



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: June 20, 2008

RE: Enbridge Energy-Hartsdale / 089-26507-00497

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER-MOD.dot 12/3/07



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Rachael Shetka
Environmental Analyst II
Enbridge Energy, Limited Partnership - Hartsdale/Griffith
119 North 25th Street
Superior, Wisconsin 54880-5247

June 20, 2008

Re: T 089-26507-00497
Minor Source Modification to
Part 70 Operating Permit No.: T 089-17501-00497

Dear Ms. Shetka:

Enbridge Energy, Limited Partnership - Hartsdale/Griffith was issued Part 70 Operating Permit No. T 089-17501-00497 on October 3, 2007 for the operation of a stationary bulk petroleum storage company. A letter requesting changes to this permit was received on May 8, 2008, relating to the replacement of a 4,600 foot section of an existing outbound pipeline with a larger diameter pipe and the construction of additional piping and components (valves and flanges) that originates at the Griffith terminal. Pursuant to 326 IAC 2-7-10.5(d)(9), the pipeline expansion project is approved for construction at the source.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction when the source modification has been issued. The source must comply with the requirements of 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12 before operation of any of the proposed emission units can begin.

All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire Part 70 Operating Permit as modified will be provided at issuance.

This decision is subject to the Indiana Administrative Orders and Procedures Act – IC 4-21.5-3-5. If you have any questions on this matter, please contact Joe Sachse, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Joe Sachse or extension (4-3350), or dial (317) 234-3350.

Original signed by,

Tripurari P. Sinha, Ph. D., Section Chief
Permits Branch
Office of Air Quality

Attachments:
Updated Permit
Technical Support Document
PTE Calculations

ajs

cc: File – Lake County
Lake County Health Department
U.S. EPA, Region V
Northwest Regional Office
Air Compliance Inspector
Compliance Data Section
Permits Administration and Development

Ron Reding
Environmental Consultant
Barr Engineering Company
4700 West 77th Street
Minneapolis, Minnesota 55435



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Part 70 Minor Source Modification 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 construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This approval 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. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Minor Source Modification No.: 089-26507-00497	
Issued by Original signed by: Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: June 20, 2008

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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.3 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 bulk petroleum storage company.

Source Address:	Central Avenue and Division Street, Schererville, IN 46375 and 1500 West Main Street, Griffith, IN 46319
Mailing Address:	119 North 25 th Street East, Superior, Wisconsin 54880
General Source Phone Number:	(713) 821-2110
SIC Code:	4612 and 4226
County Location:	Lake
Source Location Status:	Nonattainment for 8-hour ozone standard Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, Emission Offset Rules Minor Source, PSD 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 are 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 4,200,000 gallons (100,000 barrels) of crude oil.
- (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 guide-pole controls (guide-pole sleeve and guide-pole wiper), permitted in 2008, 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 2007, 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) One (1) crude oil storage tank, constructed in 2007, identified as EU80, with an external floating roof, with a maximum capacity of 188,000 barrels (7,896,000 gallons). Pursuant to 40 CFR 60, Subpart Kb, this is an affected facility.
- (l) 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, 089-26507-00497, 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) A "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 July 1 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;

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 phone: (219) 757-0265; fax: (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

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 089-26507-00497 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]

- (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.

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]

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 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]

- (a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.26 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 thirty percent (30%) 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). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

C.6 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.7 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.8 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.9 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.10 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.11 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.12 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.13 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.14 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 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.15 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 61-50 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.16 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 reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 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/or 326 IAC 2-3-1(II)) 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/or 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.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) 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
 - (2) 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.17 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 (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) 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/or 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 (d)(1) and (2) 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/or 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.18 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 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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 4,200,000 gallons (100,000 barrels) of crude oil.
- (b) One (1) pump station, constructed in 2005, identified as the 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.

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 guide-pole controls (guide-pole sleeve and guide-pole wiper), permitted in 2008, 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 2007, 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) One (1) crude oil storage tank, approved for construction in 2007, identified as EU80, with an external floating roof, with a maximum capacity of 188,000 barrels (7,896,000 gallons). Pursuant to 40 CFR 60, Subpart Kb, this is an affected facility.

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

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

D.1.1 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 EU70 through EU80, and 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.1.2 Volatile Organic Compounds (VOC) [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 through EU78 and EU1601 through 1609:

- (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.1.3 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, EU79, and EU80.

Compliance Determination Requirements

D.1.4 Compliance Determination [326 IAC 8-9-5]

Pursuant to 326 IAC 8-9-5(a), for storage tanks EU70 through EU78 and EU1601 through 1609, 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.1.5 Record Keeping Requirements [326 IAC 8-4] [326 IAC 8-9]

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- (a) Pursuant to 326 IAC 8-4-3(d), the Permittee shall maintain the following records for storage tanks EU70 through EU80 and EU1601 through 1609:
 - (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.

- (b) Pursuant to 326 IAC 8-9-6(b), the Permittee shall maintain a record of the following for storage tanks EU70 through EU78 and 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.

- (c) Pursuant to 326 IAC 8-9-6(d), the Permittee shall keep a record for storage tanks EU70 through EU78 and 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.

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

D.1.6 Reporting and Notification Requirements [326 IAC 8-4] [326 IAC 8-9]

- (a) 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.1.5 to afford IDEM, OAQ the opportunity to have an observer present.
- (b) 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.
- (c) 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.
- (d) Pursuant to 326 IAC 8-9-6, the Permittee of storage vessels EU70 through EU78 and 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.
- (e) 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 E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Griffith Terminal:

- (a) 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.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to New Source Performance Standards Under 40 CFR Part 60 [326 IAC 12-1] [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 the crude oil storage tank identified as EU78 except when otherwise specified in 40 CFR Part 60, Subpart Ka.
- (b) Pursuant to 40 CFR 60.7, the Permittee shall submit all of the required notifications and reports 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

E.1.2 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 Part 60, Subpart Ka] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Ka, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Ka (included as Attachment A), which are incorporated by reference as 326 IAC 12, for the crude oil storage tank identified as EU78:

- (1) 40 CFR 60.112a(a)
- (2) 40 CFR 60.113a
- (3) 40 CFR 60.115a

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Griffith Terminal:

- (a) One (1) crude oil storage tank, constructed in 2007, identified as EU79, with an external floating roof, with a maximum capacity of 392,169 barrels (16,471,098 gallons).
- (b) One (1) crude oil storage tank, constructed in 2007, identified as EU80, with an external floating roof, with a maximum capacity of 188,000 barrels (7,896,000 gallons).

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to New Source Performance Standards Under 40 CFR Part 60 [326 IAC 12-1] [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 the crude oil storage tanks identified as EU79 and EU80 except when otherwise specified in 40 CFR Part 60, Subpart Kb.
- (b) Pursuant to 40 CFR 60.7, the Permittee shall submit all of the required notifications and reports 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

E.2.2 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 Part 60, Subpart Kb] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Kb, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Kb (included as Attachment B), which are incorporated by reference as 326 IAC 12, for the crude oil storage tanks identified as EU79 and EU80:

- (1) 40 CFR 60.110b
- (2) 40 CFR 60.113b
- (3) 40 CFR 60.115b(b)

**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, Schererville, IN 46375
and 1500 West Main Street, Griffith, IN 46319
Mailing Address: 119 North 25th Street East, Superior, Wisconsin 54880
Part 70 Permit No.: 089-26507-00497

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, Schererville, IN 46375
and 1500 West Main Street, Griffith, IN 46319
Mailing Address: 119 North 25th Street East, Superior, Wisconsin 54880
Part 70 Permit No.: 089-26507-00497

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: 1500 West Main Street, Griffith, Indiana 46319
 Mailing Address: 119 North 25th Street East, Superior, Wisconsin 54880
 Part 70 Permit No.: 089-26507-00497

Months: _____ **to** _____ **Year:** _____

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".	
<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.

