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Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Enbridge Energy, Limited Partnership - Hartsdale/Griffith
Central Avenue and Division Street, Schererville, Indiana 46375 and
1500 West Main Street, Griffith, Indiana 46319

(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.

Table with permit details: Operation Permit No.: T089-17501-00497, Issued by: Nisha Sizemore, Chief, Permits Branch, Office of Air Quality, Issuance Date, Expiration Date.

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary crude petroleum pipeline and storage terminal.

Source Address:	Central Avenue and Division Street, Schererville, Indiana 46375 and 1500 West Main Street, Griffith, Indiana 46319
Mailing Address:	119 North 25th Street, Superior, Wisconsin 54880
General Source Phone Number:	(218) 725-0145
SIC Code:	4612
County Location:	Lake
Source Location Status:	Nonattainment for 8-hour ozone standard Nonattainment for PM 2.5 standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This bulk petroleum storage company consists of two (2) plants:

- (a) Hartsdale Terminal with Plant ID 089-00081 is located at Central Avenue and Division Street, Schererville, Indiana 46375; and
- (b) Griffith Terminal with Plant ID 089-00059 is located at 1500 West Main Street and Lakehead Road, Griffith, Indiana 46319.

IDEM, OAQ has determined that these two (2) terminals are considered one plant and therefore, the two (2) Part 70 permits will be combined into one permit. Therefore, the term "source" in the Part 70 documents refers to both the Hartsdale Terminal and the Griffith Terminal as one source.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Hartsdale Terminal:

- (a) Nine (9) crude oil storage tanks, all constructed in 1958, identified as EU1601 through EU1609, each with an external floating roof, each with a maximum storage capacity of capacity of 4,200,000 gallons (100,000 barrels) of crude oil.

Under the New Source Performance Standard 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, Subpart Kb) (326 IAC 12), storage tanks EU1601 through EU1609 are considered to be an

affected source.

- (b) One (1) pump station, constructed in 2005, identified as Spearhead project, consisting of three (3) main line booster pumps and associated piping, metering, sampling and maintenance equipment, with a maximum potential throughput of 125,000 barrels per day.
- (c) Piping component fugitive emission sources in VOC service.

Griffith Terminal:

- (a) One (1) crude oil storage tank, constructed in 1969, identified as EU70, with an external floating roof, with a maximum capacity of 120,000 barrels.
- (b) One (1) crude oil storage tank, constructed in 1970, identified as EU71, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (c) One (1) crude oil storage tank, constructed in 1971, identified as EU72, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (d) One (1) crude oil storage tank, constructed in 1971, identified as EU73, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (e) One (1) crude oil storage tank, constructed in 1972, identified as EU74, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (f) One (1) crude oil storage tank, constructed in 1972, identified as EU75, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (g) One (1) crude oil storage tank, constructed in 1973, identified as EU76, with an external floating roof, with a maximum capacity of 395,000 barrels.
- (h) One (1) crude oil storage tank, constructed in 1973, identified as EU77, with an external floating roof, with a maximum capacity of 395,000 barrels.
- (i) One (1) crude oil storage tank, constructed in 1979, identified as EU78, with an external floating roof, with a maximum capacity of 217,000 barrels.

Under the New Source Performance Standard for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 (40 CFR 60, Subpart Ka) (326 IAC 12), storage tank EU78 is considered to be an affected source.

- (j) One (1) crude oil storage tank, constructed in 2006, identified as EU79, with an external floating roof, with a maximum capacity of 392,169 barrels (16,471,098 gallons).

Under the New Source Performance Standard 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, Subpart Kb) (326 IAC 12), storage tank EU79 is considered to be an affected source.

- (k) Piping component fugitive emission sources in VOC service.

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities, which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

- (a) This permit, T089-17501-00497, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) The "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM Main Office
Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865
Northwest Regional Office
Telephone Number: (219) 757-0265
Facsimile Number: (219) 757-0267

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

IDEM Northwest Regional Office
NBD Bank Building
504 North Broadway, Suite 418
Gary, Indiana 46402-1942

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T089-17501-00497 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12][40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2 and/or 326 IAC 2-3 (for sources located in NA areas).

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2][326 IAC 2-2][326 IAC 2-3]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;

- (B) Removal or demolition contractor; or
- (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue

MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), the Permittee shall submit by July 1 an emission statement covering the previous calendar year as follows:
 - (1) Starting in 2004 and every three (3) years thereafter, and
 - (2) Any year not already required under (1) if the source emits volatile organic compounds or oxides of nitrogen into the ambient air at levels equal to or greater than twenty-five (25) tons during the previous calendar year.
- (b) The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present

or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a "project" (as defined in 326 IAC 2-2-1(qq)) at an existing emissions unit or at a source with Plant-wide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and 326 IAC 2-3-1(mm)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
 - (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue

MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and 326 IAC 2-3-1(II) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ :
 - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C - General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx) and 326 IAC 2-3-1(qq), for that regulated NSR pollutant, and
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
 - (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C - General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Air Compliance Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C - General Record Keeping Requirements available for

review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Griffith Terminal:

- (a) One (1) crude oil storage tank, constructed in 1969, identified as EU70, with an external floating roof, with a maximum capacity of 120,000 barrels.
- (b) One (1) crude oil storage tank, constructed in 1970, identified as EU71, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (c) One (1) crude oil storage tank, constructed in 1971, identified as EU72, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (d) One (1) crude oil storage tank, constructed in 1971, identified as EU73, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (e) One (1) crude oil storage tank, constructed in 1972, identified as EU74, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (f) One (1) crude oil storage tank, constructed in 1972, identified as EU75, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (g) One (1) crude oil storage tank, constructed in 1973, identified as EU76, with an external floating roof, with a maximum capacity of 395,000 barrels.
- (h) One (1) crude oil storage tank, constructed in 1973, identified as EU77, with an external floating roof, with a maximum capacity of 395,000 barrels.
- (i) One (1) crude oil storage tank, constructed in 1979, identified as EU78, with an external floating roof, with a maximum capacity of 217,000 barrels.

Under the New Source Performance Standard for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 (40 CFR 60, Subpart Ka) (326 IAC 12), storage tank EU78 is considered to be an affected source.

- (j) One (1) crude oil storage tank, constructed in 2006, identified as EU79, with an external floating roof, with a maximum capacity of 392,169 barrels (16,471,098 gallons).

Under the New Source Performance Standard 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, Subpart Kb) (326 IAC 12), storage tank EU79 is considered to be an affected source.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 General Provisions Relating to NSPS [326 IAC 12-1-1][40 CFR Part 60, Subpart A]

- (a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1-1, apply to storage tank EU78 except when

otherwise specified in 40 CFR Part 60, Subpart Ka.

- (b) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1-1, apply to storage tank EU79 except when otherwise specified in 40 CFR Part 60, Subpart Kb.

D.1.2 New Source Performance Standard [326 IAC 12] [40 CFR 60, Subpart Ka]

Pursuant to 326 IAC 12 and 40 CFR 60.112a(a), the Permittee shall equip the storage vessel EU78 with an external floating roof, consisting of a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents and is equipped with a closure device between the tank wall and the roof edge. Except as provided in 40 CFR 60.112(a)(1)(ii)(D), 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. The roof is to be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

- (a) The primary seal shall be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. Each seal is to meet the following requirements:
- (1) The accumulated area of gaps between the tank wall and the metallic shoe seal or the liquid-mounted seal shall not exceed 212 cm^2 per meter of tank diameter (10.0 in^2 per ft of tank diameter) and the width of any portion of any gap shall not exceed 3.81 cm (1 1/2 in).
 - (2) The accumulated area of gaps between the tank wall and the vapor-mounted seal shall not exceed 21.2 cm^2 per meter of tank diameter (1.0 in^2 per ft of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (1/2 in).
 - (3) One end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 61 cm (24 in) above the stored liquid surface.
 - (4) 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:
- (1) 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 60.112a(a)(1)(ii)(B).
 - (2) The accumulated area of gaps between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed 21.2 cm^2 per meter of tank diameter (1.0 in^2 per ft. of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (1/2 in.). There shall be no gaps between the tank wall and the secondary seal used in combination with a vapor-mounted primary seal.
 - (3) There are to be no holes, tears or other openings in the seal or seal fabric.
 - (4) The Permittee is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of

the primary seal.

- (c) Each opening in the roof except for automatic bleeder vents and rim space vents is to provide a projection below the liquid surface. Each opening in the roof except for automatic bleeder vents, rim space vents and leg sleeves is to be equipped with a cover, seal or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use or as described in 40 CFR 60.112a(a)(1)(iv). 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.
- (d) 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.

D.1.3 New Source Performance Standard [326 IAC 12] [40 CFR 60, Subpart Kb]

Pursuant to 326 IAC 12 and 40 CFR 60.110b, Subpart Kb, the external floating roof for Tank EU79 shall meet the following requirements:

- (a) 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, the primary seal, and the secondary seal.
 - (1) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal, and shall completely cover the annular space between the edge of the floating roof and tank wall.
 - (2) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel.
- (b) All opening in a noncontact external floating roof except for automatic bleeder vents, rim space vents, and leg sleeve shall:
 - (1) Be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times, except when the device is in actual use;
 - (2) Provide a projection below the liquid surface.
 - (3) Automatic bleeder vents shall be closed at all times when the roof is floating except when the roof is being floated off the roof legs supports;
 - (4) Rim vents shall be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting;
 - (5) Emergency roof drain shall be provided with slotted membrane fabric cover that covers at least ninety percent (90%) of the area of the opening.
- (c) All seal closure devices shall meet the following requirements:
 - (1) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 square centimeter (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 shall extend into the stored liquid, and

- the other end shall extend a minimum vertical distance of 61 centimeter (cm).
- (ii) There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
- (2) The secondary seal shall be installed above the primary seal to completely cover the space between the roof edge and the tank wall.
 - (3) 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.
 - (i) There shall be no holes, tears, or other openings in the seal or seal fabric.
 - (4) The roof shall be floating on the liquid at all times 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 shall be continuous and shall be accomplished as rapidly as possible.

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-4-3]

Pursuant to 326 IAC 8-4-3(c)(2), the Permittee shall not store petroleum liquid in the storage tanks identified as EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, EU78, and EU79 unless:

- (a) The storage tanks have been fitted with:
 - (1) A continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or
 - (2) A closure or other device approved by the commissioner which is equally effective.
- (b) All seal closure devices meet the following requirements:
 - (1) There are no visible holes, tears, or other openings in the seal(s) or seal fabric;
 - (2) The seal(s) are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.
 - (3) For vapor mounted primary seals, the accumulated gap area around the circumference of the secondary seal where a gap exceeding one-eighth (1/8) inch exists between the secondary seal and the tank wall shall not exceed one (1.0) square inch per foot of tank diameter. There shall be no gaps exceeding one-half (1/2) inch between the secondary seal and the tank wall of welded tanks and no gaps exceeding one (1) inch between the secondary seal and the tank wall of riveted tanks.
- (c) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:
 - (1) Equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and

- (2) Equipped with projections into the tank which remain below the liquid surface at all times.
- (d) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
- (e) Rim vents are set to open when the roof is being floated off the leg supports or at the manufacturer's recommended setting; and
- (f) 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.1.5 Volatile Organic Compounds [326 IAC 8-9-4]

Pursuant to 326 IAC 8-9-4 (Volatile Organic Liquid Storage Vessels), the Permittee shall comply with the following standards for the external floating roofs on storage tanks EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, and EU78:

- (a) 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.
- (b) 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.
- (c) 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).
- (d) 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.
- (e) 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.
- (f) 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.
- (g) 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.
- (h) 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.
- (i) 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.

D.1.6 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 storage tanks EU78 and EU79.

