



Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

January 21, 2004

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Phillips Pipe Line Company / 089-18204-00326

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER-AM.dot 9/16/03

January 21, 2004

Mr. D.C. Gill, Jr.  
Philips Pipe Line Company  
1000 South Pine  
Ponca City, Oklahoma 74602

Re: 089-18204-00326  
First Administrative Amendment to  
Part 70 089-16208-00326

Dear Mr. Gill:

Philips Pipe Line Company - East Chicago Terminal, located at 400 East Columbus Drive, East Chicago, Indiana 46312 was issued a Part 70 Permit Renewal on September 22, 2003 on for a stationary bulk liquid fuel storage and transfer terminal. A letter requesting a change to the permit was received on November 6, 2003. The change qualifies as "corrections to typographical error" under 326 IAC 2-7-11(a)(1). Therefore, the permit is hereby administratively amended as follows (additions are **bolded** and deletions are ~~struck through~~ for emphasis):

Request 1: Permit Conditions D.1.3, D.1.5 and D.1.7 of the Part 70 Permit Renewal, incorrectly listed storage tanks (T-205, T-206, T-208, T-240, T-807, T-2101 and T-2102) as being subject to 326 IAC 8-9-4, IAC 8-9-5 and IAC 8-9-6. These storage tanks store kerosene with a maximum true vapor pressure of 0.011 psia for kerosene as indicated in the permit application, and/or diesel fuel only. The cited rules exempt storage tanks with capacities greater than 39,000 gallons that store volatile organic liquid with a maximum true vapor pressure less than 0.5 psia.

Response 1: Storage tanks (T-205, T-206, T-208, T-240, T-807, T-2101, T-2102, including T2601, and T2602) will be deleted in Condition D.1.3, D.1.5, and D.1.7, since they are currently exempted from 326 IAC 8-9-4, IAC 8-9-5 and IAC 8-9-6. The typographical error in the TSD page 15 of 19 under 326 IAC 8-9-1(b), which states that these tanks store petroleum liquid with vapor pressure of greater than 0.75 psia will also be amended by deleting the above referenced tanks. These tanks, however, would be subject to these rules when storing VOL with vapor pressure of 0.75 psia or greater but less than 11.1 psia. See bolded paragraph at the end of Conditions D.1.3, D.1.5, and D.1.7:

D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-9-4]

~~The eight (8)~~ Pursuant to 326 IAC 8-9-4 VOC Storage tanks identified as T-103, T-201, T-202, T-204, T-207, T-209, T-401, T-801, T-802, T-803, T-804, T-805, T-806, T-808, T-809, T-810, ~~T-205, T-206, T-208, T-240, T-807, T-2101, T-2102, T-2601, and T-2602,~~ are subject to this rule. Pursuant to this rule, the Permittee shall equip each tank with one (1) of the following:

- (a) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, 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 a foam - or liquid filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
    - (B) Two seals mounted one above the others 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.
  - (iii) Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
  - (iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
  - (v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
  - (vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
  - (vii) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
  - (viii) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
  - (ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- (b) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, an external floating roof meeting the following specifications:

- (i) Each external floating roof shall be equipped with a closure device between the wall of the vessel and the roof edge. The closure device shall consist of two (2) seals, one (1) above the other. The lower seal shall be referred to as the primary seal; the upper seal shall be referred to as the secondary seal.
  - (ii) Except as provided in 326 IAC 8-9-5(c)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and vessel wall and shall be either a liquid-mounted seal or a shoe seal.
  - (iii) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the vessel in a continuous fashion except as allowed in 326 IAC 8-9-5(c)(4).
  - (iv) 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.
  - (v) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times, without visible gap, except when the device is in actual use.
  - (vi) Automatic bleeder vents shall 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.
  - (vii) Rim vents shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents shall be gasketed.
  - (viii) Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least ninety percent (90%) of the area of the opening.
  - (ix) The roof shall be floating on the liquid at all times, for example, off the roof leg supports, except when the vessel 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.
- (c) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, a closed vent system and control device meeting the following specifications:
- (i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, 40 CFR 60.485(b).
  - (ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (40 CFR 60.18) of the General Provisions.