**Attachment A
NSPS 40 CFR Part 60, Subpart Ka**

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

**Minor Source Modification No.: T 089-26507-00497
Significant Permit Modification No.: T 089-26535-00497**

Subpart Ka—Standards of Performance 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]

§ 60.110a Applicability and designation of affected facility.

(a) *Affected facility.* Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a storage capacity greater than 151,416 liters (40,000 gallons) that is used to store petroleum liquids for which construction is commenced after May 18, 1978.

(b) Each petroleum liquid storage vessel with a capacity of less than 1,589,873 liters (420,000 gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer is not an affected facility and, therefore, is exempt from the requirements of this subpart.

(c) *Alternative means of compliance*—(1) *Option to comply with part 65.* Owners or operators may choose to comply with 40 CFR part 65, subpart C, to satisfy the requirements of §§60.112a through 60.114a for storage vessels that are subject to this subpart that store petroleum liquids that, as stored, have a maximum true vapor pressure equal to or greater than 10.3 kPa (1.5 psia). Other provisions applying to owners or operators who choose to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(2) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart C, must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those storage vessels. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (c)(2) do not apply to owners or operators of storage vessels complying with 40 CFR part 65, subpart C, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart C, must comply with 40 CFR part 65, subpart A.

[45 FR 23379, Apr. 4, 1980, as amended at 65 FR 78275, Dec. 14, 2000]

§ 60.111a Definitions.

In addition to the terms and their definitions listed in the Act and subpart A of this part the following definitions apply in this subpart:

(a) *Storage vessel* means each tank, reservoir, or container used for the storage of petroleum liquids, but does not include:

(1) Pressure vessels which are designed to operate in excess of 204.9 kPa (15 psig) without emissions to the atmosphere except under emergency conditions.

(2) Subsurface caverns or porous rock reservoirs, or

(3) Underground tanks if the total volume of petroleum liquids added to and taken from a tank annually does not exceed twice the volume of the tank.

(b) *Petroleum liquids* means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery but does not mean Nos. 2 through 6 fuel oils as specified in ASTM D396–78, 89, 90, 92, 96, or 98, gas turbine fuel oils Nos. 2–GT through 4–GT as specified in ASTM D2880–78 or 96, gas turbine fuel oils Nos. 2–GT through 4–GT as specified in ASTM D2880–78 or 96, or diesel fuel oils Nos. 2–D and 4–D as specified in ASTM D975–78, 96, or 98a. (These three methods are incorporated by reference—see §60.17.)

(c) *Petroleum refinery* means each facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through redistillation, cracking, extracting, or reforming of unfinished petroleum derivatives.

(d) *Petroleum* means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

ATTACHMENT A
NSPS 40 CFR Part 60, Subpart Ka

(e) *Condensate* means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

(f) *True vapor pressure* means the equilibrium partial pressure exerted by a petroleum liquid such as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, Evaporation Loss from External Floating-Roof Tanks, Second Edition, February 1980 (incorporated by reference—see §60.17).

(g) *Reid vapor pressure* is the absolute vapor pressure of volatile crude oil and nonviscous petroleum liquids, except liquified petroleum gases, as determined by ASTM D323–82 or 94 (incorporated by reference—see §60.17).

(h) *Liquid-mounted seal* means a foam or liquid-filled primary seal mounted in contact with the liquid between the tank wall and the floating roof continuously around the circumference of the tank.

(i) *Metallic shoe seal* includes but is not limited to a metal sheet held vertically against the tank wall by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(j) *Vapor-mounted seal* means a foam-filled primary seal mounted continuously around the circumference of the tank so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.

(k) *Custody transfer* means the transfer of produced petroleum and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

[45 FR 23379, Apr. 4, 1980, as amended at 48 FR 3737, Jan. 27, 1983; 52 FR 11429, Apr. 8, 1987; 65 FR 61756, Oct. 17, 2000]

§ 60.112a Standard for volatile organic compounds (VOC).

(a) The owner or operator of each storage vessel to which this subpart applies which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with one of the following:

(1) 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 paragraph (a)(1)(ii)(D) of this section, 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.

(i) The primary seal is to be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. Each seal is to meet the following requirements:

(A) The accumulated area of gaps between the tank wall and the metallic shoe seal or the liquid-mounted seal shall not exceed 212 cm² per meter of tank diameter (10.0 in² per ft of tank diameter) and the width of any portion of any gap shall not exceed 3.81 cm (1 1/2 in).

(B) The accumulated area of gaps between the tank wall and the vapor-mounted seal shall not exceed 21.2 cm² per meter of tank diameter (1.0 in² per ft of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (1/2 in).

(C) 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.

(D) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(ii) The secondary seal is to meet the following requirements:

(A) 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 paragraph (a)(1)(ii)(B) of this section.

(B) 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 cm² per meter of tank diameter (1.0 in² per ft. of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (1/2in.). There shall be no gaps between the tank wall and the secondary seal used in combination with a vapor-mounted primary seal.

(C) There are to be no holes, tears or other openings in the seal or seal fabric.

(D) The owner or operator is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal.

(iii) 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 paragraph (a)(1)(iv) of this section. 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.

(iv) 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.

(2) A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

(3) A vapor recovery system which collects all VOC vapors and gases discharged from the storage vessel, and a vapor return or disposal system which is designed to process such VOC vapors and gases so as to reduce their emission to the atmosphere by at least 95 percent by weight.

(4) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) of this section as provided in §60.114a.

(b) The owner or operator of each storage vessel to which this subpart applies which contains a petroleum liquid which, as stored, has a true vapor pressure greater than 76.6 kPa (11.1 psia), shall equip the storage vessel with a vapor recovery system which collects all VOC vapors and gases discharged from the storage vessel, and a vapor return or disposal system which is designed to process such VOC vapors and gases so as to reduce their emission to the atmosphere by at least 95 percent by weight.

[45 FR 23379, Apr. 4, 1980, as amended at 45 FR 83229, Dec. 18, 1980]

§ 60.113a Testing and procedures.

(a) Except as provided in §60.8(b) compliance with the standard prescribed in §60.112a shall be determined as follows or in accordance with an equivalent procedure as provided in §60.114a.

ATTACHMENT A
NSPS 40 CFR Part 60, Subpart Ka

(1) The owner or operator of each storage vessel to which this subpart applies which has an external floating roof shall meet the following requirements:

(i) 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 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 paragraphs (a)(1)(i)(A) and (a)(1)(i)(B) of this section.

(D) Keep records of each gap measurement at the plant for a period of at least 2 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 paragraph (a)(1)(ii) of this section and the calculation required by paragraph (a)(1)(iii) of this section.

(E) If either the seal gap calculated in accord with paragraph (a)(1)(iii) of this section or the measured maximum seal gap exceeds the limitations specified by §60.112a of this subpart, 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 §60.112a. The report shall also describe the actions necessary to bring the storage vessel into compliance with the specifications of §60.112a.

(ii) 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 paragraph (a)(1)(ii)(B) of this section 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.

(iii) 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 §60.112a(a)(1)(i) and §60.112a(a)(1)(ii).

(iv) Provide the Administrator 30 days prior notice of the gap measurement to afford the Administrator the opportunity to have an observer present.

(2) The owner or operator of each storage vessel to which this subpart applies which has a vapor recovery and return or disposal system shall provide the following information to the Administrator on or before the date on which construction of the storage vessel commences:

(i) Emission data, if available, for a similar vapor recovery and return or disposal system used on the same type of storage vessel, which can be used to determine the efficiency of the system. A complete description of the emission measurement method used must be included.

(ii) The manufacturer's design specifications and estimated emission reduction capability of the system.

(iii) The operation and maintenance plan for the system.

(iv) Any other information which will be useful to the Administrator in evaluating the effectiveness of the system in reducing VOC emissions.

[45 FR 23379, Apr. 4, 1980, as amended at 52 FR 11429, Apr. 8, 1987]

§ 60.114a Alternative means of emission limitation.