Compliance Determination Requirements

D.1.7 Compliance Determination [326 IAC 12] [40 CFR 60, Subpart Ka]

Pursuant to 40 CFR 60.113a, the Permittee shall comply with the requirements of 40 CFR 60.112a(a)(1) for the storage vessel EU78 as follows:

- (a) Determine the gap areas and maximum gap widths between the primary seal and the tank wall and between the secondary seal and the tank wall according to the following frequency:
 - (1) For primary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every five years thereafter. All primary seal inspections or gap measurements which require the removal or dislodging of the secondary seal shall be accomplished as rapidly as possible and the secondary seal shall be replaced as soon as possible.
 - (2) For secondary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every year thereafter.
 - (3) If any storage vessel is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill for the purposes of 40 CFR 60.113a(a)(1)(i)(A) and 40 CFR 60.113a(a)(1)(i)(B).
- (b) Determine gap widths in the primary and secondary seals individually by the following procedures:
 - (1) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.
 - (2) Measure seal gaps around the entire circumference of the tank in each place where a 1/8 inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location.
 - (3) The total surface area of each gap described in 40 CFR 60.113a(a)(1)(ii)(B) shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.
- (c) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the appropriate ratio in the standard in 40 CFR 60.112a(a)(1)(i) and 40 CFR 60.112a(a)(1)(ii).

D.1.8 Compliance Determination [326 IAC 8-9-5] [326 IAC 12] [40 CFR 60.113b, Subpart Kb]

Pursuant to 326 IAC 8-9-5(a), for storage vessels EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, and EU78, and, pursuant to 40 CFR 60.113b, Subpart Kb, for Tank EU79, the Permittee shall comply with the following requirements:

- (a) 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:

- (1) 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.
 - (2) 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.
 - (3) 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.
- (b) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:
- (1) Measure seal gaps, if any, at one (1) or more floating roof levels when the roof is floating off the roof leg supports.
 - (2) Measure seal gaps around the entire circumference of the vessel in each place where a one-eighth ($\frac{1}{8}$) 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.
 - (3) The total surface area of each gap described in 326 IAC 8-9-5(c)(2)(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.
- (c) 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 326 IAC 8-9-5(c)(4).
- (d) Make necessary repairs or empty the vessel within forty-five (45) days of identification of seals not meeting the requirements listed in 326 IAC 8-9-5(c)(4)(A) and 326 IAC 8-9-5(c)(4)(B) as follows:
- (1) 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.
 - (2) The secondary seal shall meet the following requirements:
 - (A) 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 326 IAC 8-9-5(c)(2)(C).
 - (B) 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.

- (C) There shall be no holes, tears, or other openings in the seal or seal fabric.
- (3) 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 IDEM, OAQ 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.
- (e) Notify the department thirty days in advance of any gap measurements required to afford the department the opportunity to have an observer present.
- (f) 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:
 - (1) 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.
 - (2) The owner or operator shall notify the department in writing at least thirty 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 is not planned and the owner or operator could not have known about the inspection thirty days in advance of refilling the vessel, the owner or operator shall notify the department at least seven 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 7 days prior to the refilling.

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

D.1.9 Record Keeping Requirements [326 IAC 12] [326 IAC 8-4] [326 IAC 8-9] [40 CFR 60, Subpart Ka] [40 CFR 60, Subpart Kb]

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- (a) Pursuant to 40 CFR 60.115a, the Permittee shall maintain the following records for storage tank EU78:
 - (1) The petroleum liquid stored,
 - (2) The period of storage, and
 - (3) The maximum true vapor pressure of that liquid during the respective storage period.

These records shall be maintained for a period of five years.

- (b) Pursuant to 40 CFR 60.113a(1)(i)(D), the Permittee shall maintain records of each gap measurement on storage tank EU78 performed under Condition D.1.7 for a period of at least five (5) years following the date of measurement. Each record shall identify the vessel on which the measurement was performed and shall contain the date of the seal

gap measurement, the raw data obtained in the measurement process required by 40 CFR 60.113a(a)(1)(ii) and the calculation required by 40 CFR 60.113a(a)(1)(iii).

- (c) Pursuant to 40 CFR 60.115b(b), for tank EU79, after installing control equipment in accordance with 40 CFR 60.112b(a)(2) (external floating roof), the Permittee shall:
- (1) 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 326 IAC 8-4-3(d), the Permittee shall maintain the following records for storage tanks EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, EU78, and EU79:
- (1) The types of volatile petroleum liquid stored,
 - (2) The maximum true vapor pressure of the liquid as stored, and
 - (3) The results of the inspections performed on the storage vessels.
- Records shall be maintained for a period of two (2) years and shall be made available to the commissioner upon written request.
- (e) Pursuant to 326 IAC 8-9-6(b), the Permittee shall maintain a record of the following for storage tanks EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, and EU78:
- (1) The vessel identification number.
 - (2) The vessel dimensions.
 - (3) The vessel capacity.
 - (4) A description of the emission control equipment for each storage vessel with a certification that the emission control equipment meets the applicable standards.
- These records shall be maintained for the life of the vessel.
- (f) Pursuant to 326 IAC 8-9-6(d), the Permittee shall keep a record for storage tanks EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, and EU78 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 following:
- (1) The date of measurement.
 - (2) The raw data obtained in the measurement.
 - (3) The calculations described in 326 IAC 8-9-5(c)(2) and 326 IAC 8-9-5(c)(3).
- These records shall be maintained for a period of three (3) years.
- (g) All records shall be maintained in accordance with Section C - General Record Keeping

Requirements, of this permit.

D.1.10 Reporting and Notification Requirements [326 IAC 12] [326 IAC 8-4] [326 IAC 8-9] [40 CFR 60, Subpart Ka] [40 CFR 60, Subpart Kb]

- (a) Pursuant to 40 CFR 60.113a(1)(i)(E), for the gap measurements and calculations performed under Condition D.1.6, if either the seal gap calculated in accord with 40 CFR 60.113a(a)(1)(iii) or the measured maximum seal gap exceeds the limitations specified by 40 CFR 60.112a, the Permittee shall furnish a report to the Administrator within 60 days of the date of measurements. The report shall identify the vessel and list each reason why the vessel did not meet the specifications of 40 CFR 60.112a. The report shall also describe the actions necessary to bring the storage vessel into compliance with the specifications of 40 CFR 60.112a.
- (b) Pursuant to 40 CFR 60.113a, the Permittee shall provide the Administrator 30 days prior notice of the gap measurements performed under 40 CFR 60.113a in order to afford the Administrator the opportunity to have an observer present.
- (c) Pursuant to 40 CFR 60.115b(b), for tank EU79, after installing control equipment in accordance with 40 CFR 60.112b(a)(2) (external floating roof), the Permittee shall:
 - (1) Furnish the Administrator 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).
 - (2) Within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1), furnish the Administrator with a report that contains:
 - (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).
 - (3) After each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4), submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (b)(2) of this section and the date the vessel was emptied or the repairs made and date of repair.
- (d) Pursuant to 326 IAC 8-9-5(c)(5), the Permittee shall notify IDEM, OAQ thirty (30) days in advance of any gap measurements required by Condition D.1.8 to afford IDEM, OAQ the opportunity to have an observer present.
- (e) Pursuant to 326 IAC 8-9-5(c)(6)(B), the Permittee shall notify IDEM, OAQ in writing at least thirty (30) days prior to the filling or refilling of each vessel to afford IDEM, OAQ the opportunity to inspect the vessel prior to the filling. If the inspection required by 326 IAC 8-9-5(c)(6) 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 IDEM, OAQ 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 IDEM, OAQ at least seven (7) days prior to the refilling.

- (f) Pursuant to 326 IAC 8-9-6:
 - (1) Within sixty (60) days of performing the seal gap measurements required by 326 IAC 8-9-5(c)(1), the Permittee shall furnish IDEM, OAQ with a report that contains the following:
 - (A) The date of measurement.
 - (B) The raw data obtained in the measurement.
 - (C) The calculations described in 326 IAC 8-9-5(c)(2) and 326 IAC 8-9-5(c)(3).
 - (2) After each seal gap measurement that detects gaps exceeding the limitations specified in 326 IAC 8-9-5(c), the Permittee shall submit a report to IDEM, OAQ within thirty (30) days of the inspection. The report shall identify the vessel and contain the date of measurement, the raw data obtained in the measurement, the calculations described in 326 IAC 8-9-5(c)(2) and 326 IAC 8-9-5(c)(3), and the date the vessel was emptied or the repairs made and date of repair.
- (g) Pursuant to 326 IAC 8-9-6, the Permittee of storage vessels EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, and EU78 shall submit to IDEM, OAQ a report containing the following information for each vessel:
 - (1) The vessel identification number.
 - (2) The vessel dimensions.
 - (3) The vessel capacity.
 - (4) A description of the emission control equipment for each storage vessel with a certification that the emission control equipment meets the applicable standards.
- (h) The reports and notifications required by this Condition shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Hartsdale Terminal:

- (a) Nine (9) crude oil storage tanks, all constructed in 1958, identified as EU1601 through EU1609, each with an external floating roof, each with a maximum storage capacity of capacity of 4,200,000 gallons (100,000 barrels) of crude oil.

Under the New Source Performance Standard 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, Subpart Kb) (326 IAC 12), storage tanks EU1601 through EU1609 are considered to be an affected source.

- (b) One (1) pump station, constructed in 2005, identified as Spearhead project, consisting of three (3) main line booster pumps and associated piping, metering, sampling and maintenance equipment, with a maximum potential throughput of 125,000 barrels per day.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 General Provisions Relating to NSPS [326 IAC 12-1-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1-1, apply to storage tanks EU1601 through EU1609 except when otherwise specified in 40 CFR Part 60, Subpart Kb.

D.2.2 New Source Performance Standard [326 IAC 12] [40 CFR 60, Subpart Kb]

Pursuant to 326 IAC 12 and 40 CFR 60.110b, Subpart Kb, the external floating roofs for Tanks EU1601 through EU1609 shall meet the following requirements:

- (a) 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, the primary seal, and the secondary seal.
- (1) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal, and shall completely cover the annular space between the edge of the floating roof and tank wall.
 - (2) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel.
- (b) All opening in a noncontact external floating roof except for automatic bleeder vents, rim space vents, and leg sleeve shall:
- (1) Be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times, except when the device is in actual use;
 - (2) Provide a projection below the liquid surface.
 - (3) Automatic bleeder vents shall be closed at all times when the roof is floating except when the roof is being floated off the roof legs supports;

- (4) Rim vents shall be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting;
 - (5) Emergency roof drain shall be provided with slotted membrane fabric cover that covers at least ninety percent (90%) of the area of the opening.
- (c) All seal closure devices shall meet the following requirements:
- (1) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 square centimeter (cm^2) per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.
 - (A) One end of the mechanical shoe shall extend into the stored liquid, and the other end shall extend a minimum vertical distance of 61 centimeter (cm).
 - (B) There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
 - (2) The secondary seal shall be installed above the primary seal to completely cover the space between the roof edge and the tank wall.
 - (3) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.
 - (A) There shall be no holes, tears, or other openings in the seal or seal fabric.
 - (4) The roof shall be floating on the liquid at all times 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 shall be continuous and shall be accomplished as rapidly as possible.

D.2.3 Volatile Organic Compounds (VOC) [326 IAC 8-4-3]

Pursuant to 326 IAC 8-4-3(c)(2), the Permittee shall not store petroleum liquid in the storage tanks identified as EU1601 through EU1609 unless:

- (a) The storage tanks have been fitted with:
 - (1) A continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or
 - (2) A closure or other device approved by the commissioner which is equally effective.
- (b) All seal closure devices meet the following requirements:
 - (1) There are no visible holes, tears, or other openings in the seal(s) or seal fabric;
 - (2) The seal(s) are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.