- (d) A system equivalent to those described in paragraphs a, b and c as provided in 326 IAC 8-9-4.
- (e) The testing procedures are required under 326 IAC 8-9-5. The record keeping and reporting are required under 326 IAC 8-9-6.
- (f) On or before May 1, 1996, the Permittee of each vessel with a capacity greater than or equal to thirty-nine thousand (39,000) gallons, that stores VOL with a maximum true vapor pressure greater than or equal to eleven and one-tenth (11.1) psia shall equip each vessel with a closed vent system meeting the standards of paragraph (c).

**Storage tanks, identified as T-205, T-206, T-208, T-240, T-807, T-1201, T-2102, T-2601, and T-2602 are not subject to 326 IAC 8-9-4, since each tank store VOL with a maximum true vapor pressure of less than 0.75 psia. Any change in the VOL stored with true vapor pressure of 0.75 psia or greater but less than 11.1 psia shall be subject entirely to the requirements of this condition, under 326 IAC 8-9-4.**

D.1.5 Testing and Procedures [326 IAC 8-9-5]

~~The eight (8)~~ Pursuant to 326 IAC 8-9-5 VOC Storage tanks identified as T-103, T-201, T-202, T-204, T-207, T-209, T-401, T-801, T-802, T-803, T-804, T-805, T-806, T-808, T-809, T-810, ~~T-205, T-206, T-208, T-240, T-807, T-2101, T-2102, T-2601, and T-2602~~, are subject to 326 IAC 8-9-5.

Pursuant to this rule, the Permittee of each storage tank shall do the following:

- (a) Except as provided in section 326 IAC 8-9-4(a)(2), the Permittee of each vessel equipped with an internal floating roof shall meet the following requirements.
  - (1) 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 Permittee shall repair the items before filling the storage vessel.
  - (2) 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 Permittee 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 Administrator (IDEM) in the inspection report required in 326 IAC 8-9-6(c)(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.
  - (3) For vessels equipped with both primary and secondary seals:
    - (i) Visually inspect the vessel as specified in paragraph (4) of this section at

- least every 5 years; or
  - (ii) Visually inspect the vessel as specified in paragraph (2) of this section.
- (4) 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 Permittee 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 paragraphs (2) and (3)(ii) of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (3)(i) of this section.
- (5) Notify the Administrator (IDEM) in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a) and (d) of this section to afford the Administrator (IDEM) the opportunity to have an observer present. If the inspection required by paragraph (d) of this section is not planned and the Permittee could not have known about the inspection 30 days in advance or refilling the tank, the Permittee shall notify the Administrator (IDEM) 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 Administrator (IDEM) at least 7 days prior to the refilling.
- (b) Except as provided in 326 IAC 8-9-4(a)(3), the Permittee of each vessel equipped with an external floating roof shall meet the following requirements:
- (1) Determine the gap areas and maximum gap widths between the primary seal and the wall of the vessel and between the secondary seal and the wall of the vessel according to the following frequency:
    - (A) Measurements of gaps between the vessel wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within sixty (60) days of the initial fill with VOL and at least once every five (5) years thereafter.
    - (B) Measurements of gaps between the vessel wall and the secondary seal shall be performed within sixty (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 one (1) year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for purposes of this subdivision.
  - (2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:

- (A) Measure seal gaps, if any, at one (1) 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 vessel in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the vessel and measure the circumferential distance of each such location.
  - (C) The total surface area of each gap described in clause (B) shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.
- (3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each by the nominal diameter of the vessel and compare each ratio to the respective standards in subdivision (4).
- (4) Make necessary repairs or empty the vessel within forty-five (45) days of identification of seals not meeting the requirements listed in clauses (A) and (B) as follows:
- (A) The accumulated area of gaps between the vessel wall and the mechanical shoe or liquid-mounted primary seal shall not exceed ten (10) square inches per foot of vessel diameter, and the width of any portion of any gap shall not exceed one and five-tenths (1.5) inches. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
  - (B) The secondary seal shall meet the following requirements:
    - (i) The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in subdivision (2)(C).
    - (ii) The accumulated area of gaps between the vessel wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed one (1) square inch per foot of vessel diameter, and the width of any portion of any gap shall not exceed five-tenths (0.5) inch. There shall be no gaps between the vessel wall and the secondary seal when used in combination with a vapor-mounted primary seal.
    - (iii) There shall be no holes, tears, or other openings in the seal or seal fabric.
  - (C) If a failure that is detected during inspections required in subdivision (1) cannot be repaired within forty-five (45) days and if the vessel cannot be emptied within forty-five (45) days, a thirty (30) day extension may be requested from the department in the inspection report required in 326 IAC 8-9-6(d)(3). 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.
- (5) Notify the department thirty (30) days in advance of any gap measurements required by subdivision (1) to afford the department the opportunity to have an observer present.