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §60.112a, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement.

(b) Any notice under paragraph (a) of this section will be published only after notice and an opportunity for a hearing.

(c) Any person seeking permission under this section shall submit to the Administrator a written application including:

(1) An actual emissions test that uses a full-sized or scale-model storage vessel that accurately collects and measures all VOC emissions from a given control device and that accurately simulates wind and accounts for other emission variables such as temperature and barometric pressure.

(2) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

(d) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as specified in §60.112a.

(e) The primary vapor-mounted seal in the "Volume-Maximizing Seal" manufactured by R.F.I. Services Corporation is approved as equivalent to the vapor-mounted seal required by §60.112a(a)(1)(i) and must meet the gap criteria specified in §60.112a(a)(1)(i)(B). There shall be no gaps between the tank wall and any secondary seal used in conjunction with the primary seal in the "Volume-Maximizing Seal".

[52 FR 11429, Apr. 8, 1987]

§ 60.115a Monitoring of operations.

(a) Except as provided in paragraph (d) of this section, the owner or operator subject to this subpart shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

(b) Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(c) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

(d) The following are exempt from the requirements of this section:

(1) Each owner or operator of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

ATTACHMENT A
NSPS 40 CFR Part 60, Subpart Ka

(2) The owner or operator of each storage vessel equipped with a vapor recovery and return or disposal system in accordance with the requirements of §60.112a(a)(3) and (b), or a closed vent system and control device meeting the specifications of 40 CFR 65.42(b)(4), (b)(5), or (c).

**Attachment B
NSPS 40 CFR Part 60, Subpart Kb**

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

**Minor Source Modification No.: T 089-26507-00497
Significant Permit Modification No.: T 089-26535-00497**

Subpart Kb—Standards of Performance 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]

§ 60.110b Applicability and designation of affected facility.

(a) Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m^3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

(b) This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure less than 15.0 kPa.

(c) [Reserved]

(d) This subpart does not apply to the following:

(1) Vessels at coke oven by-product plants.

(2) Pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.

(3) Vessels permanently attached to mobile vehicles such as trucks, railcars, barges, or ships.

(4) Vessels with a design capacity less than or equal to 1,589.874 m^3 used for petroleum or condensate stored, processed, or treated prior to custody transfer.

(5) Vessels located at bulk gasoline plants.

(6) Storage vessels located at gasoline service stations.

(7) Vessels used to store beverage alcohol.

(8) Vessels subject to subpart GGGG of 40 CFR part 63.

(e) *Alternative means of compliance*—(1) *Option to comply with part 65.* Owners or operators may choose to comply with 40 CFR part 65, subpart C, to satisfy the requirements of §§60.112b through 60.117b for storage vessels that are subject to this subpart that meet the specifications in paragraphs (e)(1)(i) and (ii) of this section. When choosing to comply with 40 CFR part 65, subpart C, the monitoring requirements of §60.116b(c), (e), (f)(1), and (g) still apply. Other provisions applying to owners or operators who choose to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(i) A storage vessel with a design capacity greater than or equal to 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa; or

(ii) A storage vessel with a design capacity greater than 75 m^3 but less than 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa.

(2) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart C, must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those storage vessels. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of storage vessels complying with 40 CFR part 65, subpart C, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart C, must comply with 40 CFR part 65, subpart A.

ATTACHMENT B
NSPS 40 CFR Part 60, Subpart Kb

(3) *Internal floating roof report.* If an owner or operator installs an internal floating roof and, at initial startup, chooses to comply with 40 CFR part 65, subpart C, a report shall be furnished to the Administrator stating that the control equipment meets the specifications of 40 CFR 65.43. This report shall be an attachment to the notification required by 40 CFR 65.5(b).

(4) *External floating roof report.* If an owner or operator installs an external floating roof and, at initial startup, chooses to comply with 40 CFR part 65, subpart C, a report shall be furnished to the Administrator stating that the control equipment meets the specifications of 40 CFR 65.44. This report shall be an attachment to the notification required by 40 CFR 65.5(b).

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989; 65 FR 78275, Dec. 14, 2000; 68 FR 59332, Oct. 15, 2003]

§ 60.111b Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this subpart as follows:

Bulk gasoline plant means any gasoline distribution facility that has a gasoline throughput less than or equal to 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal requirement or Federal, State or local law, and discoverable by the Administrator and any other person.

Condensate means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

Custody transfer means the transfer of produced petroleum and/or condensate, after processing and/or treatment in the producing operations, from storage vessels or automatic transfer facilities to pipelines or any other forms of transportation.

Fill means the introduction of VOL into a storage vessel but not necessarily to complete capacity.

Gasoline service station means any site where gasoline is dispensed to motor vehicle fuel tanks from stationary storage tanks.

Maximum true vapor pressure means the equilibrium partial pressure exerted by the volatile organic compounds (as defined in 40 CFR 51.100) in the stored VOL at the temperature equal to the highest calendar-month average of the VOL storage temperature for VOL's stored above or below the ambient temperature or at the local maximum monthly average temperature as reported by the National Weather Service for VOL's stored at the ambient temperature, as determined:

- (1) In accordance with methods described in American Petroleum Institute Bulletin 2517, Evaporation Loss From External Floating Roof Tanks, (incorporated by reference—see §60.17); or
- (2) As obtained from standard reference texts; or
- (3) As determined by ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17);
- (4) Any other method approved by the Administrator.

Petroleum means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

Petroleum liquids means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery.

Process tank means a tank that is used within a process (including a solvent or raw material recovery process) to collect material discharged from a feedstock storage vessel or equipment within the process before the material is

transferred to other equipment within the process, to a product or by-product storage vessel, or to a vessel used to store recovered solvent or raw material. In many process tanks, unit operations such as reactions and blending are conducted. Other process tanks, such as surge control vessels and bottoms receivers, however, may not involve unit operations.

Reid vapor pressure means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquified petroleum gases, as determined by ASTM D323–82 or 94 (incorporated by reference—see §60.17).

Storage vessel means each tank, reservoir, or container used for the storage of volatile organic liquids but does not include:

- (1) Frames, housing, auxiliary supports, or other components that are not directly involved in the containment of liquids or vapors;
- (2) Subsurface caverns or porous rock reservoirs; or
- (3) Process tanks.

Volatile organic liquid (VOL) means any organic liquid which can emit volatile organic compounds (as defined in 40 CFR 51.100) into the atmosphere.

Waste means any liquid resulting from industrial, commercial, mining or agricultural operations, or from community activities that is discarded or is being accumulated, stored, or physically, chemically, or biologically treated prior to being discarded or recycled.

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989; 65 FR 61756, Oct. 17, 2000; 68 FR 59333, Oct. 15, 2003]

§ 60.112b Standard for volatile organic compounds (VOC).

(a) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with one of the following:

(1) A fixed roof in combination with an internal floating roof meeting the following specifications:

(i) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

(ii) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(A) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

(C) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(iii) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

(iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

(v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

(vii) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

(viii) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(2) An external floating roof. An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Each external floating roof must meet the following specifications:

(i) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in §60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

(B) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in §60.113b(b)(4).

(ii) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(iii) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(3) A closed vent system and control device meeting the following specifications:

(i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, §60.485(b).

(ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (§60.18) of the General Provisions.

(4) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) of this section as provided in §60.114b of this subpart.

(b) The owner or operator of each storage vessel with a design capacity greater than or equal to 75 m³ which contains a VOL that, as stored, has a maximum true vapor pressure greater than or equal to 76.6 kPa shall equip each storage vessel with one of the following:

(1) A closed vent system and control device as specified in §60.112b(a)(3).

(2) A system equivalent to that described in paragraph (b)(1) as provided in §60.114b of this subpart.

(c) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.* This paragraph applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site").