- (3) For vapor mounted primary seals, the accumulated gap area around the circumference of the secondary seal where a gap exceeding one-eighth (1/8) inch exists between the secondary seal and the tank wall shall not exceed one (1.0) square inch per foot of tank diameter. There shall be no gaps exceeding one-half (1/2) inch between the secondary seal and the tank wall of welded tanks and no gaps exceeding one (1) inch between the secondary seal and the tank wall of riveted tanks.
- (c) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:
 - (1) Equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and
 - (2) Equipped with projections into the tank which remain below the liquid surface at all times.
- (d) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
- (e) Rim vents are set to open when the roof is being floated off the leg supports or at the manufacturer's recommended setting; and
- (f) 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.2.4 Volatile Organic Compounds [326 IAC 8-9-4]

Pursuant to 326 IAC 8-9-4 (Volatile Organic Liquid Storage Vessels), the Permittee shall comply with the following standards for the external floating roofs on storage tanks EU1601 through EU1609:

- (a) 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.
- (b) 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.
- (c) 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).
- (d) 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.
- (e) 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.
- (f) 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.

- (g) 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.
- (h) 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.
- (i) 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.

D.2.5 Void Air Space Height Limitation [326 IAC 2-3]

Pursuant to Minor Source Modification 089-21491-00497, issued on August 18, 2005, the total void space height for the nine (9) storage tanks, identified as 1601 through 1609, shall be limited to less than 97.19 feet per twelve (12) consecutive month period, equivalent to VOC emissions of less than twenty-five (25) tons per year. Therefore the requirements of 326 IAC 2-3 do not apply.

D.2.6 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 storage tanks EU1601 through EU1609 and the pump station.

Compliance Determination Requirements

D.2.7 Compliance Determination [326 IAC 8-9-5] [326 IAC 12] [40 CFR 60.113b, Subpart Kb]

Pursuant to 326 IAC 8-9-5(a) and 40 CFR 60.113b, Subpart Kb, for storage vessels EU1601 through EU1609, the Permittee shall comply with the following requirements:

- (a) 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:
 - (1) 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.
 - (2) 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.
 - (3) 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.
- (b) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:
 - (1) Measure seal gaps, if any, at one (1) or more floating roof levels when the roof is floating off the roof leg supports.
 - (2) Measure seal gaps around the entire circumference of the vessel in each place where a one-eighth ($\frac{1}{8}$) 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.

- (3) The total surface area of each gap described in 326 IAC 8-9-5(c)(2)(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.
- (c) 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 326 IAC 8-9-5(c)(4).
- (d) Make necessary repairs or empty the vessel within forty-five (45) days of identification of seals not meeting the requirements listed in 326 IAC 8-9-5(c)(4)(A) and 326 IAC 8-9-5(c)(4)(B) as follows:
 - (1) 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.
 - (2) The secondary seal shall meet the following requirements:
 - (A) 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 326 IAC 8-9-5(c)(2)(C).
 - (B) 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.
 - (C) There shall be no holes, tears, or other openings in the seal or seal fabric.
 - (3) 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 IDEM, OAQ 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.
- (e) Notify the department thirty days in advance of any gap measurements required to afford the department the opportunity to have an observer present.
- (f) 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:
 - (1) 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.

- (2) The owner or operator shall notify the department in writing at least thirty 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 is not planned and the owner or operator could not have known about the inspection thirty days in advance of refilling the vessel, the owner or operator shall notify the department at least seven 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 7 days prior to the refilling.

D.2.8 Crude Oil Level

Whenever the crude oil level in any of the nine (9) storage tanks falls to or below 3.75 feet from the bottom of that storage tank, the Permittee shall record the minimum crude oil level to the nearest 1/8th of an inch reached for each storage tank unloading using a Varec crude oil level gauge.

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

D.2.9 Record Keeping Requirements [326 IAC 12] [326 IAC 8-4] [326 IAC 8-9] [40 CFR 60, Subpart Ka] [40 CFR 60, Subpart Kb]

- (a) Pursuant to 40 CFR 60.115b(b), for tanks EU1601 through EU 1609, after installing control equipment (external floating roof) in accordance with 40 CFR 60.112b(a)(2), the Permittee shall:
 - (1) 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:
 - (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).
 - (b) Pursuant to 40 CFR 60.116b(a) and (b), for tanks EU1601 through EU1609, the Permittee shall maintain accessible records showing the dimension of each storage vessel and an analysis showing the capacity of each storage vessel. This record shall be kept for the life of the source.
 - (c) Pursuant to 326 IAC 8-4-3(d), the Permittee shall maintain the following records for storage tanks EU1601 through EU1609:
 - (1) The types of volatile petroleum liquid stored,
 - (2) The maximum true vapor pressure of the liquid as stored, and
 - (3) The results of the inspections performed on the storage vessels.Records shall be maintained for a period of two (2) years and shall be made available to the commissioner upon written request.
- (d) Pursuant to 326 IAC 8-9-6(b), the Permittee shall maintain a record of the following for storage tanks EU1601 through EU1609:

- (1) The vessel identification number.
- (2) The vessel dimensions.
- (3) The vessel capacity.
- (4) A description of the emission control equipment for each storage vessel with a certification that the emission control equipment meets the applicable standards.

These records shall be maintained for the life of the vessel.

- (e) Pursuant to 326 IAC 8-9-6(d), the Permittee shall keep a record for storage tanks EU1601 through EU1609 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 following:
 - (1) The date of measurement.
 - (2) The raw data obtained in the measurement.
 - (3) The calculations described in 326 IAC 8-9-5(c)(2) and 326 IAC 8-9-5(c)(3).

These records shall be maintained for a period of three (3) years.

- (f) In order to comply with Conditions D.2.5 and D.2.7, the Permittee shall record the crude level void air space height each time the unloading of storage tanks EU1601 through EU1609 results in void air space.
- (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.10 Reporting and Notification Requirements [326 IAC 12] [326 IAC 8-4] [326 IAC 8-9] [40 CFR 60, Subpart Kb]

- (a) Pursuant to 40 CFR 60.115b(b), for tanks EU1601 through EU1609, after installing control equipment (external floating roof) in accordance with 40 CFR 60.112b(a)(2), the Permittee shall:
 - (1) Furnish the Administrator 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).
 - (2) Within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1), furnish the Administrator 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).
 - (3) After each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4), submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the

information specified in 40 CFR 60.113b(b)(2) and the date the vessel was emptied or the repairs made and date of repair.

- (b) Pursuant to 326 IAC 8-9-5(c)(5), the Permittee shall notify IDEM, OAQ thirty (30) days in advance of any gap measurements required by Condition D.2.6 to afford IDEM, OAQ the opportunity to have an observer present.
- (c) Pursuant to 326 IAC 8-9-5(c)(6)(B), the Permittee shall notify IDEM, OAQ in writing at least thirty (30) days prior to the filling or refilling of each vessel to afford IDEM, OAQ the opportunity to inspect the vessel prior to the filling. If the inspection required by 326 IAC 8-9-5(c)(6) 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 IDEM, OAQ 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 IDEM, OAQ at least seven (7) days prior to the refilling.
- (d) Pursuant to 326 IAC 8-9-6:
 - (1) Within sixty (60) days of performing the seal gap measurements required by 326 IAC 8-9-5(c)(1), the Permittee shall furnish IDEM, OAQ with a report that contains the following:
 - (A) The date of measurement.
 - (B) The raw data obtained in the measurement.
 - (C) The calculations described in 326 IAC 8-9-5(c)(2) and 326 IAC 8-9-5(c)(3).
 - (2) After each seal gap measurement that detects gaps exceeding the limitations specified in 326 IAC 8-9-5(c), the Permittee shall submit a report to IDEM, OAQ within thirty (30) days of the inspection. The report shall identify the vessel and contain the date of measurement, the raw data obtained in the measurement, the calculations described in 326 IAC 8-9-5(c)(2) and 326 IAC 8-9-5(c)(3), and the date the vessel was emptied or the repairs made and date of repair.
- (e) Pursuant to 326 IAC 8-9-6, the Permittee of storage vessels EU1601 through EU1609, shall submit to IDEM, OAQ a report containing the following information for each vessel:
 - (1) The vessel identification number.
 - (2) The vessel dimensions.
 - (3) The vessel capacity.
 - (4) A description of the emission control equipment for each storage vessel with a certification that the emission control equipment meets the applicable standards.
- (f) The reports and notifications required by this Condition shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith
Source Address: Central Avenue and Division Street, Scherverville, Indiana 46375 and 1500 West
Main Street, Griffith, Indiana 46319
Mailing Address: 119 North 25th Street, Superior, Wisconsin 54880
Part 70 Permit No.: T089-17501-00497

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)
- Report (specify)
- Notification (specify)
- Affidavit (specify)
- Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith
Source Address: Central Avenue and Division Street, Scherverville, Indiana 46375 and 1500 West
Main Street, Griffith, Indiana 46319
Mailing Address: 119 North 25th Street, Superior, Wisconsin 54880
Part 70 Permit No.: T089-17501-00497

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith
 Source Address: Central Avenue and Division Street, Schererville, Indiana 46375 and 1500 West Main Street, Griffith, Indiana 46319
 Mailing Address: 119 North 25th Street, Superior, Wisconsin 54880
 Part 70 Permit No.: T089-17501-00497

Months: _____ to _____ Year: _____

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality**

**Addendum to the Technical Support Document
for a Part 70 (Title V) Operating Permit Renewal**

Source Background and Description

Source Name: Enbridge Energy, Limited Partnership – Hartsdale/Griffith
Source Location: Central Avenue and Division Street, Schererville, Indiana 46375 and 1500 West Main Street, Griffith, Indiana 46319
County: Lake
SIC Code: 4612
Operation Permit No.: T089-17501-00497
Permit Reviewer: ERG/ST

On June 29, 2007, the Office of Air Quality (OAQ) had a notice published in the Post Tribune, Merrillville, Indiana, stating that Enbridge Energy, Limited Partnership – Hartsdale/Griffith had applied for a Part 70 Operating Permit Renewal to operate a crude petroleum pipeline and storage terminal. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On June 27, 2007, Enbridge Energy, Limited Partnership – Hartsdale/Griffith submitted comments on the proposed Part 70 Renewal permit. The summary of the comments is as follows:

Comment 1: On pages 1, 5, 47 and 48 of the permit, please correct the street address for the Griffith Terminal to 1500 West Main Street.

IDEM Response to Comment 1: The street address for the Griffith Terminal has been corrected throughout the permit as follows:

**Enbridge Energy, Limited Partnership - Hartsdale/Griffith
Central Avenue and Division Street, Schererville, Indiana 46375 and ~~450~~
1500 West Main Street, Griffith, Indiana 46319**

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary crude petroleum pipeline and storage terminal.

Source Address: Central Avenue and Division Street, Schererville, Indiana 46375 and ~~450~~ 1500 West Main Street, Griffith, Indiana 46319
Mailing Address: 119 North 25th Street, Superior, Wisconsin 54880
General Source Phone Number: (218) 725-0145
SIC Code: 4612
County Location: Lake
Source Location Status: Nonattainment for 8-hour ozone standard
Nonattainment for PM 2.5 standard
Attainment for all other criteria pollutants

Source Status: Part 70 Operating Permit Program
Major Source, under PSD and Emission Offset Rules
Minor Source, Section 112 of the Clean Air Act
1 of 28 Source Categories

The address on the reporting forms has been changed as follows:

Source Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith
Source Address: Central Avenue and Division Street, Schererville, Indiana 46375 and ~~450~~ **1500**
West Main Street, Griffith, Indiana 46319
Mailing Address: 119 North 25th Street, Superior, Wisconsin 54880
Part 70 Permit No.: T089-17501-00497

Comment 2: Please correct the following errors in the potential to emit calculations for the piping and tanks in Appendix A to the Technical Support Document (TSD):

- (a) On page 1 of Appendix A to the TSD, please correct the fugitive piping emission calculations to include emissions from the Hartsdale Terminal. The quantity of piping components used in the calculations only included the components from the Griffith Terminal.
- (b) On page 2 of the Appendix to the TSD, please recalculate the tank emissions to include tank turnovers and throughput for all tanks at both terminals. Also, please recalculate the roof landing emissions for all tanks using the AP-42 methodology included in AP-42, Fifth Edition, Volume I Chapter 7.1, November 2006.
- (c) On page 3 of the Appendix to the TSD, please remove the phrase "Truck Loading Racks" from the title for this page. This terminal does not operate truck loading racks.
- (d) On page 3 of the Appendix to the TSD, please recalculate HAP emissions from storage tank standing and roof landing losses and fugitive piping components based on using a vapor weight fractions and not the liquid weight fraction. Please recalculate HAP emissions using the HAP speciation methodology described in AP 42, Fifth Edition Volume I Chapter 7.1, November 2006 or American Petroleum Institute (API) Manual of Petroleum Measurement Standards Chapter 19.4 - Recommended Practice for Speciation of Evaporative Losses, Second Edition, September 2005.
- (e) On page 4 of the Appendix to the TSD, please delete the reference to 1,600 hp generators. The source does not operate any generators this large.