- (6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. For all visual inspections, the following requirements apply:
  - (A) 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 fabric, the Permittee shall repair the items as necessary so that none of the conditions specified in this clause exist before filling or refilling the vessel with VOL.
  - (B) The Permittee shall notify the department in writing at least thirty (30) days prior to the filling or refilling of each vessel to afford the department the opportunity to inspect the vessel prior to the filling. If the inspection required by this subdivision is not planned and the Permittee could not have known about the inspection thirty (30) days in advance of refilling the vessel, the Permittee shall notify the department at least seven (7) days prior to the refilling of the 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 department at least seven (7) days prior to the refilling.

**Storage tanks, identified as T-205, T-206, T-208, T-240, T-807, T-1201, T-2102, T-2601, and T-2602 are not subject to 326 IAC 8-9-5, since each tank store VOL with a maximum true vapor pressure of less than 0.75 psia. Any change in the VOL stored with true vapor pressure of 0.75 psia or greater but less than 11.1 psia shall be subject entirely to the requirements of this condition, under 326 IAC 8-9-5.**

#### D.1.7 Record Keeping Requirements [326 IAC 8-9-6]

The Permittee shall comply with the record keeping requirements in 326 IAC 8-9-6 (for Tanks T-103, T-201, T-202, T-204, T-207, T-209, T-401, T-801, T-802, T-803, T-804, T-805, T-806, T-808, T-809, T-810, T-205, T-206, T-208, T-240, T-807, T-2101, T-2102, T-2601, and T-2602), and shall maintain the following records for a minimum of three (3) years.

- (a) Pursuant to Condition D.1.3 and 326 IAC 8-9-6, the Permittee of the internal floating roof gasoline storage tanks shall keep copies of all reports and records for at least three (3) years. The Permittee of the internal floating roof tanks shall meet the following requirements:
  - (1) Keep a record of each inspection performed as required by 326 IAC 8-9-5(b)(1) through 326 IAC 8-9-5(b)(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).
  - (2) If any of the conditions described in 326 IAC 8-9-5(b)(2) are detected during the annual visual inspection, a record shall be maintained and a report shall be furnished to the department 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.

- (3) After each inspection required by 326 IAC 8-9-5(b)(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 326 IAC 8-9-5(b)(3)(B), a record shall be maintained and a report shall be furnished to the department within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 326 IAC 8-9-4(a)(1)(A), 326 IAC 8-9-4(a)(2)(A), or 326 IAC 8-9-5(b), and list each repair made.
- (b) Pursuant to Condition D.1.3 and 326 IAC 8-9-6, the Permittee of the external floating roof gasoline storage tanks shall keep copies of all reports and records for at least three (3) years. The Permittee of the external floating roof tanks shall meet the following requirements:
  - (1) Keep a record of each gap measurement performed as required by 326 IAC 8-9-5(c). Each record shall identify the vessel in which the measurement was made and shall contain the date of measurement, the raw data obtained in the measurement and the calculations described in 326 IAC 8-9-5(c)(2) and (c)(3).
  - (2) Within sixty (60) days of performing the seal gap measurements required by 326 IAC 8-9-5(c)(1), furnish the department with a report that contains the date of measurement, the raw data obtained in the measurement, and the calculations described in 326 IAC 8-9-5(c)(2) and (c)(3).
  - (3) After each seal gap measurement that detects gaps exceeding the limitations specified in 326 IAC 8-9-5(c), submit a report to the department within thirty (30) days of the inspection. The report shall identify the vessel and contain the information specified in subdivision (2) and the date the vessel was emptied or the repairs made and date of repair.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**Storage tanks, identified as T-205, T-206, T-208, T-240, T-807, T-1201, T-2102, T-2601, and T-2602 are not subject to the Record Keeping Requirements of 326 IAC 8-9-6, since each tank store VOL with a maximum true vapor pressure of less than 0.75 psia. Any change in the VOL stored with true vapor pressure of 0.75 psia or greater but less than 11.1 psia shall be subject entirely to the requirements of this condition, under 326 IAC 8-9-6.**