(1) For any storage vessel that otherwise would be subject to the control technology requirements of paragraphs (a) or (b) of this section, the site shall have the option of either complying directly with the requirements of this subpart, or reducing the site-wide total criteria pollutant emissions cap (total emissions cap) in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the total emissions cap in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable requirements of this subpart for such storage vessel.

(2) For any storage vessel at the site not subject to the requirements of 40 CFR 60.112b (a) or (b), the requirements of 40 CFR 60.116b (b) and (c) and the General Provisions (subpart A of this part) shall not apply.

[52 FR 11429, Apr. 8, 1987, as amended at 62 FR 52641, Oct. 8, 1997]

§ 60.113b Testing and procedures.

The owner or operator of each storage vessel as specified in §60.112b(a) shall meet the requirements of paragraph (a), (b), or (c) of this section. The applicable paragraph for a particular storage vessel depends on the control equipment installed to meet the requirements of §60.112b.

(a) After installing the control equipment required to meet §60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:

(1) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

(2) For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(a)(3). Such a request for an extension must document that

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alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(3) For vessels equipped with a double-seal system as specified in §60.112b(a)(1)(ii)(B):

(i) Visually inspect the vessel as specified in paragraph (a)(4) of this section at least every 5 years; or

(ii) Visually inspect the vessel as specified in paragraph (a)(2) of this section.

(4) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of this section.

(5) Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of this section to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(b) After installing the control equipment required to meet §60.112b(a)(2) (external floating roof), the owner or operator shall:

(1) Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency.

(i) Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.

(ii) Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.

(iii) If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i) and (b)(1)(ii) of this section.

(2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:

(i) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

(ii) Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

(iii) The total surface area of each gap described in paragraph (b)(2)(ii) of this section shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

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(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 seal by the nominal diameter of the tank and compare each ratio to the respective standards in paragraph (b)(4) of this section.

(4) Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (b)(4) (i) and (ii) of this section:

(i) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 Cm² per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.

(A) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.

(B) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(ii) The secondary seal is to meet the following requirements:

(A) 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 paragraph (b)(2)(iii) of this section.

(B) 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.

(C) There are to be no holes, tears, or other openings in the seal or seal fabric.

(iii) If a failure that is detected during inspections required in paragraph (b)(1) of §60.113b(b) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(b)(4). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(5) Notify the Administrator 30 days in advance of any gap measurements required by paragraph (b)(1) of this section to afford the Administrator 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.

(i) If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL.

(ii) For all the inspections required by paragraph (b)(6) of this section, the owner or operator shall notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (b)(6) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(c) The owner or operator of each source that is equipped with a closed vent system and control device as required in §60.112b (a)(3) or (b)(2) (other than a flare) is exempt from §60.8 of the General Provisions and shall meet the following requirements.

(1) Submit for approval by the Administrator as an attachment to the notification required by §60.7(a)(1) or, if the facility is exempt from §60.7(a)(1), as an attachment to the notification required by §60.7(a)(2), an operating plan containing the information listed below.

(i) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(ii) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(2) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

(d) The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in §60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, §60.18 (e) and (f).

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989]

§ 60.114b Alternative means of emission limitation.

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §60.112b, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement.

(b) Any notice under paragraph (a) of this section will be published only after notice and an opportunity for a hearing.

(c) Any person seeking permission under this section shall submit to the Administrator a written application including:

(1) An actual emissions test that uses a full-sized or scale-model storage vessel that accurately collects and measures all VOC emissions from a given control device and that accurately simulates wind and accounts for other emission variables such as temperature and barometric pressure.

(2) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

(d) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as specified in §60.112b.

§ 60.115b Reporting and recordkeeping requirements.

The owner or operator of each storage vessel as specified in §60.112b(a) shall keep records and furnish reports as required by paragraphs (a), (b), or (c) of this section depending upon the control equipment installed to meet the requirements of §60.112b. The owner or operator shall keep copies of all reports and records required by this section, except for the record required by (c)(1), for at least 2 years. The record required by (c)(1) will be kept for the life of the control equipment.

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(a) After installing control equipment in accordance with §60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall meet the following requirements.

(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(1) and §60.113b(a)(1). This report shall be an attachment to the notification required by §60.7(a)(3).

(2) Keep a record of each inspection performed as required by §60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

(3) If any of the conditions described in §60.113b(a)(2) are detected during the annual visual inspection required by §60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

(4) After each inspection required by §60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in §60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of §60.112b(a)(1) or §60.113b(a)(3) and list each repair made.

(b) After installing control equipment in accordance with §60.112b(a)(2) (external floating roof), the owner or operator shall meet the following requirements.

(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(2) and §60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by §60.7(a)(3).

(2) Within 60 days of performing the seal gap measurements required by §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 §60.113b (b)(2) and (b)(3).

(3) Keep a record of each gap measurement performed as required by §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 §60.113b (b)(2) and (b)(3).

(4) After each seal gap measurement that detects gaps exceeding the limitations specified by §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.

(c) After installing control equipment in accordance with §60.112b (a)(3) or (b)(1) (closed vent system and control device other than a flare), the owner or operator shall keep the following records.

(1) A copy of the operating plan.

- (2) A record of the measured values of the parameters monitored in accordance with §60.113b(c)(2).
- (d) After installing a closed vent system and flare to comply with §60.112b, the owner or operator shall meet the following requirements.
 - (1) A report containing the measurements required by §60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator as required by §60.8 of the General Provisions. This report shall be submitted within 6 months of the initial start-up date.
 - (2) Records shall be kept of all periods of operation during which the flare pilot flame is absent.
 - (3) Semiannual reports of all periods recorded under §60.115b(d)(2) in which the pilot flame was absent shall be furnished to the Administrator.

§ 60.116b Monitoring of operations.

- (a) The owner or operator shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.
- (b) The owner or operator of each storage vessel as specified in §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
- (c) Except as provided in paragraphs (f) and (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
- (d) Except as provided in paragraph (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.
- (e) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.
 - (1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - (2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:
 - (i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see §60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
 - (ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
 - (3) For other liquids, the vapor pressure:

- (i) May be obtained from standard reference texts, or
 - (ii) Determined by ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17); or
 - (iii) Measured by an appropriate method approved by the Administrator; or
 - (iv) Calculated by an appropriate method approved by the Administrator.
- (f) The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.
- (1) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of this section.
 - (2) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in §60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:
 - (i) ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17); or
 - (ii) ASTM D323–82 or 94 (incorporated by reference—see §60.17); or
 - (iii) As measured by an appropriate method as approved by the Administrator.
 - (g) The owner or operator of each vessel equipped with a closed vent system and control device meeting the specification of §60.112b or with emissions reductions equipment as specified in 40 CFR 65.42(b)(4), (b)(5), (b)(6), or (c) is exempt from the requirements of paragraphs (c) and (d) of this section.

[52 FR 11429, Apr. 8, 1987, as amended at 65 FR 61756, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000; 68 FR 59333, Oct. 15, 2003]

§ 60.117b Delegation of authority.

- (a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.
- (b) Authorities which will not be delegated to States: §§60.111b(f)(4), 60.114b, 60.116b(e)(3)(iii), 60.116b(e)(3)(iv), and 60.116b(f)(2)(iii).

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

**Technical Support Document (TSD)
for a Part 70 Minor Source Modification**

Source Description and Location	
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Source Name:	Enbridge Energy, Limited Partnership - Hartsdale/Griffith
Source Location:	Central Avenue and Division Street, Schererville, IN 46375 and 1500 West Main Street, Griffith, IN 46319
County:	Lake
SIC Code:	4612, 4226
Operation Permit No.:	T 089-17501-00497
Operation Permit Issuance Date:	October 3, 2007
Minor Source Modification No.:	089-26507-00497
Permit Reviewer:	Joe Sachse

Source Definition

The Source Definition explained in the Minor Permit Modification No. 089-21442-00497, issued 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. The source ID number of the combined source is now 089-00497.