IDEM Response to Comment 2: The fugitive piping emission calculations have been corrected as shown on page 1 of Appendix A to this Addendum. The tank emissions of VOC have been recalculated based on the information submitted by the Permittee. The corrected potential to emit of VOC for the tanks is shown on page 2 of the Appendix to this Addendum. Since the Permittee does not operate truck loading racks, the title has been deleted from page 3. The HAP emissions for the piping and storage tanks have been recalculated using the vapor weight fraction methodology in AP 42. The corrected potential to emit of HAPs for the tanks is shown on page 3 of the Appendix to this Addendum. Since the source does not operate any large generators, the reference to 160 hp generators has been removed. All of these changes are shown in Appendix A to this Addendum.

Comment 3: Please update the Unrestricted Potential to Emit and the Potential to Emit After Issuance tables in the Technical Support Document (TSD) to reflect the corrected values for the VOC and HAP emissions from the piping and tanks.

IDEM Response to Comment 3: The values in the Unrestricted Potential Emissions table and the Potential to Emit After Issuance table in the TSD should read as follows:

Unrestricted Potential Emissions

Pollutant	PTE (tons/year)
PM	0.21
PM-10	0.21
SO ₂	0.20
VOC	118 243.2
CO	0.64
NO _x	2.87 2.86
Single HAP (Hexane)	2.91 2.17
Combination HAPs	7.21 3.31

Potential to Emit After Issuance

Process/emission unit	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Tanks EU70 – EU78	0	0	0	52.8 81.6	0	0	2.85 1.20
Tank EU79	0	0	0	15.9 20.9	0	0	0.86 0.213
Tanks EU1601 – EU1609	0	0	0	53.8 139.6	0	0	2.9 1.28
Spearhead Project	0	0	0	0.19	0	0	0.01 0.002
Emergency Generators	0.21	0.21	0.20	0.24	0.64	2.86	0.61
Pumps, Valves, Orifices, Flanges, Sampling Connections	0	0	0	0.30 0.68	0	0	0.015 0.006
Total PTE	0.21	0.21	0.20	123 243.2	0.64	2.86	7.26 3.31

Note: PTE for VOC and HAP for all tanks EU70 – EU79 are from TANKS 4.0. U.S. EPA’s Compilation of Air Pollutant Emission Factors, Volume 1, 5th Edition, AP 42, Chapter 7.1 Liquid Storage Tanks (September 1977).

No changes have been made to the Technical Support Document (TSD) because the OAQ prefers that the TSD reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the TSD. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Comment 4: In Sections A.2 and D.2 of the permit, the references to Subpart Kb and the requirements for Subpart Kb for the tanks at the Hartsdale Terminal should be removed. The requirements of 40 CFR 60, Subpart Kb were incorrectly applied to these tanks (EU1601 through EU1609) in Minor Source Modification 089-21491-00497, issued on August 18, 2005. Also, the void air space requirements in conditions D.2.5 and D.2.7 should be removed. The landing of the tank’s floating lid and the release of void air space should not be considered a modification under the NSPS, as these actions occur as a part of normal operations.

IDEM Response to Comment 4: The changes requested by the Permittee require extensive examination of the permits and issues involved. Such an action is outside of the scope of this Addendum. IDEM and the Permittee have agreed to address this concern in a separate permit action.

Appendix A: Emission Calculations
Fugitive VOC Emissions from Pumps, Valves, Orifices, Flanges and Sampling Connections

Company Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith Terminal
Address: 1500 West Main Street, Griffith, Indiana 46319 and Central Avenue and Division Street, Schererville, Indiana 46375
Title V: ~~T089-17501-00059~~ **T089-17501-00497**
Reviewer: ERG/ST
Date: **July 30, 2007**

Equipment Description	Quantity Griffith Terminal	Quantity Hartsdale Terminal	Emission Factor (kg/hour)	PTE of VOC Griffith Terminal (tons/year)	PTE of VOC Hartsdale Terminal (tons/year)	Total PTE of VOC (tons/year)
Pump Seals	29	22	5.40E-04	0.15	0.11	0.27
Valves	228	391	4.30E-05	0.09	0.16	0.26
Orifices	9	-	1.30E-04	0.01	-	0.01
Flanges	492	1,246	8.00E-06	0.04	0.10	0.13
Sampling Connections	4	10	1.30E-04	0.01	0.01	0.02
			Total	0.30	0.39	0.68

Emission factors from "Protocol For Equipment Leak Emission Estimates", Table 2-3 Marketing Terminal Average Emission Factors, EPA-453/R-93-026, (June 1993)

Methodology

PTE of VOC (tons/year) = Quantity of Emission Units x Emission Factor (kg/hour) x 2.2 (lbs/kg) x 8760 (hours/year) x 1 ton/2000 lbs

Appendix A: Emission Calculations
VOC Emissions from Tanks

Company Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith Terminal

Address: 1500 West Main Street, Griffith, Indiana 46319 and Central Avenue and Division Street, Schererville, Indiana 46375

Title V: ~~T089-17501-00059~~ **T089-17501-00497**

Reviewer: ERG/ST

Date: **July 30, 2007**

Tank ID #	Fuel	Roof Type	Maximum Capacity (gal)	Number of Turnovers (1/year)	Maximum Throughput (gal/year)	Year Constructed	PTE of VOC (lbs/year)
EU70	Crude Oil	External Floating	5,040,000	416.25 70.76	585,900,000 356,614,015	1969	40,453
EU71	Crude Oil	External Floating	9,114,000	416.25 70.76	4,059,502,500 644,877,010	1970	41,939
EU72	Crude Oil	External Floating	9,114,000	416.25 70.76	4,059,502,500 644,877,010	1971	41,939
EU73	Crude Oil	External Floating	9,114,000	416.25 70.76	4,059,502,500 644,877,010	1971	41,939
EU74	Crude Oil	External Floating	9,114,000	416.25 70.76	4,059,502,500 644,877,010	1972	41,939
EU75	Crude Oil	External Floating	9,114,000	416.25 70.76	4,059,502,500 644,877,010	1972	41,939
EU76	Crude Oil	External Floating	16,590,000	416.25 70.76	1,928,587,500 1,173,854,466	1973	44,734
EU77	Crude Oil	External Floating	16,590,000	416.25 70.76	1,928,587,500 1,173,854,466	1973	44,734
EU78	Crude Oil	External Floating	9,114,000	416.25 70.76	4,059,502,500 644,877,010	1979	5,950
EU79	Crude Oil	External Floating	16471098 15,540,000	70.31 70.76	1,158,082,900 1,099,559,879	2006	12,716
EU79	Crude Oil	External Floating		Landing Losses ^a			9,460
EU1601	Crude Oil	External Floating	4,200,000	NA 70.76	NA 297,178,346	1958	6.48
EU1602	Crude Oil	External Floating	4,200,000	NA 70.76	NA 297,178,346	1958	6.48
EU1603	Crude Oil	External Floating	4,200,000	NA 70.76	NA 297,178,346	1958	6.48
EU1604	Crude Oil	External Floating	4,200,000	NA 70.76	NA 297,178,346	1958	6.48
EU1605	Crude Oil	External Floating	4,200,000	NA 70.76	NA 297,178,346	1958	6.48
EU1606	Crude Oil	External Floating	4,200,000	NA 70.76	NA 297,178,346	1958	6.48
EU1607	Crude Oil	External Floating	4,200,000	NA 70.76	NA 297,178,346	1958	6.48
EU1608	Crude Oil	External Floating	4,200,000	NA 70.76	NA 297,178,346	1958	6.48
EU1609	Crude Oil	External Floating	4,200,000	NA 70.76	NA 297,178,346	1958	6.48
EU1601-09	Crude Oil	External Floating		Landing Losses ^a		4958	49,200

Total

The potential to emit of VOC for the storage tanks is calculated using **U.S. EPA's TANKS-4.0. Compilation of Air Pollutant Emission Factors, Vol Edition, AP 42, Chapter 7.1 Liquid Storage Tanks (September 1977)**. Information on maximum capacity and number of turnovers per year provide source.

^a VOC emissions due to landing losses is from information submitted by source.

Methodology:

Maximum Throughput (gal/year) = Maximum capacity (gal) x Number of turnovers per year.

PTE of VOC (tons/year)	
5.23	9.40
5.97	11.21
5.97	11.36
5.97	11.35
5.97	13.19
5.97	13.19
7.37	15.29
7.37	15.29
2.98	6.67
6.36	16.14
4.73	
3.24	12.78
24.60	
417.7	267.4

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Appendix A: Emission Calculations
HAP Emissions from Truck Loading Racks and Tanks

Company Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith Terminal
Address: 1500 West Main Street, Griffith, Indiana 46319 and Central Avenue and Division Street, Schererville, Indiana 46375
Title V: ~~T089-17501-00059~~ **T089-17501-00497**
Reviewer: ERG/ST
Date: **July 30, 2007**

HAP Emission Factors (vapor weight %)						
Hexane	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	1,2,4-Trimethylbenzene-Other HAPs
2.463 0.81%	0.446 0.12%	0.878 0.054 %	0.346 0.0065%	1.42 0.02%	0.219 0.0001%	0.326 0.011%
8.07E-03	1.18E-03	5.38E-04	6.55E-05	2.02E-04	6.48E-07	1.08E-04