### Changes to the Technical Support Document

The rule applicability in TSD page 15 of 19 for 326 IAC 8-9-1 (Volatile Organic Liquid Storage Vessels) will be amended as follows:

- 326 IAC 8-9-1 (Volatile Organic Liquid Storage Vessels)
- (a) no change
  - (b) Storage tanks identified as (T-103, T-201, T-202, T-204, T-207, T-209, T-401, T-801, T-802, T-803, T-804, T-805, T-806, T-808, T-809, T-810 ~~T-205, T-206, T-208, T-240, T-807, T-2101, T-2102, T-2601, and T-2602~~), with capacity greater than 39,000 gallons, are subject to the requirements of this rule because the listed tanks contain petroleum liquids with vapor

pressure of greater than 0.75 psia.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Aida De Guzman, at (800) 451-6027, press 0 and ask for extension (3-4972), or dial (317) 233-4972.

Sincerely,

Original signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments

APD

cc: File - Lake County  
U.S. EPA, Region V  
Lake County Health Department  
Northwest Regional Office  
Air Compliance Section Inspector - Rick Massoels/Ramesh Tejuja  
Compliance Data Section  
Administrative and Development

# PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

## Phillips Pipe Line Company - East Chicago Terminal 400 East Columbus Drive East Chicago, Indiana 46312

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T089-16208-00326	
Issued by: Original signed by Janet G. McCabe Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: September 22, 2003  Expiration Date: September 22, 2008
First Administrative Amendment 089-18204	Pages Affected: 31, 32, 33, 34, 35, 36, 37, 38, 39 Pages Added: 39a
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Chief Permit Branch Office of Air Quality	Issuance Date: January 21, 2004

- (A) equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and
  - (B) equipped with projections into the tank which remain below the liquid surface at all times.
- (4) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
  - (5) Rim vents are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting; and
  - (6) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least ninety percent (90%) of the area of the opening.

#### D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-9-4]

Pursuant to 326 IAC 8-9-4, VOC Storage tanks identified as T-103, T-201, T-202, T-204, T-207, T-209, T-401, T-801, T-802, T-803, T-804, T-805, T-806, T-808, T-809, T-810 are subject to this rule. Pursuant to this rule, the Permittee shall equip each tank with one (1) of the following:

- (a) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, an internal floating roof meeting the following specifications:
  - (1) 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.
  - (2) 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 a foam - or liquid filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
    - (B) Two seals mounted one above the others 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.
  - (3) Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

- (4) 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.
  - (5) 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.
  - (6) 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.
  - (7) 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.
  - (8) 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.
  - (9) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- (b) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, an external floating roof meeting the following specifications:
- (1) Each external floating roof shall be equipped with a closure device between the wall of the vessel and the roof edge. The closure device shall consist of two (2) seals, one (1) above the other. The lower seal shall be referred to as the primary seal; the upper seal shall be referred to as the secondary seal.
  - (2) Except as provided in 326 IAC 8-9-5(c)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and vessel wall and shall be either a liquid-mounted seal or a shoe seal.
  - (3) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the vessel in a continuous fashion except as allowed in 326 IAC 8-9-5(c)(4).
  - (4) 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.
  - (5) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times, without visible gap, except when the device is in actual use.
  - (6) Automatic bleeder vents shall 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.