In addition, the following was added to clarify the proposed changes included in this minor source modification and significant permit modification:

Enbridge Energy, Limited Partnership - Hartsdale Griffith currently receives crude oil deliveries from two inbound pipelines and makes crude oil deliveries through three outbound pipelines. One of the outbound pipelines, referred to as the British Petroleum (BP) Pipeline, delivers crude oil to British Petroleum Pipelines, North America (BP). Enbridge Energy, does not operate this pipeline. It is operated by BP.

The OAQ has determined that Enbridge Energy and BP are two separate independent sources and have been issued two separate permits.

In order to consider both plants as one single source, all three of the following criteria must be met:

- (1) The plants must have common ownership/control;
- (2) The plants must have the same SIC code; and

- (3) The plants must be located on contiguous or adjacent properties.

The two sources operate under different SIC codes: Enbridge Energy operates under SIC codes 4226 and 4612 while BP operates under SIC code 2911. The two sources are located ten miles from each other and are not on contiguous or adjacent properties. The two sources are owned and operated by different companies: Enbridge Energy has contractual agreements with BP to deliver crude oil to their refineries, and Enbridge Energy does not have ownership or equity agreements with BP. Enbridge Energy does not meet the "50% support test" which is commonly used to determine whether one facility supports the other: the BP pipeline accounts for 350,000 barrels per day, or 44% of the 800,000 barrels per day of the pipeline delivery capacity of Enbridge Energy. Enbridge Energy does not meet the "but for" test used to determine support and dependency relationships between facilities. The two facilities support each other, but are not dependent upon each other. Enbridge Energy delivers crude oil to other refineries and BP has other pipelines from which it receives crude oil deliveries. Enbridge Energy and BP would continue to operate if the other were shut down.

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T 089-17501-00497 on October 3, 2007. The source has since received the following approvals:

- (a) Minor Permit Modification No. 089-24914-00497, issued January 8, 2008
- (b) First Significant Permit Modification No. 089-25868-00497, issued April 7, 2008.

County Attainment Status

The source is located in Lake County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148 th Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
O ₃	Nonattainment Subpart 2 Moderate effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Nonattainment Severe 17 effective November 15, 1990, for the Chicago-Gary-Lake County area for the 1-hour ozone standard which was revoked effective June 15, 2005.	

- (a) Ozone Standards
 - (1) 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.
 - (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph County as attainment for the 8-hour ozone standard.
 - (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary

emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph County as attainment for the 8-hour ozone standard.

- (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.

(i) 1-hour ozone standard

On December 22, 2006 the United States Court of Appeals, District of Columbia issued a decision which served to partially vacate and remand the U.S. EPA's final rule for implementation of the eight-hour National Ambient Air quality Standard for ozone. *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir., December 22, 2006), *rehearing denied* 2007 U.S. App. LEXIS 13748 (D.C. Cir., June 8, 2007). The U.S. EPA has instructed IDEM to issue permits in accordance with its interpretation of the *South Coast* decision as follows: the Gary-Lake-Porter County area was previously designated as a severe non-attainment area prior to revocation of the one-hour ozone standard, therefore, pursuant to the anti-backsliding provisions of the Clean Air Act, any new or existing source must be subject to the major source applicability cut-offs and offset ratios under the area's previous one-hour standard designation. This means that a source must achieve the Lowest Achievable Emission Rate (LAER) if it exceeds 25 tons per year of VOC emissions and must offset any increase in VOC emissions by a decrease of 1.3 times that amount.

On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NO_x threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the Permit Level Determination - Emission Offset section.

(ii) 8-hour ozone standard

VOC and NO_x 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 NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the Permit Level Determination - Emission Offset section.

(b) PM_{2.5}

U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Lake County as nonattainment for PM_{2.5}. 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 nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5.

(c) Other Criteria Pollutants

Lake County has been classified as attainment or unclassifiable in Indiana for SO₂, CO, PM₁₀, NO₂, and Pb. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (d) Since this source is classified as a petroleum storage and transfer unit with a total storage capacity exceeding three hundred thousand (300,000) barrels, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (e) **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.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (ton/yr)
PM	0.21
PM ₁₀	0.21
SO ₂	0.20
VOC	230.76
CO	0.64
NO _x	2.87

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) This existing source is a major stationary source, under Emission Offset (326 IAC 2-3), because VOC, a nonattainment regulated pollutant, is emitted at a rate of 25 tons per year or more.
- (c) The VOC emissions are provided by the source; all other emissions are based upon the Technical Support Document for Minor Source Modification No. 089-24839-00497, issued July 9, 2007.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

HAPs	Potential To Emit (ton/yr)
Single HAP (hexane)	3.28
Combined HAPs	7.71

This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2006 OAQ emission data.

Pollutant	Actual Emissions (ton/yr)
PM	Not Reported
PM ₁₀	Not Reported
SO ₂	Not Reported
VOC	156.49
CO	Not Reported
NO _x	Not Reported
single HAP	Not Reported
Total HAPs	Not Reported

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Enbridge Energy, Limited Partnership - Hartsdale/Griffith on May 8, 2008, relating to the replacement of a 4,600 foot section of an existing outbound pipeline with a larger diameter pipe and the construction of additional piping and components (valves and flanges) that originates at the Griffith terminal. The larger diameter pipeline will increase the capacity of the outbound pipeline by an estimated 125,000 barrels per day, from 675,000 to 800,000 barrels per day. The pipeline being replaced is operated by British Petroleum Pipelines, North America (BP) and delivers crude oil to BP's Whiting Refinery. However, this modification is not related to the OCC project at BP's Whiting Refinery. As described under the Source Definition section of this TSD, the OAQ has determined that Enbridge Energy and BP are two separate independent sources and have been issued two separate permits.

Enforcement Issues

There are no pending enforcement actions.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit 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, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

PTE Change of the Modified Process			
Pollutant	PTE Before Modification (ton/yr)	PTE After Modification (ton/yr)	Net Difference (ton/yr)
PM	0.00	0.00	0
PM ₁₀	0.00	0.00	0
SO ₂	0.00	0.00	0
VOC	28.69	34.00	+5.31
CO	0.00	0.00	0
NO _x	0.00	0.00	0
Benzene	0.58	0.61	+0.03
Hexane	3.28	3.41	+0.13
Toluene	1.07	1.12	+0.05
Xylene	1.71	1.79	+0.08
All Other HAPs	1.08	1.13	+0.05
Total HAPs	7.71	8.05	+0.34

This source modification is subject to 326 IAC 2-7-10.5(d)(9) because the source is located in Lake County, has a potential to emit greater than twenty-five (25) tons per year and the increase in emissions of VOC is greater than 15 pounds per day but less than 25 tons per year. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d) because this modification requires a case-by-case determination by using emission netting.

Permit Level Determination – Emission Offset

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

	Potential to Emit (ton/yr)					
	PM	PM₁₀	SO₂	VOC	CO	NO_x
Project Emissions Increase	0	0	0	5.32	0	0
Net Emissions Increase (NEI) During Contemporaneous Period	0	0	0	19.81	0	0
Net Emissions Decrease During Contemporaneous Period	0	0	0	-3.48	0	0
Total for Modification after Netting	0	0	0	21.65	0	0
Significant Level or Major Source Threshold	25	15	40	25	100	40

This modification is not a major modification for Emission Offset because the net VOC emission increase is less than 25 tons per year.

- (a) Pursuant to the South Coast Air Quality Mgmt. Dist. v. EPA, 472 F.3d 882 (D.C. Cir., December 22, 2006) decision, any new or existing source must be subject to the major source applicability cut offs and offset ratios under the area's previous one hour standard designation for VOCs. This modification to an existing major stationary source is minor because the net emissions increase for VOC is less than the significant levels under the de minimis evaluation as included in Appendix B. Therefore, pursuant to 326 IAC 2-3, Emission Offset requirements do not apply.