Facility/ Tank ID #	Fuel Type	PTE of VOC (tons/yr)	PTE of Hexane (tons/yr)	PTE of Benzene (tons/yr)	PTE of Toluene (tons/yr)	PTE of Ethylbenzene (tons/yr)	PTE of Xylenes (tons/yr)	PTE of Naphthalene (tons/yr)	0.000
EU70	Crude Oil	5.23 9.40	0.129 0.076	0.023 0.011	0.046 0.005	0.018 0.001	0.074 0.002	0.011 0.000	0.017 0.001
EU71	Crude Oil	5.97 11.21	0.147 0.090	0.027 0.013	0.052 0.006	0.021 0.001	0.085 0.002	0.013 0.000	0.019 0.001
EU72	Crude Oil	5.97 11.36	0.147 0.092	0.027 0.013	0.052 0.006	0.021 0.001	0.085 0.002	0.013 0.000	0.019 0.001
EU73	Crude Oil	5.97 11.35	0.147 0.092	0.027 0.013	0.052 0.006	0.021 0.001	0.085 0.002	0.013 0.000	0.019 0.001
EU74	Crude Oil	5.97 13.19	0.147 0.106	0.027 0.016	0.052 0.007	0.021 0.001	0.085 0.003	0.013 0.000	0.019 0.001
EU75	Crude Oil	5.97 13.19	0.147 0.106	0.027 0.016	0.052 0.007	0.021 0.001	0.085 0.003	0.013 0.000	0.019 0.001
EU76	Crude Oil	7.37 15.29	0.184 0.123	0.033 0.018	0.065 0.008	0.025 0.001	0.105 0.003	0.016 0.000	0.024 0.002
EU77	Crude Oil	7.37 15.29	0.184 0.123	0.033 0.018	0.065 0.008	0.025 0.001	0.105 0.003	0.016 0.000	0.024 0.002
EU78	Crude Oil	2.98 6.67	0.073 0.054	0.013 0.008	0.026 0.004	0.010 0.000	0.042 0.001	0.007 0.000	0.010 0.001
EU79	Crude Oil	6.36 16.14	0.157 0.130	0.028 0.019	0.056 0.009	0.022 0.001	0.090 0.003	0.014 0.000	0.021 0.002
EU79 - Landing Losses		4.73	0.116 0.038	0.021 0.006	0.042 0.003	0.016 0.000	0.067 0.001	0.010 0.000	0.015 0.001
EU1601	Crude Oil	3.24 12.78	0.080 0.103	0.014 0.006	0.028 0.003	0.011 0.000	0.046 0.001	0.007 0.000	0.011 0.001
EU1602	Crude Oil	3.24 12.78	0.080 0.103	0.014 0.006	0.028 0.003	0.011 0.000	0.046 0.001	0.007 0.000	0.011 0.001
EU1603	Crude Oil	3.24 12.78	0.080 0.103	0.014 0.006	0.028 0.003	0.011 0.000	0.046 0.001	0.007 0.000	0.011 0.001
EU1604	Crude Oil	3.24 12.78	0.080 0.103	0.014 0.006	0.028 0.003	0.011 0.000	0.046 0.001	0.007 0.000	0.011 0.001
EU1605	Crude Oil	3.24 12.78	0.080 0.103	0.014 0.006	0.028 0.003	0.011 0.000	0.046 0.001	0.007 0.000	0.011 0.001
EU1606	Crude Oil	3.24 12.78	0.080 0.103	0.014 0.006	0.028 0.003	0.011 0.000	0.046 0.001	0.007 0.000	0.011 0.001
EU1607	Crude Oil	3.24 12.78	0.080 0.103	0.014 0.006	0.028 0.003	0.011 0.000	0.046 0.001	0.007 0.000	0.011 0.001
EU1608	Crude Oil	3.24 12.78	0.080 0.103	0.014 0.006	0.028 0.003	0.011 0.000	0.046 0.001	0.007 0.000	0.011 0.001
EU1609	Crude Oil	3.24 12.78	0.080 0.103	0.014 0.006	0.028 0.003	0.011 0.000	0.046 0.001	0.007 0.000	0.011 0.001
EU1601-1609 - Landing Losses		24.60	0.606 0.199	0.110 0.029	0.216 0.013	0.085 0.002	0.349 0.005	0.054 0.000	0.080 0.003
Spearhead Project	Crude Oil	0.19	0.005 0.002	0.001 0.000	0.002 0.000	0.001 0.000	0.003 0.000	0.000 0.000	0.001 0.000
Pump Seals	Crude Oil	0.27	0.004 0.002	0.001 0.000	0.001 0.000	0.001 0.000	0.002 0.000	0.000 0.000	0.000 0.000
Valves	Crude Oil	0.26	0.002 0.002	0.000 0.000	0.001 0.000	0.000 0.000	0.001 0.000	0.000 0.000	0.000 0.000
Orifices	Crude Oil	0.01	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
Flanges	Crude Oil	0.13	0.001 0.001	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.000	0.000 0.000	0.000 0.000
Sampling Connections	Crude Oil	0.02	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
Totals			2.94 2.17	0.53 0.32	1.04 0.14	0.41 0.02	1.68 0.05	0.26 0.00	0.39 0.00

Emissions of HAPs as weight percent of Crude Oil are from Material Safety Data Sheets. Vapor Weight percent calculated per U.S. EPA's Compilation of Air Pollutant Emission Factors, Volume 1, 5th Edition, AP 42, Chapter 7.1 Liquid Storage Tanks (September 1977) Hazardous Air Pollutant Speciation Methodology, Section 7.1.4.

Methodology
PTE of VOC (tons/year) from Appendix A: pages 2 and 3
PTE of HAPs (tons/year) = PTE of VOC (tons/year) x Emission Factor (HAP content of VOC (weight vapor %))

Appendix A: Emission Calculations
Internal Combustion Engine - Diesel Emergency Generators

Company Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith Terminal
 Address: 1500 West Main Street, Griffith, Indiana 46319 and Central Avenue and Division Street, Schererville, Indiana 46375
 Title V: ~~T089-17501-00059~~ **T089-17501-00497**
 Reviewer: ERG/ST
 Date: **July 30, 2007**

Power Output Horse Power (Hp)
207
175

Operation Limit (hours/year)
500
500

S = Weight % Sulfur

0.5

		PM*	PM10*	SO ₂	NO _x	**VOC	CO	HAPs
Emission Factor (lb/Hp-hr)	(< 600 hp)	2.20E-03	2.20E-03	2.05E-03	3.00E-02	2.47E-03	6.68E-03	6.47E-03

		PM*	PM10*	SO ₂	NO _x	**VOC	CO	HAPs
Potential to Emit (tons/year)	207 hp	0.11	0.11	0.11	1.55	0.13	0.35	0.33
	175 hp	0.10	0.10	0.09	1.31	0.11	0.29	0.28

*Assume PM10 emissions are equal to PM emissions.

** Assume TOC (total organic compounds) emissions are equal to VOC emissions.

Emission factors for **207 and 175 hp** diesel generators are from AP-42, Tables 3.3-1 and 3.3-2, (SCC 2-02-001-01, 2-03-001-01) (AP-42, 10/96).

~~Emission factors for 1,600 hp diesel generator are from AP-42, Tables 3.4-1 and 3.4-3, SCC #2-02-004-01 (AP-42, 10/96).~~

1 Hp-hr = 7,000Btu: AP 42, Chapter 3.3, Table 3.3-1 "Emission Factors for Uncontrolled Gasoline and Diesel Engines" (10/96).

Note: As defined in the September 6, 1995 memorandum from John S. Seitz of US EPA on the subject of "Calculating Potential to Emit for Emergency Generators", an emergency generator's sole function is to provide back-up power when power from the local utility is interrupted. The only circumstances under which an emergency generator would operate when utility power is available are during operator training or brief maintenance checks. The generator's potential to emit is based on an operating time of 500 hours per year as set forth in the EPA memo.

Methodology

HAP Emission Factor (lbs/Hp-hr) = (SUM (HAP emission factors (lbs/MMBtu)) x 1/1,000,000 (MMBtu/Btu) x 7,000 (Btu/Hp-hr)

PTE (tons/year) = Power Output (Hp) x Emission Factor (lbs/Hp-hr) x Operation Limit (hours/year) x 1 ton/2000 lbs

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	Enbridge Energy, Limited Partnership – Hartsdale/Griffith
Source Location:	1500 West Main Street, Griffith, Indiana 46319 and Central Avenue and Division Street, Schererville, Indiana 46375
County:	Lake
SIC Code:	4612
Operation Permit No.:	T089-7802-00059 and T089-11137-00081
Operation Permit Issuance Date:	September 24, 1998 and May 1, 2001, respectively
Permit Renewal No.:	T089-17501-00497
Permit Reviewer:	ERG/ST

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit Renewal application from Enbridge Energy, Limited Partnership relating to the operation of a crude petroleum pipeline and storage terminal.

History and Background

This combined source consists of two stationary crude petroleum pipeline and storage terminals. The source was issued Title V (Part 70) permit T089-7802-00059 on September 24, 1998 as Lakehead Pipe Line Company for its Griffith terminal. The source was also issued Title V (Part 70) permit T089-11137-00081 on May 1, 2001 as Lakehead Pipe Line Company – Hartsdale Terminal for its Hartsdale terminal. On November 1, 2005, the two sources were combined in Minor Permit Modification 089-21442-00497. The source name is Enbridge Energy, Limited Partnership – Hartsdale/Griffith.

Source Definition

The Source Definition from Minor Permit Modification 089-21442-00497, issued on November 1, 2005 was incorporated into this permit as follows:

This bulk petroleum storage company consists of two (2) plants:

- (a) Hartsdale Terminal with Plant ID 089-00081 is located at Central Avenue and Division Street, Schererville, Indiana 46375; and
- (b) Griffith Terminal with Plant ID 089-00059 is located at 1500 West Main Street and Lakehead Road, Griffith, Indiana 46319.

IDEM, OAQ has determined that these two (2) terminals are considered one plant and therefore, the two (2) Part 70 permits will be combined into one permit. Therefore, the term “source” in the Part 70 documents refers to both the Hartsdale Terminal and the Griffith Terminal as one source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

Hartsdale Terminal:

- (a) Nine (9) crude oil storage tanks, all constructed in 1958, identified as EU1601 through EU1609, each with an external floating roof, each with a maximum storage capacity of capacity of 4,200,000 gallons (100,000 barrels) of crude oil.

Under the New Source Performance Standard 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, Subpart Kb) (326 IAC 12), storage tanks EU1601 through EU1609 are considered to be an affected source.

- (b) One (1) pump station, constructed in 2005, identified as Spearhead project, consisting of three (3) main line booster pumps and associated piping, metering, sampling and maintenance equipment, with a maximum potential throughput of 125,000 barrels per day.
- (c) Piping component fugitive emission sources in VOC service.

Griffith Terminal:

- (a) One (1) crude oil storage tank, constructed in 1969, identified as EU70, with an external floating roof, with a maximum capacity of 120,000 barrels.
- (b) One (1) crude oil storage tank, constructed in 1970, identified as EU71, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (c) One (1) crude oil storage tank, constructed in 1971, identified as EU72, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (d) One (1) crude oil storage tank, constructed in 1971, identified as EU73, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (e) One (1) crude oil storage tank, constructed in 1972, identified as EU74, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (f) One (1) crude oil storage tank, constructed in 1972, identified as EU75, with an external floating roof, with a maximum capacity of 217,000 barrels.
- (g) One (1) crude oil storage tank, constructed in 1973, identified as EU76, with an external floating roof, with a maximum capacity of 395,000 barrels.
- (h) One (1) crude oil storage tank, constructed in 1973, identified as EU77, with an external floating roof, with a maximum capacity of 395,000 barrels.
- (i) One (1) crude oil storage tank, constructed in 1979, identified as EU78, with an external floating roof, with a maximum capacity of 217,000 barrels.

Under the New Source Performance Standard for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 (40 CFR 60, Subpart Ka) (326 IAC 12), storage tank EU78 is considered to be an affected source.

- (j) One (1) crude oil storage tank, constructed in 2006, identified as EU79, with an external floating roof, with a maximum capacity of 392,169 barrels (16,471,098 gallons).

Under the New Source Performance Standard 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, Subpart Kb) (326 IAC 12), storage tank EU79 is considered to be an affected source.

- (k) Piping component fugitive emission sources in VOC service.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (b) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and/or fluid handling equipment.
- (c) On-site fire training approved by IDEM, OAQ.
- (d) Two (2) emergency diesel generators, rated at 175 horsepower and 207 horsepower.
- (e) A laboratory as defined in 326 IAC 2-7-1(21)(D).

Existing Approvals

This combined source has been operating under Title V Operating Permit 089-7802-00059, issued on September 24, 1998, Title V Operating Permit 089-11137-00081, issued on May 1, 2001, and the following previous approvals:

- (a) Significant Source Modification to T089-11137-00081: SSM 089-14657 00081, issued on November 8, 2001
- (b) Significant Permit Modification to T089-11137-00081: SPM 089-14902-00081, issued on November 27, 2001
- (c) Reopening to T089-7802-00059: R 089-13365 00059, issued on February 6, 2002
- (d) First Administrative Amendment to T089-7802-00059: 089-18379-00059, issued on December 29, 2003
- (e) First Administrative Amendment to T089-11137-00081: AA 089-19761-00081, issued on November 15, 2004
- (f) Second Administrative Amendment to T089-11137-00081: AA 089-19406-00081, issued on February 15, 2005
- (g) Minor Source Modification 089-21491-00497, issued on August 18, 2005
- (h) Minor Permit Modification 089-21442-00497, issued on November 1, 2005

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous permits are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document (pages 1 through 4).