- (7) Rim vents shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents shall be gasketed.
  - (8) Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least ninety percent (90%) of the area of the opening.
  - (9) The roof shall be floating on the liquid at all times, for example, off the roof leg supports, except when the vessel 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.
- (c) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, a closed vent system and control device meeting the following specifications:
- (1) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, 40 CFR 60.485(b).
  - (2) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (40 CFR 60.18) of the General Provisions.
- (d) A system equivalent to those described in paragraphs a, b and c as provided in 326 IAC 8-9-4.
- (e) The testing procedures are required under 326 IAC 8-9-5. The record keeping and reporting are required under 326 IAC 8-9-6.
- (f) On or before May 1, 1996, the Permittee of each vessel with a capacity greater than or equal to thirty-nine thousand (39,000) gallons, that stores VOL with a maximum true vapor pressure greater than or equal to eleven and one-tenth (11.1) psia shall equip each vessel with a closed vent system meeting the standards of paragraph (c).

Storage tanks, identified as T-205, T-206, T-208, T-240, T-807, T-1201, T-2102, T-2601, and T-2602 are not subject to 326 IAC 8-9-4, since each tank store VOL with a maximum true vapor pressure of less than 0.75 psia. Any change in the VOL stored with true vapor pressure of 0.75 psia or greater but less than 11.1 psia shall be subject entirely to the requirements of this condition, under 326 IAC 8-9-4.

#### D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

### **Compliance Determination Requirements**

#### D.1.5 Testing and Procedures [326 IAC 8-9-5]

Pursuant to 326 IAC 8-9-5, VOC Storage tanks identified as T-103, T-201, T-202, T-204, T-207, T-209, T-401, T-801, T-802, T-803, T-804, T-805, T-806, T-808, T-809, T-810, T-2601, and T-2602, are subject to 326 IAC 8-9-5. Pursuant to this rule, the Permittee of each storage tank shall do the following:

- (a) Except as provided in section 326 IAC 8-9-4(a)(2), the Permittee of each vessel equipped

with an internal floating roof shall meet the following requirements.

- (1) 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 Permittee shall repair the items before filling the storage vessel.
- (2) 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 Permittee 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 Administrator (IDEM) in the inspection report required in 326 IAC 8-9-6(c)(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.
- (3) For vessels equipped with both primary and secondary seals:
  - (A) Visually inspect the vessel as specified in paragraph (4) of this section at least every 5 years; or
  - (B) Visually inspect the vessel as specified in paragraph (2) of this section.
- (4) 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 Permittee 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 paragraphs (2) and (3)(ii) of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (3)(i) of this section.
- (5) Notify the Administrator (IDEM) in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a) and (d) of this section to afford the Administrator (IDEM) the opportunity to have an observer present. If the inspection required by paragraph (d) of this section is not planned and the Permittee could not have known about the inspection 30 days in advance or refilling the tank, the Permittee shall notify the Administrator (IDEM) 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 Administrator (IDEM) at least 7 days prior to the refilling.

- (b) Except as provided in 326 IAC 8-9-4(a)(3), the Permittee of each vessel equipped with an external floating roof shall meet the following requirements:
- (1) Determine the gap areas and maximum gap widths between the primary seal and the wall of the vessel and between the secondary seal and the wall of the vessel according to the following frequency:
    - (A) Measurements of gaps between the vessel wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within sixty (60) days of the initial fill with VOL and at least once every five (5) years thereafter.
    - (B) Measurements of gaps between the vessel wall and the secondary seal shall be performed within sixty (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 one (1) year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for purposes of this subdivision.
  - (2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:
    - (A) Measure seal gaps, if any, at one (1) 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 vessel in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the vessel and measure the circumferential distance of each such location.
    - (C) The total surface area of each gap described in clause (B) shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.
  - (3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each by the nominal diameter of the vessel and compare each ratio to the respective standards in subdivision (4).
  - (4) Make necessary repairs or empty the vessel within forty-five (45) days of identification of seals not meeting the requirements listed in clauses (A) and (B) as follows:
    - (A) The accumulated area of gaps between the vessel wall and the mechanical shoe or liquid-mounted primary seal shall not exceed ten (10) square inches per foot of vessel diameter, and the width of any portion of any gap shall not exceed one and five-tenths (1.5) inches. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
    - (B) The secondary seal shall meet the following requirements:
      - (i) The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in subdivision (2)(C).

