recovery unit 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), 10 tons/year for a 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.
- 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. Tank T-301 is 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 these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Pursuant to 40 CFR 60.112(a), the owner or operator of any storage vessel to which 40 CFR 60 Subpart K applies shall store petroleum liquids as follows:

- i. 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.
 - ii. If the true vapor pressure of the petroleum liquid as stored is greater than 570 mm Hg (11.1 psia), the storage vessel shall be equipped with a vapor recovery system or its equivalent.
- c. 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.
- 3a. Pursuant to 35 Ill. Adm. Code 215.121(b)(1), no person shall cause or allow the storage of any volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 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 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 215.122(c), exception: 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).
- e. Pursuant to 35 Ill. Adm. Code 215.123(b), 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.
- f. Pursuant to 35 Ill. Adm. Code 215.124(a), in addition to meeting the requirements of 35 Ill. Adm. Code 215.123(b), no owner or operator of a stationary storage tank equipped with an external floating roof shall cause or allow the storage of any volatile petroleum liquid in the tank unless:
 - i. The tank has been fitted with a continuous secondary seal extending from the floating roof to the tank wall (rim mounted secondary seal) or any other device which controls volatile organic material emissions with an effectiveness equal to or greater than a rim mounted secondary seal;
 - ii. Each seal closure device meets the following requirements:
 - A. The seal is intact and uniformly in place around the circumference of the floating roof between the floating roof and tank wall; and
 - B. The accumulated area of gaps exceeding 0.32 centimeter (1/8 inch) in width between the secondary seal and the tank wall shall not exceed 21.2 square centimeters per meter of tank diameter (1.0 square inches per foot of tank diameter).

- iii. Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers across at least 90 percent of the area of the opening; and
- iv. Openings are equipped with projections into the tank which remain below the liquid surface at all times.
- g. Pursuant to 35 Ill. Adm. Code 215.141(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 subparagraph 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).
- h. 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.
- i. Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) or organic material into the atmosphere from any emission unit. If no odor nuisance exists the limitation of this subpart shall apply only to photochemically reactive material.
- j. Pursuant to 35 Ill. Adm. Code 215.582(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 volatile organic material to 80 mg/l (0.00067 lbs/gallons) 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 215.584(b) or (d); or, if the terminal is driver-loaded, the terminal owner or operator shall be deemed to be in compliance with this section 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 215.584(c)(3).

- k. Pursuant to 35 Ill. Adm. Code 215.582(c), the operator of a bulk gasoline terminal shall:
 - i. Operate the terminal vapor collection system and gasoline loading equipment in a manner that prevents:
 - A. 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;
 - B. 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
 - C. Avoidable leaks of liquid during loading or unloading operations.
 - iii. 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 215.582(c)(1)(A).
 - iv. Within 15 business days after discovery of the leak by the owner, operator, or the Agency, repair and retest a vapor collection system which exceeds the limits of subsection 35 Ill. Adm. Code 215.582(c)(1)(A) or (B).
- 4a. In the event that the operation of an 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.
- b. Ethanol, gasoline, and other material with a true vapor pressure of 2.5 psia or greater shall only be loaded out through the loading racks using submerged loading and only with the vapor control system properly operating.
- c. Gasoline and gasoline blend means commercial quality gasoline and blend stocks for use as fuel in motor vehicle without further processing.
- d. A petroleum product shall be considered to be a distillate material if the true vapor pressure is less than 0.01 psia at 70°F.
- 5a. Emissions and operation of bulk terminal operations shall not exceed the following limits:

<u>Process</u>	<u>Throughput</u>		<u>Emission</u>	<u>VOM Emissions</u>	
	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>Factor</u>	<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
			<u>(Lb/Gal)</u>		

Gasoline Storage	65,000,000	520,000,000	0.00008**	5,000	20.00
Distillate Storage	131,500,000	1,052,000,000	0.0001**	750	3.00
Ethanol Storage	2,000,000	10,000,000	0.0002**	400	1.00
Additive Storage	32,540	195,250	0.0005**	17	0.05
Transmix Storage	1,050,000	8,400,000	0.001**	1,063	4.25
Gasoline Blend# and/ or Gasoline Loadout	16,250,000	120,000,000	0.00067***	10,888	40.20
Fugitive Losses from the Loading Rack from Gasoline/ Gasoline Blend	16,250,000	140,000,000	0.000054*	888	3.78
Distillate Loadout	17,500,000	140,000,000	0.0000095*	167	0.67
Ethanol Loadout	1,250,000	10,000,000	0.00005*	64	0.26
Oil/Water Separators	7,500,000	55,150,000	0.0002	1,500	5.52
Relief Tank	2,250	18,000	0.0125	28	0.11
Wastewater Treatment with Catalytic Oxidizer****	7,500,000	55,000,000	0.00083	623	2.28
				Total:	80.58

Gasoline blend consists of 90% gasoline and 10% ethanol.

* Based on standard emission factors for uncaptured emissions of VOM (Table 5.2-1, AP-42, Fifth Edition, Volume I, December 1995) with an 90% overall control efficiency for ethanol and 98.7% for fugitive losses for the loadout of gasoline/gasoline blend (0% for distillate) for the following equation:

$$E = \frac{(12.46 * S * P * M) * (1 - EFF)}{(T)}$$

E is the loading loss (lbs/1,000 gallons)

S is the saturation factor

P is true vapor pressure of the liquid loaded (psia)

M is vapor molecular weight (lbs/lb-mole)

T is the temperature of the bulk liquid loaded (°R)

Eff is the overall control efficiency.