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	Maintenance Attainment
PM 2.5	Nonattainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Nonattainment
CO	Attainment
Lead	Attainment

- (a) U.S.EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Lake County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as a surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability – Entire Source section.
- (b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability for the source section.
- (c) Lake County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (d) Fugitive Emissions
 Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.
- (e) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	PTE (tons/year)
PM	0.21
PM-10	0.21
SO ₂	0.20
VOC	118
CO	0.64
NO _x	2.87

Single HAP (Hexane)	2.91
Combination HAPs	7.21

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.
- (d) Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are counted toward the determination of Part 70 applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2003 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	Not Reported
PM10	Not Reported
SO ₂	Not Reported
VOC	80
CO	Not Reported
NO _x	Not Reported
HAP	Not Reported

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of the original Part 70 operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/emission unit	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Tanks EU70 – EU78	0	0	0	52.8	0	0	2.85
Tank EU79	0	0	0	15.9	0	0	0.86
Tanks EU1601 – EU1609	0	0	0	53.8	0	0	2.9
Spearhead Project	0	0	0	0.19	0	0	0.01
Emergency Generators	0.21	0.21	0.20	0.24	0.64	2.86	0.61
Pumps, Valves, Orifices, Flanges, Sampling Connections	0	0	0	0.30	0	0	0.015
Total PTE	0.21	0.21	0.20	123	0.64	2.86	7.26

Note: PTE for VOC and HAP for tanks EU70 – EU79 are from TANKS 4.0.

- (a) This existing stationary source is major for Emission Offset because the emissions of the nonattainment pollutant, VOC, are greater than one hundred (>100) tons per year.
- (b) Fugitive Emissions
 Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not included in this permit. This source does not involve a pollutant-specific emissions unit as defined in 40 CFR 64.1 for VOC:
 - (1) With the potential to emit before controls equal to or greater than the major source threshold for VOC,
 - (2) That is subject to an emission limitation or standard for VOC, and
 - (3) Uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.
- (b) The requirements of the New Source Performance Standard 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, Subpart K) (326 IAC 12), are not included in this permit for the petroleum storage tanks EU70 through EU78 and EU1601 through EU1609. Construction of petroleum storage tanks EU70 through EU77 and EU1601 through EU1609 commenced prior to June 11, 1973, and the tanks have not been reconstructed or modified since that time. Construction of petroleum storage tanks EU78 and EU79 commenced after May 19, 1978.
- (c) The requirements of the New Source Performance Standard 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, Subpart Kb) (326 IAC 12), are not included in this permit for the petroleum storage tanks EU70 through EU78 and EU1601 through EU1609. Construction of these petroleum storage tanks commenced prior to July 23, 1984, and the tanks have not been reconstructed or modified since July 23, 1984.

- (d) The requirements of the New Source Performance Standard for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 (40 CFR 60, Subpart Ka) (326 IAC 12) are not included in this permit for the petroleum storage tanks EU70 through EU77 because construction of petroleum storage tanks EU70 through EU77 and EU1601 through EU1609 commenced prior to May 18, 1978, and these tanks have not been reconstructed or modified since that time.
- (e) The petroleum storage tank identified as EU78 at this source is subject to the New Source Performance Standard for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 (40 CFR 60, Subpart Ka) (326 IAC 12) because this storage tank contains a volatile organic liquid, was constructed after May 18, 1978 and prior to July 23, 1984, and, although it is used for petroleum storage prior to custody transfer, its storage capacity is greater than 420,000 gallons. The crude oil stored in these tanks has a true vapor pressure of 3.4 psia (23.4 kPa) at 70 degrees Fahrenheit (AP 42, Table 7.1-2 (9/97))

The petroleum storage tank identified as EU78 is subject to the following portions of 40 CFR 60, Subpart Ka. Non applicable portions of the NSPS will not be included in the permit.

- (1) 40 CFR 60.110a(a)
- (2) 40 CFR 60.110a(b)
- (3) 40 CFR 60.111a
- (4) 40 CFR 60.112a(a)
- (5) 40 CFR 60.113a
- (6) 40 CFR 60.115a(a), (b), (c)

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated as 326 IAC 12-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60, Subpart Ka.

- (f) The petroleum storage tanks identified as EU79 and EU1601 through EU1609 at this source are subject to the New Source Performance Standard 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, Subpart Kb) (326 IAC 12) because these storage tanks contain a volatile organic liquid, were constructed or modified after July 23, 1984, and, although they are used for petroleum storage prior to custody transfer, their storage capacity is greater than 420,000 gallons. The crude oil stored in these tanks has a true vapor pressure of 3.4 psia (23.4 kPa) at 70 degrees Fahrenheit (AP 42, Table 7.1-2 (9/97))

The petroleum storage tanks identified as EU79 and EU1601 through EU1609 are subject to the following portions of 40 CFR 60, Subpart Kb. Non applicable portions of the NSPS will not be included in the permit.

- (1) 40 CFR 60.110b(a), (b)
- (2) 40 CFR 60.111b
- (3) 40 CFR 60.112b(a)(2)
- (4) 40 CFR 60.113b(b)
- (5) 40 CFR 60.115b(b)
- (6) 40 CFR 60.116b(a), (b), (c), (d), (e)
- (7) 40 CFR 60.117b

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated as 326 IAC 12-1-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 60, Subpart Kb.

- (g) The requirements of New Source Performance Standard for Bulk Gasoline Terminals (40 CFR 60, Subpart XX, 326 IAC 12) are not included in this permit because this source is not a bulk gasoline terminal and does not have loading racks which deliver liquid product into gasoline tank trucks.
- (h) The requirements of New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII) are not included in this permit for the emergency diesel generators because these engines were constructed after construction after July 11, 2005 and have not been modified or reconstructed since that time.
- (i) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 326 IAC 20, 40 CFR 61, and 40 CFR 63) included in this permit. This source is not a major source of HAP, as defined in 40 CFR 63.2.
- (j) The requirements of the National Emission Standards for Hazardous Air Pollutants for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations (40 CFR 63, Subpart R, 326 IAC 14) are not included in this permit because this source is not a major source of HAPs, as defined in 40 CFR 63.2.
- (k) The requirements of the National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries (40 CFR 63, Subpart CC) are not included in this permit because there are no petroleum refining process units at this source.
- (l) The requirements of the National Emission Standards for Hazardous Air Pollutants for Organic Liquids Distribution (Non-Gasoline) (40 CFR 63, Subpart EEEE) are not included in this permit because this source is not a major source of HAPs, as defined in 40 CFR 63.2.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source is in 1 of the 28 source categories because it is a petroleum storage and transfer facility with a total storage capacity exceeding 300,000 barrels. Also, there are applicable New Source Performance Standards that were in effect on August 7, 1980. The petroleum storage tank EU78 is subject to 40 CFR 60, Subpart Ka, which was promulgated on April 4, 1980. Therefore, fugitive emissions are counted towards applicability of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

This source was originally constructed in 1958, with storage tanks added in 1969, 1970, 1971, 1972, and 1973. At the time that the PSD rules were promulgated in 1977, the PTE for VOC was greater than 100 tons per year. Therefore, the source was a major source under PSD at the time that the PSD rules were promulgated.

The source added a new storage tank (EU78) in 1979. This modification did not trigger PSD review because the increase in PTE for PM10, NOx, CO and Lead due to this addition was less than the PSD significant levels. The source remained a major source under PSD after this modification.

The source constructed a new storage tank (EU79) in 2006 under Minor Source Modification 089-21491-00497. This modification did not trigger PSD review because the increase in PTE for PM10, NOx, CO and Lead due to this addition was less than the PSD significant levels. The source remained a major source under PSD after this modification.

326 IAC 2-3 (Emission Offset)

This source is in 1 of the 28 source categories because it is a petroleum storage and transfer facility with a total storage capacity exceeding 300,000 barrels. There are applicable New Source Performance Standards that were in effect on August 7, 1980. The petroleum storage tank EU78 is subject to 40 CFR 60, Subpart Ka, which was promulgated on April 4, 1980. Therefore, fugitive emissions of VOC and particulate matter are counted towards applicability of Emission Offset.

This source is located in Lake County. Lake County is currently designated as moderate non-attainment for the 8-hour ozone standard and non-attainment for PM_{2.5}. In 1989, this area was designated as a severe non-attainment area for the 1-hour ozone standard. This source was originally constructed in 1958. Storage tanks were added in 1969, 1970, 1971, 1972, 1973, and 1979. These modifications to the source did not result in review under the Emission Offset rules because they were completed before the area was designated non-attainment.

At the time that the area was designated as a severe non-attainment area, the potential to emit of volatile organic compounds (VOC) were greater than 25 tons per year. Therefore, this source was an existing major stationary source under Emission Offset.

In June 2000, the source was modified to allow the venting of void air space created during emptying of tanks. This modification was permitted in 2001 under SSM 089-14657-00081, issued on November 8, 2001. The increase in potential to emit of VOC over the five years prior to the modification (including the modification) was limited to less than 25 tons per year. This modification did not trigger Emission Offset review because the increase in emissions of VOC was limited to less than the de minimis level for Emission Offset.

In 2004, this area was designated as non-attainment for the 8-hour ozone standard. In 2005, the designation of severe non-attainment for the 1-hour ozone standard was removed. Because the PTE of VOC was greater than 100 tons per year, the source was a major source under Emission Offset for the 8-hour ozone standard.

The source constructed pumps and a new storage tank in 2005 and 2006, respectively, under MSM 089-21491-00497, issued on August 18, 2005. The increase in potential to emit of VOC due to this modification was 20.6 tons per year. This modification did not trigger Emission Offset review because the increase in PTE for VOC due to this addition was less than the Emission Offset significant level. For a full discussion of the PSD and Emission Offset issues involved with this modification, see pages 4 through 6 of the TSD for Minor Permit Modification 089-21442-00497, issued on November 1, 2005.

This source is a major stationary source under Emission Offset because the potential emissions of volatile organic compounds (VOC) are greater than 100 tons per year and this source is located in a non-attainment area for the 8-hour ozone standard (Lake County, Indiana, which is in the Chicago CMSA). Any future modifications that increase VOC by a significant amount are subject to the requirements of 326 IAC 2-3 (Emission Offset).

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The requirements of 326 IAC 2-4.1 do not apply to the facilities at this source because no new major sources of HAPs have been added to this source since July 27, 1997. The operation of the petroleum storage tanks (EU70 through EU78) and associated pipeline equipment will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2007 and every 3 years after. This source which is located in Lake County also has potential to emit greater than or equal to 25 tons of VOC; therefore, an emission statement covering the previous calendar year must be submitted by July 1 of any year that the source is not already required to submit a statement if the source emits VOC into the ambient air at levels equal to or greater than 25 tpy. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6.8 (Particulate Matter Limitations for Lake County)

This source is located in Lake County, but the facilities and operations at this source are not specifically listed in 326 IAC 6.8-2 through 326 IAC 6.8-11. The potential to emit of particulate matter (PM₁₀ and/or total suspended particulate) of the entire source is less than one-hundred (100) tons per year and the actual emissions of particulate matter are less than ten (10) tons per year. The potential to emit of fugitive particulate matter is less than five (5) tons per year. Therefore, pursuant to 326 IAC 6.8-1-1(a) and 326 IAC 6.8-10-1(a), the requirements of 326 IAC 6.8 are not applicable to this source.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This source is located in Lake County. This source has not added a facility with the potential to emit fugitive particulate matter greater than 25 tons per year, which requires a permit as set forth in 326 IAC 2, after December 13, 1985. Therefore, pursuant to 326 IAC 6-5-1, this source is not subject to the requirements of 326 IAC 6-5.

326 IAC 8-4-2 (Petroleum Refineries)

This source is not subject to the requirements of 326 IAC 8-4-2 because there are no petroleum refining process units at this source.