- (ii) The accumulated area of gaps between the vessel wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed one (1) square inch per foot of vessel diameter, and the width of any portion of any gap shall not exceed five-tenths (0.5) inch. There shall be no gaps between the vessel wall and the secondary seal when used in combination with a vapor-mounted primary seal.
    - (iii) There shall be no holes, tears, or other openings in the seal or seal fabric.
  - (C) If a failure that is detected during inspections required in subdivision (1) cannot be repaired within forty-five (45) days and if the vessel cannot be emptied within forty-five (45) days, a thirty (30) day extension may be requested from the department in the inspection report required in 326 IAC 8-9-6(d)(3). 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.
- (5) Notify the department thirty (30) days in advance of any gap measurements required by subdivision (1) to afford the department the opportunity to have an observer present.
- (6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. For all visual inspections, the following requirements apply:
  - (A) 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 fabric, the Permittee shall repair the items as necessary so that none of the conditions specified in this clause exist before filling or refilling the vessel with VOL.
  - (B) The Permittee shall notify the department in writing at least thirty (30) days prior to the filling or refilling of each vessel to afford the department the opportunity to inspect the vessel prior to the filling. If the inspection required by this subdivision is not planned and the Permittee could not have known about the inspection thirty (30) days in advance of refilling the vessel, the Permittee shall notify the department at least seven (7) days prior to the refilling of the 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 department at least seven (7) days prior to the refilling.

Storage tanks, identified as T-205, T-206, T-208, T-240, T-807, T-1201, T-2102, T-2601, and T-2602 are not subject to 326 IAC 8-9-5, since each tank store VOL with a maximum true vapor pressure of less than 0.75 psia. Any change in the VOL stored with true vapor pressure of 0.75 psia or greater but less than 11.1 psia shall be subject entirely to the requirements of this condition, under 326 IAC 8-9-5.

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

There are no specific Compliance Monitoring Requirements applicable to these emission units.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.1.6 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.1 the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be compiled monthly and shall be complete and sufficient to establish compliance with the usage limits and/or the VOC and HAP emission limits established in Condition D.1.1
- (1) The amount of total petroleum products (gasoline) and distillate throughput per month from storage tanks. Records shall include those documents as necessary to verify the type and amount of throughput. Examples may include, but are not limited to, shipping documents, bills of loading, purchase orders, pipeline schedules, throughput summaries, Material Safety Data Sheets, and/or other records that document volumes of the specific regulated material transferred.
  - (2) The number of gasoline tank cleanings per twelve (12) consecutive month period.
  - (3) Total amounts of petroleum products (gasoline) and distillate throughput for 12 consecutive month period from storage tanks.
- (b) The Permittee shall comply with the record keeping requirements of 326 IAC 8-4-3. The following records are required for tank Nos. T-103, T-201, T-202, T-204, T-207, T209, T-401, T-801, T-802, T-803, T-804, T-805, T-806, T-808, T-809 and T-810:
- (1) The types of volatile petroleum liquids stored,
  - (2) The maximum true vapor pressure of the liquids stored, and
  - (3) The results of the inspections performed on the tanks.
- Such records will be maintained for a period of two (2) years and shall be made available to the commissioner upon written request.
- (c) Pursuant to 326 IAC 8-9-6 (Volatile Organic Liquid Storage Vessels), all storage tanks identified as T-1501 and T-1502, T-103, T-201, T-202, T-204, T-207, T-209, T-401, T-801, T-802, T-803, T-804, T-805, T-806, T-808, T-809, T-810 T-205, T-206, T-208, T-240, T-807, T-2101, T-2102, T-2601, and T-2602 are subject to the following record keeping requirements.
- (1) The Permittee shall keep copies of all records required by this section, except for the record required by paragraph (2) below, for at least two (2) years. The record required by paragraph (2) below will be kept for the life of the source.
  - (2) The Permittee shall keep readily accessible records showing the dimension of each storage vessel, identification number and an analysis showing the capacity of each storage vessel.
  - (3) Except as provided in 326 IAC 8-9-6(f) and (g), the Permittee of each storage vessel either with a design capacity greater than or equal to thirty-nine thousand (39,000) gallons storing a liquid with a maximum true vapor pressure greater than

or equal to five-tenths (0.5) pound per square inch absolute (psia) but less than seventy-five hundredths (0.75) psia shall maintain a record of the maximum true vapor pressure of the VOL, a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