In conjunction with the Pipeline Expansion Project, the source shall install the following guide-pole controls on storage tank EU75 as part of an emissions reduction project:

- (a) Guide-pole sleeve
- (b) Guide-pole wiper

Storage tank EU75, is equipped with a slotted guide-pole. A guide-pole is an anti-rotational device that is fixed to the bottom of the tank and passes through a well in the floating roof and is used to prevent adverse movement of the roof and damages to the deck fittings and the rim seal system. The addition of the guide-pole controls on storage tank EU75 shall result in a creditable and federally-enforceable emission decrease of 3.48 tons per year and is not considered a modification under New Source Performance Standards (NSPS) regulations. Pursuant to 326 IAC 2-3-1(dd)(B)(v), a decrease in actual emissions is creditable only to the extent that:

- (1) the old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
- (2) it is enforceable as a practical matter at and after the time that actual construction on the particular change begins;
- (3) the commissioner has not relied on it in issuing any permit under regulations approved under 40 CFR Part 51, Subpart I* or the state has not relied on it in demonstrating attainment or reasonable further progress;
- (4) it has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.
- (c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The pipeline expansion project is not subject to the requirements of 40 CFR Part 64, Compliance Assurance Monitoring. The pipeline expansion project does not have a potential to emit before controls equal to or greater than 25 tons per year, the major source threshold for VOC.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-3 (Emission Offset)

Emission Offset applicability is discussed under the Permit Level Determination - Emission Offset section.

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

The pipeline expansion project will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

Since this source is located in Lake County, and has a potential to emit VOC greater than or equal to twenty-five (25) tons per year, an emission statement covering the previous calendar year must be submitted by July 1 of each year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a 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 Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements 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.

There are no new compliance monitoring requirements applicable to this modification.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T 089-17501-00497. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

1. Section A.3 and D.1 have been revised to incorporate the guide-pole controls (guide-pole sleeve and guide-pole wiper) on storage tank EU75.
2. Condition B.9(a) - Annual Compliance Certification has been modified. The due date for the certification has been changed from April 15 to July 1 to match the language in 326 IAC 2-7-6(5).
3. Sections D.1 and D.2 have been combined since the Hartsdale and Griffith terminals are both

subject to 326 IAC 8-4-3 and 326 IAC 8-9-4 for VOC. In addition, the applicable portions of NSPS 40 CFR Part 60, Subpart Ka and NSPS 40 CFR Part 60, Subpart Kb are now listed in Sections E.1 and E.2. The NSPS 40 CFR Part 60, Subpart Ka is included as Attachment A, and the NSPS 40 CFR Part 60, Subpart Kb is included as Attachment B.

...

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 4,200,000 gallons (100,000 barrels) of crude oil.
- (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 guide-pole controls (guide-pole sleeve and guide-pole wiper), permitted in 2008**, 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 2007, 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) One (1) crude oil storage tank, identified as EU80, approved for construction in 2007, with an external floating roof, and with a maximum capacity of 188,000 barrels (7,896,000 gallons). Pursuant to 40 CFR 60, Subpart Kb, this is an affected facility.
- (l) Piping component fugitive emission sources in VOC service.

...

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~~ **July 1** of each year to:

...

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 2007, 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) ~~One (1) crude oil storage tank, identified as Tank 80, approved for construction in 2007, with an external floating roof, and with a maximum capacity of 188,000 barrels (7,896,000 gallons). Pursuant to 40 CFR 60, Subpart Kb, this is an affected facility.~~

~~(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 tanks EU79 and Tank 80 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 cm² per meter of tank diameter (10.0 in² 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 cm² per meter of tank diameter (1.0 in² 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 cm² per meter of tank diameter (1.0 in² 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 and Tank 80 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, EU79, and Tank 80 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, EU79, and Tank 80.~~

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 and Tank 80, 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,~~~~

~~QAQ 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 VGL.~~
 - ~~(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]

- ~~(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 tanks EU79 and Tank 80, 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, EU79, and Tank 80:~~
- (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 and Tank 80, 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.~~
- ~~(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 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.2.2 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.2.3 — 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.2.4 — Compliance Determination [326 IAC 8-9-5]~~

~~Pursuant to 326 IAC 8-9-5(a), 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.~~

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

~~D.2.5 Record Keeping Requirements [326 IAC 8-4] [326 IAC 8-9]~~

- ~~(a) — 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.~~

- ~~(b) — 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.~~

- ~~(c) — 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.~~

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

~~D.2.6 Reporting and Notification Requirements [326 IAC 8-4] [326 IAC 8-9]~~

- (a) ~~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.2.4 to afford IDEM, OAQ the opportunity to have an observer present.~~
- (b) ~~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.~~
- (c) ~~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.~~
- (d) ~~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.~~
- (e) ~~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.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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 4,200,000 gallons (100,000 barrels) of crude oil.**
- (b) **One (1) pump station, constructed in 2005, identified as the 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.**

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 guide-pole controls (guide-pole sleeve and guide-pole wiper), permitted in 2008, 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 2007, 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) One (1) crude oil storage tank, approved for construction in 2007, identified as EU80, with an external floating roof, with a maximum capacity of 188,000 barrels (7,896,000 gallons).

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

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

D.1.1 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 EU70 through EU80, and 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.1.2 Volatile Organic Compounds (VOC) [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 through EU78 and EU1601 through 1609:

- (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.1.3 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, EU79, and EU80.

Compliance Determination Requirements

D.1.4 Compliance Determination [326 IAC 8-9-5]

Pursuant to 326 IAC 8-9-5(a), for storage tanks EU70 through EU78 and EU1601 through 1609, 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:

- (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.1.5 Record Keeping Requirements [326 IAC 8-4] [326 IAC 8-9]

- (a) Pursuant to 326 IAC 8-4-3(d), the Permittee shall maintain the following records for storage tanks EU70 through EU80, and EU1601 through 1609:**

 - (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.
- (b) Pursuant to 326 IAC 8-9-6(b), the Permittee shall maintain a record of the following for storage tanks EU70 through EU78 and 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.

- (c) Pursuant to 326 IAC 8-9-6(d), the Permittee shall keep a record for storage tanks EU70 through EU78 and 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.

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

D.1.6 Reporting and Notification Requirements [326 IAC 8-4] [326 IAC 8-9]

- (a) 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.1.5 to afford IDEM, OAQ the opportunity to have an observer present.
- (b) 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.
- (c) 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.**

- (d) **Pursuant to 326 IAC 8-9-6, the Permittee of storage vessels EU70 through EU78 and 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.**

- (e) **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 E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Griffith Terminal:

- (a) **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.**

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to New Source Performance Standards Under 40 CFR Part 60 [326 IAC 12-1] [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 the crude oil storage tank identified as EU78 except when otherwise specified in 40 CFR Part 60, Subpart Ka.**

- (b) **Pursuant to 40 CFR 60.7, the Permittee shall submit all of the required notifications and reports 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**

E.1.2 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 Part 60, Subpart Ka] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Ka, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Ka (included as Attachment A), which are incorporated by reference as 326 IAC 12, for the crude oil storage tank identified as EU78:

- (1) 40 CFR 60.112a(a)
- (2) 40 CFR 60.113a
- (3) 40 CFR 60.115a

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Griffith Terminal:

- (a) One (1) crude oil storage tank, constructed in 2007, identified as EU79, with an external floating roof, with a maximum capacity of 392,169 barrels (16,471,098 gallons).
- (b) One (1) crude oil storage tank, constructed in 2007, identified as EU80, with an external floating roof, with a maximum capacity of 188,000 barrels (7,896,000 gallons).