** Based on standard emission factors (Table 5.2-1, AP-42, Fifth Edition, Volume I, December 1995) for breathing and working losses

*** Based on emission limits defined in 35 Ill. Adm. Code 215.582

**** Overall control efficiency of 90%

These limits are based on standard emission factors (Table 5.2-1, AP-42, Fifth Edition, Volume I, December 1995), the limits in 35 Ill. Adm. Code 215.582, and the maximum throughputs.

- b. Emissions of VOM from fugitive losses (pumps, valves, seals, etc.), meter proving, maintenance activities, tank cleaning and filters shall not exceed 10.5 ton/year.

6. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 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.
7. 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).
8. 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:
 - a. 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.
 - b. 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.
- 9a. Pursuant to 35 Ill. Adm. Code 215.586(a), any tests of organic material emissions from bulk gasoline terminals, including tests conducted to determine control equipment efficiency or control device destruction efficiency, shall be conducted in accordance with the Test Methods and Procedures for the Standards of Performance for Bulk Gasoline Terminals, 40 CFR 60.503. Any alternate test method must be approved by the Illinois EPA, which shall consider data comparing the performance of the proposed alternative to the performance of the approved test method(s). If the Illinois EPA determines that such data demonstrates that the proposed alternative will achieve results

equivalent to the approved test method(s), the Illinois EPA shall approve the proposed alternative.

- b. Pursuant to 35 Ill. Adm. Code 215.586(b), upon a reasonable request by the Illinois EPA, the owner or operator of a volatile organic material emission source subject to 35 Ill. Adm. Code 215 Subpart Y shall conduct emissions testing, at such person's own expense, to demonstrate compliance.
- 10a. Pursuant to 35 Ill. Adm. Code 215.123(b), 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. Routine inspections of floating roof seals are conducted through roof hatches once every six months.
 - ii. 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 semiannual inspection or incidence of roof damage or defect.
- b. Pursuant to 35 Ill. Adm. Code 215.124(a), in addition to meeting the requirements of 35 Ill. Adm. Code 215.123(b), no owner or operator of a stationary storage tank equipped with an external floating roof shall cause or allow the storage of any volatile petroleum liquid in the tank unless:
- i. Inspections are conducted prior to May 1, of each year to insure compliance with 35 Ill. Adm. Code 215.124(a).
 - ii. The secondary seal gap is measured prior to May 1, of each year.
- 11a. 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 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.

- c. Pursuant to 35 Ill. Adm. Code 215.123(b)(6), 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.
 - d. Pursuant to 35 Ill. Adm. Code 215.124(a), in addition to meeting the requirements of 35 Ill. Adm. Code 215.123(b), no owner or operator of a stationary storage tank equipped with an external floating roof shall cause or allow the storage of any volatile petroleum liquid in the tank unless records of the types of volatile petroleum liquid stored, the maximum true vapor pressure of the liquid as stored, the results of the inspections and the results of the secondary seal gap measurements are maintained and available to the Illinois EPA, upon verbal or written request, at any reasonable time for a minimum of two years after the date on which the record was made.
 - e. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
 - i. The throughput of each product through the loading racks (gallons/month and gallons/year);
 - ii. The throughput of each product stored and in what storage tank. (gallons/month and gallons/year); and
 - iii. Monthly and annual emissions of CO, NO_x, PM, SO₂, VOM and HAPS with supporting calculations (tons/month and tons/year).
12. 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.

13. If there is an exceedance of or 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/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.
14. Pursuant to 35 Ill. Adm. Code 215.586(c), a person planning to conduct an organic material emissions test to demonstrate compliance with 35 Ill. Adm. Code 215 Subpart Y 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.
15. 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
9511 West Harrison
Des Plaines, Illinois 60016

Please note that this permit has been revised to include lubricity additive tank, removal of propane operations, and increase gasoline throughput.

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

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

Date Signed: _____

ECB:GMK:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from Phillips Pipe Line Company's bulk terminal, located in Kankakee, Illinois, 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 this bulk terminal. The resulting maximum emissions are below the levels (e.g., volatile organic material (VOM) to less than 100 tons/year, combined hazardous air pollutants (HAPs) to less than 25 tons/year, and single HAP to less than 10 tons/year) 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>Process</u>	<u>E M I S S I O N S</u> (Tons/Year)		
	<u>VOM</u>	<u>Single HAP</u>	<u>Combined HAPs</u>
Gasoline Storage	20.00		
Distillate Storage	3.00		
Ethanol Storage	1.00		
Additive Storage	0.05		
Transmix Storage	4.25		
Gasoline Blend and/or Gasoline Loadout	40.20		
Fugitive Losses from the Loading Rack from Gasoline/Gasoline Blend	3.24		
Distillate Loadout	0.67		
Ethanol Loadout	0.26		
Oil/Water Separators	5.52		
Relief Tank	0.11		
Wastewater Treatment with Catalytic Oxidizer	2.28		
Fugitives (Pumps, Valves, Seals, etc.)	<u>10.50</u>		
Totals	91.62	<u>9.9</u>	<u>22.5</u>

GMK:psj