- (4) Except as provided in paragraph 326 IAC 8-9-6(g), the Permittee of each storage vessel either with a design capacity greater than or equal to thirty-nine thousand (39,000) gallons storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia shall maintain a record and notify the Administrator (IDEM) within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each

volume range.

- (d) Pursuant to 40 CFR Part 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels), storage tanks identified as Nos. 2601 and 2602, with a storage capacity of greater than 151 cubic meters and storing only volatile organic compounds with a maximum true vapor pressure less than 3.5 kPa., are subject to following recordkeeping requirements.

The Permittee shall maintain permanent records at the source in accordance with (1) through (2) below:

- (1) the dimension of the storage vessel; and
- (2) an analysis showing the capacity of the storage vessel.

- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.7 Record Keeping Requirements [326 IAC 8-9-6]

The Permittee shall comply with the record keeping requirements in 326 IAC 8-9-6 (for Tanks T-103, T-201, T-202, T-204, T-207, T-209, T-401, T-801, T-802, T-803, T-804, T-805, T-806, T-808, T-809, T-810, T-2601, and T-2602), and shall maintain the following records for a minimum of three (3) years.

- (a) Pursuant to Condition D.1.3 and 326 IAC 8-9-6, the Permittee of the internal floating roof gasoline storage tanks shall keep copies of all reports and records for at least three (3) years. The Permittee of the internal floating roof tanks shall meet the following requirements:
- (1) Keep a record of each inspection performed as required by 326 IAC 8-9-5(b)(1) through 326 IAC 8-9-5(b)(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).
  - (2) If any of the conditions described in 326 IAC 8-9-5(b)(2) are detected during the annual visual inspection, a record shall be maintained and a report shall be furnished to the department 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.
  - (3) After each inspection required by 326 IAC 8-9-5(b)(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 326 IAC 8-9-5(b)(3)(B), a record shall be maintained and a report shall be furnished to the department within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 326 IAC 8-9-4(a)(1)(A), 326 IAC 8-9-4(a)(2)(A), or 326 IAC 8-9-5(b), and list each repair made.

- (b) Pursuant to Condition D.1.3 and 326 IAC 8-9-6, the Permittee of the external floating roof gasoline storage tanks shall keep copies of all reports and records for at least three (3) years. The Permittee of the external floating roof tanks shall meet the following requirements:
- (1) Keep a record of each gap measurement performed as required by 326 IAC 8-9-5(c). Each record shall identify the vessel in which the measurement was made and shall contain the date of measurement, the raw data obtained in the measurement and the calculations described in 326 IAC 8-9-5(c)(2) and (c)(3).
  - (2) Within sixty (60) days of performing the seal gap measurements required by 326 IAC 8-9-5(c)(1), furnish the department with a report that contains the date of measurement, the raw data obtained in the measurement, and the calculations described in 326 IAC 8-9-5(c)(2) and (c)(3).
  - (3) After each seal gap measurement that detects gaps exceeding the limitations specified in 326 IAC 8-9-5(c), submit a report to the department within thirty (30) days of the inspection. The report shall identify the vessel and contain the information specified in subdivision (2) and the date the vessel was emptied or the repairs made and date of repair.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Storage tanks, identified as T-205, T-206, T-208, T-240, T-807, T-1201, T-2102, T-2601, and T-2602 are not subject to the Record Keeping Requirements of 326 IAC 8-9-6, since each tank store VOL with a maximum true vapor pressure of less than 0.75 psia. Any change in the VOL stored with true vapor pressure of 0.75 psia or greater but less than 11.1 psia shall be subject entirely to the requirements of this condition, under 326 IAC 8-9-6.

#### D.1.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).