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to New Source Performance Standards Under 40 CFR Part 60 [326 IAC 12-1] [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 the crude oil storage tanks identified as EU79 and EU80 except when otherwise specified in 40 CFR Part 60, Subpart Kb.
- (b) Pursuant to 40 CFR 60.7, the Permittee shall submit all of the required notifications and reports 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

E.2.2 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 Part 60, Subpart Kb] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Kb, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Kb (included as Attachment B), which are incorporated by reference as 326 IAC 12, for the crude oil storage tanks identified as EU79 and EU80:

- (1) 40 CFR 60.110b
- (2) 40 CFR 60.113b
- (3) 40 CFR 60.115b(b)

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 089-26507-00497. The staff recommends to the Commissioner that this Part 70 Minor Source Modification be approved.

Source Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith
Source Location: Central Avenue and Division Street, Schererville, IN 46375 and 1500 West Main Street, Griffith, IN 46319
Permit Number: MSM T 089-26507-00497 and SPM T 089-26535-00497
Permit Reviewer: Joe Sachse
Date: 06/06/08

PTE VOC Withdrawal Losses Before Modification

Tank ID #	Tank Type	Service	Tank Capacity (Bbl)	Tank Diameter (ft)	Number of Turnovers per year	Maximum Annual Tank Throughput (bbl/yr)	Shell Clingage factor (bbl/1000 ft ³)	Average organic liquid density (lb/gal)	Withdrawal Losses (lb VOC/yr)	Withdrawal Losses (tons VOC/yr)
EU70	EFRT	Crude Oil	120,000	134	66.7	8,007,488	0.006	7.1	2,401	1.20
EU71	EFRT	Crude Oil	217,000	180	66.7	14,480,208	0.006	7.1	3,232	1.62
EU72	EFRT	Crude Oil	217,000	180	66.7	14,480,208	0.006	7.1	3,232	1.62
EU73	EFRT	Crude Oil	217,000	180	66.7	14,480,208	0.006	7.1	3,232	1.62
EU74	EFRT	Crude Oil	217,000	180	66.7	14,480,208	0.006	7.1	3,232	1.62
EU75	EFRT	Crude Oil	217,000	180	66.7	14,480,208	0.006	7.1	3,232	1.62
EU76	EFRT	Crude Oil	395,000	210	66.7	26,357,982	0.006	7.1	5,042	2.52
EU77	EFRT	Crude Oil	395,000	210	66.7	26,357,982	0.006	7.1	5,042	2.52
EU78	EFRT	Crude Oil	217,000	180	66.7	14,480,208	0.006	7.1	3,232	1.62
EU79	EFRT	Crude Oil	392,169	224	66.7	26,169,072	0.006	7.1	4,693	2.35
EU80	EFRT	Crude Oil	188,000	180	66.7	12,545,065	0.006	7.1	2,800	1.40
EU1601	EFRT	Crude Oil	100,000	134	66.7	6,672,907	0.006	7.1	2,000	1.00
EU1602	EFRT	Crude Oil	100,000	134	66.7	6,672,907	0.006	7.1	2,000	1.00
EU1603	EFRT	Crude Oil	100,000	134	66.7	6,672,907	0.006	7.1	2,000	1.00
EU1604	EFRT	Crude Oil	100,000	134	66.7	6,672,907	0.006	7.1	2,000	1.00
EU1605	EFRT	Crude Oil	100,000	134	66.7	6,672,907	0.006	7.1	2,000	1.00
EU1606	EFRT	Crude Oil	100,000	134	66.7	6,672,907	0.006	7.1	2,000	1.00
EU1607	EFRT	Crude Oil	100,000	134	66.7	6,672,907	0.006	7.1	2,000	1.00
EU1608	EFRT	Crude Oil	100,000	134	66.7	6,672,907	0.006	7.1	2,000	1.00
EU1609	EFRT	Crude Oil	100,000	134	66.7	6,672,907	0.006	7.1	2,000	1.00
Total			3,692,169			246,375,000			57,372	28.69

Notes:

1. Annual tank throughput is calculated using a tank volume flow weighted throughput allocation which results in the same number of turnovers for all tanks. The tank throughput capacity is calculated by multiplying the combined terminal throughput capacity by the tank volume and dividing by the combined terminal
2. Withdrawal loss formula from USEPA, Compilation of Air Pollutant Emission Factors, Volume 1, 5th edition, AP-42, Chapter 7.1 Liquid Storage Tanks, November 2006, Formula 2-4.

Source Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith
Source Location: Central Avenue and Division Street, Schererville, IN 46375 and 1500 West Main Street, Griffith, IN 46319
Permit Number: MSM T 089-26507-00497 and SPM T 089-26535-00497
Permit Reviewer: Joe Sachse
Date: 06/06/08

PTE VOC Withdrawal Losses After Modification

Tank ID #	Tank Type	Service	Tank Capacity (Bbl)	Tank Diameter (ft)	Number of Turnovers per year	Maximum Annual Tank Throughput (bbl/yr)	Shell Clingage factor (bbl/1000 ft ³)	Average organic liquid density (lb/gal)	Withdrawal Losses (lb VOC/yr)	Withdrawal Losses (tons VOC/yr)
EU70	EFRT	Crude Oil	120,000	134	79.1	9,490,356	0.006	7.1	2,845	1.42
EU71	EFRT	Crude Oil	217,000	180	79.1	17,161,728	0.006	7.1	3,830	1.92
EU72	EFRT	Crude Oil	217,000	180	79.1	17,161,728	0.006	7.1	3,830	1.92
EU73	EFRT	Crude Oil	217,000	180	79.1	17,161,728	0.006	7.1	3,830	1.92
EU74	EFRT	Crude Oil	217,000	180	79.1	17,161,728	0.006	7.1	3,830	1.92
EU75	EFRT	Crude Oil	217,000	180	79.1	17,161,728	0.006	7.1	3,830	1.92
EU76	EFRT	Crude Oil	395,000	210	79.1	31,239,090	0.006	7.1	5,976	2.99
EU77	EFRT	Crude Oil	395,000	210	79.1	31,239,090	0.006	7.1	5,976	2.99
EU78	EFRT	Crude Oil	217,000	180	79.1	17,161,728	0.006	7.1	3,830	1.92
EU79	EFRT	Crude Oil	392,169	224	79.1	31,015,197	0.006	7.1	5,562	2.78
EU80	EFRT	Crude Oil	188,000	180	79.1	14,868,225	0.006	7.1	3,318	1.66
EU1601	EFRT	Crude Oil	100,000	134	79.1	7,908,630	0.006	7.1	2,371	1.19
EU1602	EFRT	Crude Oil	100,000	134	79.1	7,908,630	0.006	7.1	2,371	1.19
EU1603	EFRT	Crude Oil	100,000	134	79.1	7,908,630	0.006	7.1	2,371	1.19
EU1604	EFRT	Crude Oil	100,000	134	79.1	7,908,630	0.006	7.1	2,371	1.19
EU1605	EFRT	Crude Oil	100,000	134	79.1	7,908,630	0.006	7.1	2,371	1.19
EU1606	EFRT	Crude Oil	100,000	134	79.1	7,908,630	0.006	7.1	2,371	1.19
EU1607	EFRT	Crude Oil	100,000	134	79.1	7,908,630	0.006	7.1	2,371	1.19
EU1608	EFRT	Crude Oil	100,000	134	79.1	7,908,630	0.006	7.1	2,371	1.19
EU1609	EFRT	Crude Oil	100,000	134	79.1	7,908,630	0.006	7.1	2,371	1.19
Total			3,692,169			292,000,000			67,996	34.00

Notes:

1. Annual tank throughput is calculated using a tank volume flow weighted throughput allocation which results in the same number of turnovers for all tanks. The tank throughput capacity is calculated by multiplying the combined terminal throughput capacity by the tank volume and dividing by the combined terminal
2. Withdrawal loss formula from USEPA, Compilation of Air Pollutant Emission Factors, Volume 1, 5th edition, AP-42, Chapter 7.1 Liquid Storage Tanks, November 2006, Formula 2-4.