State Rule Applicability – Emergency Generators

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

The two (2) emergency generators are not subject to the requirements of 326 IAC 6-2 because they are not a source of indirect heating.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(b)(14), the two (2) emergency generators are not subject to the requirements of 326 IAC 6-3 because they have potential particulate emissions less than five hundred fifty-one thousandths (0.551) pound per hour.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The PTE of sulfur dioxide (SO₂) for the two (2) emergency generators is less than twenty-five (25) tons per year and less than ten (10) pounds per hour. Therefore, the requirements of 326 IAC 7-1.1 do not apply to these facilities.

326 IAC 7-4.1 (Lake County Sulfur Dioxide Emission Limitations)

The two (2) emergency generators at this source are located in Lake County and are not located at a source listed in 326 IAC 7-4-1.1(b) or (c). The emergency generators are not subject to the requirements of 326 IAC 7-1.1 because the PTE of SO₂ is less than twenty-five (25) tons per year and less than ten (10) pounds per hour. Therefore, pursuant to 326 IAC 7-4-1.1(a), these facilities are not subject to the requirements of 326 IAC 7-4-1.1.

326 IAC 10-5 (Nitrogen Oxide Reduction Program for Internal Combustion Engines (ICE))

The two (2) emergency generators are not subject to the requirements of 326 IAC 10-5 because these engines are not large NO_x SIP Call engines.

State Rule Applicability – Petroleum Storage Tanks

326 IAC 8-1-6 (Volatile Organic Compounds)

The storage tanks at this source are subject to the requirements of 326 IAC 8-4-3. Therefore, the requirements of 326 IAC 8-1-6 do not apply to these facilities.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

The source is located in Lake County. The storage tanks at this source (EU1601 through EU1609, EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, EU78, and EU79) contain a petroleum liquid, have a maximum storage capacity greater than one hundred fifty thousand (150,000) liters (thirty-nine thousand (39,000) gallons) and contain a volatile organic compound (crude oil) with a true vapor pressure greater than 10.5 kPa (1.5 psia).

The petroleum storage tanks at this source are equipped with external floating roofs. Therefore, the storage tanks comply with the requirements of 326 IAC 8-4-3(b).

The petroleum storage tanks at this source are equipped with external floating roofs, contain a liquid with a pour point of less than 50 degrees Fahrenheit, have capacities greater than 420,000 gallons, contain a petroleum liquid with a true vapor pressure less than 27.6 kPa, and are of welded construction. The tanks have been fitted with primary and secondary seals meeting the requirements 326 IAC 8-4-3(c)(2). Therefore, the storage tanks comply with the requirements of 326 IAC 8-4-3(c).

Pursuant to 326 IAC 8-4-3(d), the Permittee shall maintain records of:

- (a) The types of volatile petroleum liquid stored,
- (b) The maximum true vapor pressure of the liquid as stored, and
- (c) The results of the inspections performed on the storage vessels.

Records shall be maintained for a period of two (2) years and shall be made available to the commissioner upon written request.

326 IAC 8-4-4 (Bulk Gasoline Terminals)

The source is located in Lake County, and does not load gasoline and is not a bulk gasoline terminal. Therefore, pursuant to 326 IAC 8-4-1, the source is not subject to the requirements of 326 IAC 8-4-4.

326 IAC 8-4-5 (Bulk Gasoline Plants)

The source is located in Lake County, and does not meet the definition of a bulk gasoline plant, which requires a daily gasoline throughput of less than 20,000 gallons per day. Therefore, pursuant to 326 IAC 8-4-1, the source is not subject to the requirements of 326 IAC 8-4-5.

326 IAC 8-4-6 (Gasoline Dispensing Facilities)

The source is located in Lake County, and does not dispense gasoline into motor vehicles or portable containers from a storage tank. Therefore, pursuant to 326 IAC 8-4-1, the source is not subject to the requirements of 326 IAC 8-4-6.

326 IAC 8-4-7 (Gasoline Transports)

The source is located in Lake County, and does not transfer gasoline between transports and storage tanks. Therefore, pursuant to 326 IAC 8-4-1, the source is not subject to the requirements of 326 IAC 8-4-7.

326 IAC 8-4-9 (Leaks from Transports and Vapor Collection Systems; Records)

The source is located in Lake County, and is not subject to the requirements of 326 IAC 8-4-4, 326 IAC 8-4-5, 326 IAC 8-4-6, or 326 IAC 8-4-7. Therefore, pursuant to 326 IAC 8-4-9(a), the source is not subject to the requirements of 326 IAC 8-4-9.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This source is located in Lake County and was an existing source as of January 1, 1980. The potential to emit of VOC of this source is greater than 100 tons per year. However, this source is subject to another Article 8 rule (326 IAC 8-4). Therefore, the requirements of 326 IAC 8-6 (Organic Solvent Emission Limitations) do not apply.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties)

This source is located in Lake County, and has the potential to emit volatile organic compounds at levels equal to or greater than twenty-five (25) tons per year. However, the petroleum storage tanks at this source are subject to 326 IAC 8-4. Therefore, pursuant to 326 IAC 8-7-2(a)(3)(C), the storage tanks are exempted from the requirements of 326 IAC 8-7-2.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

The petroleum storage tanks identified as EU79 was subject to the requirements of 40 CFR 60, Subpart Kb upon its construction. Therefore, pursuant to 326 IAC 8-9-2(8), the requirements of 326 IAC 8-9 do not apply to this storage tank.

The petroleum storage tanks identified as EU1601 through EU1609 are located in Lake County, store a volatile organic liquid (VOL) with a true vapor pressure greater than seventy-five hundredths (0.75) pound per square inch absolute (psia), have a design capacity greater than four hundred twenty thousand (420,000) gallons, and store a volatile organic liquid (VOL) prior to custody transfer. Pursuant to Minor Source Modification 089-21491-00497, issued on August 18, 2005, these tanks are also subject to 40 CFR 60, Subpart Kb. However, in Title V operating permit 089-11137-00081, issued on May 1, 2001, it was determined that these tanks were subject to the requirements of 326 IAC 8-9. Pursuant to 326 IAC 8-1-1(a), 326 IAC 8-9-1, 326 IAC 8-9-2, and 326 IAC 8-9-4(a), the storage tanks identified as EU1601 through EU1609 are subject to the requirements of 326 IAC 8-9-4, 326 IAC 8-9-5 and 326 IAC 8-9-6.

The petroleum storage tanks identified as EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, and EU78 are located in Lake County, store a VOL with a true vapor pressure greater than seventy-five hundredths (0.75) pound per square inch absolute (psia), have a design capacity greater than four hundred twenty thousand (420,000) gallons, store a volatile organic liquid (VOL) prior to custody transfer, are not subject to any provisions of 40 CFR 60, Subpart Kb, and have a true vapor pressure less than eleven and one-tenth (11.1) pound per square inch absolute (psia). Pursuant to 326 IAC 8-9-1, 326 IAC 8-9-2, and 326 IAC 8-9-4(a), the storage tanks identified as EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, and EU78 are subject to the requirements of 326 IAC 8-9-4, 326 IAC 8-9-5 and 326 IAC 8-9-6.

The Permittee has chosen to comply with the requirements of 326 IAC 8-9-4 by installing an external floating roof meeting the standards specified in 326 IAC 8-9-4(e) on each tank prior to May 1, 1996. Pursuant to 326 IAC 8-9-4(a)(3) and 326 IAC 8-9-4(e), the standards applicable to each storage vessel having an external floating roof are as follows:

- (a) 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.
- (b) 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.
- (c) 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).
- (d) 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.

- (e) 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.
- (f) 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.
- (g) 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.
- (h) 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.
- (i) 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.

[The compliance requirements for the storage tanks EU1601 through EU1609 and EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, and EU78 under 326 IAC 8-9-5 are discussed in the Compliance Requirements section of this TSD.]

Pursuant to 326 IAC 8-9-6:

- (a) The Permittee shall keep all records for three (3) years unless specified otherwise.
- (b) The Permittee of the storage vessels identified as EU1601 through EU1609 and EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, and EU78 shall maintain a record and submit to IDEM, OAQ a report containing the following information for each vessel:
 - (1) The vessel identification number.
 - (2) The vessel dimensions.
 - (3) The vessel capacity.
 - (4) A description of the emission control equipment for each storage vessel with a certification that the emission control equipment meets the applicable standards.

These records shall be maintained for the life of the vessel.

- (c) The Permittee shall comply with the following record keeping and reporting 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 following:
 - (A) The date of measurement.
 - (B) The raw data obtained in the measurement.
 - (C) The calculations described in 326 IAC 8-9-5(c)(2) and 326 IAC 8-9-5(c)(3).
 - (2) Within sixty (60) days of performing the seal gap measurements required by 326 IAC 8-9-5(c)(1), furnish IDEM, OAQ with a report that contains the following:
 - (A) The date of measurement.

- (B) The raw data obtained in the measurement.
 - (C) The calculations described in 326 IAC 8-9-5(c)(2) and 326 IAC 8-9-5(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 IDEM, OAQ within thirty (30) days of the inspection. The report shall identify the vessel and contain the information specified in 326 IAC 8-9-6(d)(2) and the date the vessel was emptied or the repairs made and date of repair.

Testing Requirements

Testing is not required for the storage tanks. The compliance monitoring, recordkeeping and reporting conditions in the permit are sufficient to ensure compliance with the federal and state emission standards.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

- (a) The compliance determination requirements applicable to storage tank EU78 are as follows:
 - (1) Determine the gap areas and maximum gap widths between the primary seal and the tank wall and between the secondary seal and the tank wall according to the following frequency:
 - (A) For primary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every five years thereafter. All primary seal inspections or gap measurements which require the removal or dislodging of the secondary seal shall be accomplished as rapidly as possible and the secondary seal shall be replaced as soon as possible.
 - (B) For secondary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every year thereafter.
 - (C) If storage vessel EU78 is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill for the purposes of 40 CFR 60.113a(a)(1)(i)(A) and 40 CFR 60.113a(a)(1)(i)(B).

- (D) Keep records of each gap measurement at the plant for a period of at least 5 years following the date of measurement. Each record shall identify the vessel on which the measurement was performed and shall contain the date of the seal gap measurement, the raw data obtained in the measurement process required by 40 CFR 60.113a(a)(1)(ii) and the calculation required by 40 CFR 60.113a(a)(1)(iii).
 - (E) If either the seal gap calculated in accord with 40 CFR 60.113a(a)(1)(iii) or the measured maximum seal gap exceeds the limitations specified by 40 CFR 60.112a, a report shall be furnished to the Administrator within 60 days of the date of measurements. The report shall identify the vessel and list each reason why the vessel did not meet the specifications of 40 CFR 60.112a. The report shall also describe the actions necessary to bring the storage vessel into compliance with the specifications of 40 CFR 60.112a.
- (2) Determine gap widths 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 1/8 inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location.
 - (C) The total surface area of each gap described in 40 CFR 60.113a(a)(1)(ii)(B) shall be determined by using probes of various widths to accurately measure the actual distance from the tank 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. Divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the appropriate ratio in the standard in 40 CFR 60.112a(a)(1)(i) and 40 CFR 60.112a(a)(1)(ii).
- (4) Provide the Administrator 30 days prior notice of the gap measurement to afford the Administrator the opportunity to have an observer present.

These compliance determination requirements are necessary because the external floating roof for storage tank EU78 must operate properly to ensure compliance with 40 CFR 60, Subpart Ka, 326 IAC 12, and 326 IAC 2-7 (Part 70).

- (b) The compliance determination requirements applicable to storage tanks EU1601 through EU1609 and EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, and EU78 are as follows:

Pursuant to 326 IAC 8-9-5(a), except as provided in 326 IAC 8-9-4(a)(3)(A), the Permittee of each storage 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 ($\frac{1}{8}$) 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 326 IAC 8-9-5(c)(2)(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 326 IAC 8-9-5(c)(4).
- (4) Make necessary repairs or empty the vessel within forty-five (45) days of identification of seals not meeting the requirements listed in 326 IAC 8-9-5(c)(4)(A) and 326 IAC 8-9-5(c)(4)(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 326 IAC 8-9-5(c)(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 IDEM, OAQ 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 IDEM, OAQ thirty (30) days in advance of any gap measurements required by 326 IAC 8-9-5(c)(1) to afford IDEM, OAQ 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 IDEM, OAQ in writing at least thirty (30) days prior to the filling or refilling of each vessel to afford IDEM, OAQ the opportunity to inspect the vessel prior to the filling. If the inspection required by 326 IAC 8-9-5(c)(6) 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 IDEM, OAQ 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 IDEM, OAQ at least seven (7) days prior to the refilling.

These compliance determination requirements are necessary because the external floating roofs for storage tanks EU1601 through EU1609 and EU70, EU71, EU72, EU73, EU74, EU75, EU76, EU77, and EU78 must operate properly to ensure compliance with 326 IAC 8-9-4 and 326 IAC 2-7 (Part 70).

Recommendation

The staff recommends to the Commissioner that the Part 70 permit renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit renewal application for the purposes of this review was received on December 18, 2002. Additional information was received on October 18, 2004, and July 25.

Conclusion

The operation of this crude petroleum pipeline and storage terminal shall be subject to the conditions of this Part 70 permit T089-17501-00497.

Appendix A: Emission Calculations**Fugitive VOC Emissions from Pumps, Valves, Orifices, Flanges and Sampling Connections**

Company Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith Terminal

Address: 1500 West Main Street, Griffith, Indiana 46319 and Central Avenue and Division Street, Schererville, Indiana 46375

Title V: T089-17501-00059

Reviewer: ERG/ST

Date: April 4, 2007

Equipment Description	Quantity	Emission Factor (kg/hour)	PTE of VOC (tons/year)
Pump Seals	29	5.40E-04	0.15
Valves	228	4.30E-05	0.09
Orifices	9	1.30E-04	0.01
Flanges	492	8.00E-06	0.04
Sampling Connections	4	1.30E-04	0.01
		Total	0.30

Emission factors from "Protocol For Equipment Leak Emission Estimates", Table 2-3 Marketing Terminal Average Emission Factors, EPA-453/R-93-026, (June 1993)

Methodology

PTE of VOC (tons/year) = Quantity of Emission Units x Emission Factor (kg/hour) x 2.2 (lbs/kg) x 8760 (hours/year) x 1 ton/2000 lbs

**Appendix A: Emission Calculations
VOC Emissions from Tanks**

Company Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith Terminal

Address: 1500 West Main Street, Griffith, Indiana 46319 and Central Avenue and Division Street, Schererville, Indiana 46375

Title V: T089-17501-00059

Reviewer: ERG/ST

Date: April 4, 2007

Tank ID #	Fuel	Roof Type	Maximum Capacity (gal)	Number of Turnovers (1/year)	Maximum Throughput (gal/year)	Year Constructed	PTE of VOC (lbs/year)	PTE of VOC (tons/year)
EU70	Crude Oil	External Floating	5,040,000	116.25	585,900,000	1969	10,453	5.23
EU71	Crude Oil	External Floating	9,114,000	116.25	1,059,502,500	1970	11,939	5.97
EU72	Crude Oil	External Floating	9,114,000	116.25	1,059,502,500	1971	11,939	5.97
EU73	Crude Oil	External Floating	9,114,000	116.25	1,059,502,500	1971	11,939	5.97
EU74	Crude Oil	External Floating	9,114,000	116.25	1,059,502,500	1972	11,939	5.97
EU75	Crude Oil	External Floating	9,114,000	116.25	1,059,502,500	1972	11,939	5.97
EU76	Crude Oil	External Floating	16,590,000	116.25	1,928,587,500	1973	14,734	7.37
EU77	Crude Oil	External Floating	16,590,000	116.25	1,928,587,500	1973	14,734	7.37
EU78	Crude Oil	External Floating	9,114,000	116.25	1,059,502,500	1979	5,950	2.98
EU79	Crude Oil	External Floating	16,471,098	70.31	1,158,082,900	2006	12,716	6.36
EU79	Crude Oil	External Floating		Landing Losses ^a			9,460	4.73
EU1601	Crude Oil	External Floating	4,200,000	NA	NA	1958	6,489	3.24
EU1602	Crude Oil	External Floating	4,200,000	NA	NA	1958	6,489	3.24
EU1603	Crude Oil	External Floating	4,200,000	NA	NA	1958	6,489	3.24
EU1604	Crude Oil	External Floating	4,200,000	NA	NA	1958	6,489	3.24
EU1605	Crude Oil	External Floating	4,200,000	NA	NA	1958	6,489	3.24
EU1606	Crude Oil	External Floating	4,200,000	NA	NA	1958	6,489	3.24
EU1607	Crude Oil	External Floating	4,200,000	NA	NA	1958	6,489	3.24
EU1608	Crude Oil	External Floating	4,200,000	NA	NA	1958	6,489	3.24
EU1609	Crude Oil	External Floating	4,200,000	NA	NA	1958	6,489	3.24
EU1601-09	Crude Oil	External Floating	Landing Losses ^a			1958	49,200	24.60
Total							117.7	

The potential to emit of VOC for the storage tanks is calculated using EPA's TANKS 4.0. Information on maximum capacity and number of turnovers per year provided by the source.

^a VOC emissions due to landing losses is from information submitted by source.

Methodology:

Maximum Throughput (gal/year) = Maximum capacity (gal) x Number of turnovers per year.

Appendix A: Emission Calculations
HAP Emissions from Truck Loading Racks and Tanks

Company Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith Terminal
Address: 1500 West Main Street, Griffith, Indiana 46319 and Central Avenue and Division Street, Schererville, Indiana 46375
Title V: T089-17501-00059
Reviewer: ERG/ST
Date: April 4, 2007

		HAP Emission Factors (weight %)							
		Hexane	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	1,2,4-Trimethyl benzene	
		2.46%	0.45%	0.88%	0.35%	1.42%	0.22%	0.33%	
Facility/ Tank ID #	Fuel Type	PTE of VOC (tons/yr)	PTE of Hexane (tons/yr)	PTE of Benzene (tons/yr)	PTE of Toluene (tons/yr)	PTE of Ethylbenzene (tons/yr)	PTE of Xylenes (tons/yr)	PTE of Naphthalene (tons/yr)	PTE of 1,2,4-Trimethyl benzene (tons/yr)
EU70	Crude Oil	5.23	0.129	0.023	0.046	0.018	0.074	0.011	0.017
EU71	Crude Oil	5.97	0.147	0.027	0.052	0.021	0.085	0.013	0.019
EU72	Crude Oil	5.97	0.147	0.027	0.052	0.021	0.085	0.013	0.019
EU73	Crude Oil	5.97	0.147	0.027	0.052	0.021	0.085	0.013	0.019
EU74	Crude Oil	5.97	0.147	0.027	0.052	0.021	0.085	0.013	0.019
EU75	Crude Oil	5.97	0.147	0.027	0.052	0.021	0.085	0.013	0.019
EU76	Crude Oil	7.37	0.181	0.033	0.065	0.025	0.105	0.016	0.024
EU77	Crude Oil	7.37	0.181	0.033	0.065	0.025	0.105	0.016	0.024
EU78	Crude Oil	2.98	0.073	0.013	0.026	0.010	0.042	0.007	0.010
EU79	Crude Oil	6.36	0.157	0.028	0.056	0.022	0.090	0.014	0.021
EU79 - Landing Losses		4.73	0.116	0.021	0.042	0.016	0.067	0.010	0.015
EU1601	Crude Oil	3.24	0.080	0.014	0.028	0.011	0.046	0.007	0.011
EU1602	Crude Oil	3.24	0.080	0.014	0.028	0.011	0.046	0.007	0.011
EU1603	Crude Oil	3.24	0.080	0.014	0.028	0.011	0.046	0.007	0.011
EU1604	Crude Oil	3.24	0.080	0.014	0.028	0.011	0.046	0.007	0.011
EU1605	Crude Oil	3.24	0.080	0.014	0.028	0.011	0.046	0.007	0.011
EU1606	Crude Oil	3.24	0.080	0.014	0.028	0.011	0.046	0.007	0.011
EU1607	Crude Oil	3.24	0.080	0.014	0.028	0.011	0.046	0.007	0.011
EU1608	Crude Oil	3.24	0.080	0.014	0.028	0.011	0.046	0.007	0.011
EU1609	Crude Oil	3.24	0.080	0.014	0.028	0.011	0.046	0.007	0.011
EU1601-1609 - Landing Losses		24.6	0.606	0.110	0.216	0.085	0.349	0.054	0.080
Spearhead Project	Crude Oil	0.19	0.005	0.001	0.002	0.001	0.003	0.000	0.001
Pump Seals	Crude Oil	0.15	0.004	0.001	0.001	0.001	0.002	0.000	0.000
Valves	Crude Oil	0.09	0.002	0.000	0.001	0.000	0.001	0.000	0.000
Orifices	Crude Oil	0.01	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Flanges	Crude Oil	0.04	0.001	0.000	0.000	0.000	0.001	0.000	0.000
Sampling Connections	Crude Oil	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Totals			2.91	0.53	1.04	0.41	1.68	0.26	0.39

Emissions of HAPs as weight percent of Crude Oil are from Material Safety Data Sheets.

Methodology

PTE of VOC (tons/year) from Appendix A: pages 2 and 3

PTE of HAPs (tons/year) = PTE of VOC (tons/year) x Emission Factor (HAP content of VOC (weight %))

Appendix A: Emission Calculations
Internal Combustion Engine - Diesel Emergency Generators

Company Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith Terminal
 Address: 1500 West Main Street, Griffith, Indiana 46319 and Central Avenue and Division Street, Schererville, Indiana 46375
 Title V: T089-17501-00059
 Reviewer: ERG/ST
 Date: April 4, 2007

Power Output Horse Power (Hp)
207
175

Operation Limit (hours/year)
500
500

S = Weight % Sulfur

0.5

		PM*	PM10*	SO ₂	NO _x	**VOC	CO	HAPs
Emission Factor (lb/Hp-hr)	(< 600 hp)	2.20E-03	2.20E-03	2.05E-03	3.00E-02	2.47E-03	6.68E-03	6.47E-03

		PM*	PM10*	SO ₂	NO _x	**VOC	CO	HAPs
Potential to Emit (tons/year)	207 hp	0.11	0.11	0.11	1.55	0.13	0.35	0.33
	175 hp	0.10	0.10	0.09	1.31	0.11	0.29	0.28

*Assume PM10 emissions are equal to PM emissions.

** Assume TOC (total organic compounds) emissions are equal to VOC emissions.

Emission factors for 175 hp diesel generator are from AP-42, Tables 3.3-1 and 3.3-2, (SCC 2-02-001-01, 2-03-001-01) (AP-42, 10/96).

Emission factors for 1,600 hp diesel generator are from AP-42, Tables 3.4-1 and 3.4-3, SCC #2-02-004-01 (AP-42, 10/96).

1 Hp-hr = 7,000Btu: AP 42, Chapter 3.3, Table 3.3-1 "Emission Factors for Uncontrolled Gasoline and Diesel Engines" (10/96).

Note: As defined in the September 6, 1995 memorandum from John S. Seitz of US EPA on the subject of "Calculating Potential to Emit for Emergency Generators", an emergency generator's sole function is to provide back-up power when power from the local utility is interrupted. The only circumstances under which an emergency generator would operate when utility power is available are during operator training or brief maintenance checks. The generator's potential to emit is based on an operating time of 500 hours per year as set forth in the EPA memo.

Methodology

HAP Emission Factor (lbs/Hp-hr) = (SUM (HAP emission factors (lbs/MMBtu)) x 1/1,000,000 (MMBtu/Btu) x 7,000 (Btu/Hp-hr)

PTE (tons/year) = Power Output (Hp) x Emission Factor (lbs/Hp-hr) x Operation Limit (hours/year) x 1 ton/2000 lbs