Source Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith
Source Location: Central Avenue and Division Street, Schererville, IN 46375 and 1500 West Main Street, Griffith, IN 46319
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Permit Reviewer: Joe Sachse
Date: 06/06/08

Example Withdrawal Loss Calculations - Hartsdale Terminal Tank 1601 Projected Actual Withdrawal Losses

Symbol	Description (Units of Measure)	Formula / Constant Value	AP-42 Formula or Reference Table Number	Withdrawal Loss Calculation
	Tank Number			EU1601
	Tank Type			EFRT
	Product			Crude Oil
L_{WD}	Withdrawal Loss (lb VOC/yr)	$L_{WD} = ((0.943) * Q * C * W_L/D) * (1+N_C+F_C/D)$	2-4	2,371
	Constant (1000 ft ³ * gal/bbl ²)	0.943		0.943
Q	Tank Throughput (bbl/yr)	Input value		7,908,630
C_S	Shell Clingage Factor (bbl/1000 ft ²)	Input value	Table 7.1-10	0.0060
W_L	Average organic liquid density (lb/gal)	Input value	Table 7.1-2	7.1
D	Tank Diameter (ft)	Input value		134
N_C	Number of fixed roof support columns	Input value	2-4 Note 2	NA ¹
F_C	Effective column diameter (ft)	Input value	2-4 Note 3	NA ¹
Withdrawal Loss (tons VOC/yr)				1.19

Note:

- External Floating Roof Tanks have no support columns.

Source Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith
Source Location: Central Avenue and Division Street, Schererville, IN 46375 and 1500 West Main Street, Griffith, IN 46319
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Permit Reviewer: Joe Sachse
Date: 06/06/08

Piping Component Fugitive VOC Emission Calculations

Piping Component	Pipeline Expansion Project Piping Component Counts	Service	Emission Factor (kg/hr/source) *	Emission Factor (lb/hr/source)	Piping Component Emissions (lb/yr)	Total Emissions (tons/yr)
Valves	8	Crude/Light Liquid	4.30E-05	9.46E-05	6.63	0.003
Flanges	42	Crude/Light Liquid	8.00E-06	1.76E-05	6.48	0.003
Total				0.000	13.10	0.007

* Note: Emission factors are from Table 2-3 Light liquid emission factors, Marketing Terminal Average Emission Factors from Protocol for Equipment Leak Emission Estimates, USEPA Office of Air Quality Planning and Standards, November 1995 (EPA-453/R-95-017).

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

Source Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith
Source Location: Central Avenue and Division Street, Schererville, IN 46375 and 1500 West Main Street, Griffith, IN 4
Permit Number: MSM T 089-26507-00497 and SPM T 089-26535-00497
Permit Reviewer: Joe Sachse
Date: 06/06/08

Hazardous Air Pollutant Emission Calculations

	Liquid Weight Fraction ¹	6.00E-03	2.46E-03	1.00E-02	1.42E-02	1.00E-03	
	Vapor Weight Fraction ²	4.67E-03	3.19E-03	2.14E-03	8.00E-04	3.93E-04	
	VOC Losses (tons/yr)	Benzene PTE (tons/yr)	Hexane PTE (tons/yr)	Toluene PTE (tons/yr)	Xylene PTE (tons/yr)	Isooctane/ 2,2,4- Trimethyl- pentane PTE (tons/yr)	Total (tons/yr)
Pipeline Expansion Project Withdrawal Loss Emissions Increase ³	5.31	0.03	0.13	0.05	0.08	0.01	0.30
Pipeline Expansion Project New Piping Fugitive Emissions Increase ⁴	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Project Total	5.32	0.03	0.13	0.05	0.08	0.01	0.30

Note:

1. Calculated per API Manual of Petroleum Measurement Standards Ch. 19.4 - Recommended Practice for Speciation of Evaporative Losses, 2nd Ed., September 2005.
2. Calculated using the TANKS and EPCRA Section 313 Industry Guidance.
3. PTE (tons/yr) = Liquid Weight Fraction * VOC Losses (tons/yr) * ton/2000 lb
4. PTE (tons/yr) = Vapor Weight Fraction * VOC Losses (tons/yr) * ton/2000 lb

Source Name: Enbridge Energy, Limited Partnership - Hartsdale/Griffith
Source Location: Central Avenue and Division Street, Schererville, IN 46375 and 1500 West Main Street, Griffith, IN 46319
Permit Number: MSM T 089-26507-00497 and SPM T 089-26535-00497
Permit Reviewer: Joe Sachse
Date: 06/06/08

Source Summary PTE

	PM (tons/yr)	PM₁₀ (tons/yr)	SO₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)
Source PTE Before Modification	0.21	0.21	0.20	230.75	0.64	2.87
Pipeline Expansion Project Withdrawal Loss Emissions Increase	0.00	0.00	0.00	5.31	0.00	0.00
Pipeline Expansion Project New Piping Fugitive Emissions Increase	0.00	0.00	0.00	0.01	0.00	0.00
Source PTE After Modification	0.21	0.21	0.20	236.07	0.64	2.87

	Benzene (tons/yr)	Hexane (tons/yr)	Toluene (tons/yr)	Xylene (tons/yr)	All Other (tons/yr)	Total HAPs (tons/yr)
Source PTE Before Modification	1.12	7.15	0.72	0.57	0.48	10.04
Pipeline Expansion Project Withdrawal Loss Emissions Increase	0.03	0.13	0.05	0.08	0.06	0.36
Pipeline Expansion Project New Piping Fugitive Emissions Increase	0.00	0.00	0.00	0.00	0.00	0.00
Source PTE After Modification	1.15	7.28	0.77	0.64	0.55	10.40

Project VOC de minimis Test

Per 326 IAC 2-3-1(q), a de minimis increase of VOC from a modification in a serious or severe ozone nonattainment area, means an increase that does not exceed twenty-five (25) tons per year when the net emissions increases from the proposed modification are aggregated on a pollutant specific basis with all other net emissions increases from the source over a five (5) consecutive calendar year period prior to, and including, the year of the modification. This modification is expected to commence operation in 2008, and therefore the net emissions changes from projects taking place between 2004 and 2008 have been considered for this evaluation.

Project Emissions Increase ¹	VOC (tons/yr)
Project Emission Increase (PEI) New Units	34.00
Project Emission Increase (PEI) Fugitive	0.01
Actual Emissions Excluded ²	(8.66)
Baseline Actual Emissions ³	(20.03)
PEI	5.32

5-Year Contemporaneous Projects

Griffith Storage Tank 80 Permitted Emissions (MSM No. 089-24839-00497) (Effective date: 07/09/07)	6.77
Griffith Storage Tank 80 Permitted Piping Fugitive Emissions (MSM No. 089-24839-00497) (Effective date: 07/09/07)	0.02
Griffith Storage Tank EU79 Permitted Emissions (MSM No. 089-21491-00497) (Effective date: 08/18/05)	7.99
Griffith Storage Tank EU79 Permitted Piping Fugitive Emissions (MSM No. 089-21491-00497) (Effective date: 08/18/05)	0.03
Spearhead Project (Line 55) Permitted Piping Fugitive Emissions (MSM No. 089-21491-00497) (Effective date: 08/18/05)	0.19
Spearhead Project (Line 55) Permitted Tank Withdrawal Emissions (MSM No. 089-21491-00497) (Effective date: 08/18/05)	4.81
Griffith Storage Tank EU75 Guide-pole controls	(3.48)

NEI Project Emissions	21.65
NSR SERs (tons/yr)	25.00
Significant Net Emissions Increase?	No
Pollutant	VOC (tons/yr)

¹ Since the proposed projects include modifications to new and existing emission units, Emission Offset Rule Applicability was evaluated using the combined emission unit method outlined in 326 IAC 2-3-2(c)(6). The Pipeline Capacity Expansion Project emissions increase includes withdrawal losses that result from increased tank throughput. Standing and tank landing losses do not increase as a result of the project.

² Pursuant to 326 IAC 2-3-1(mm)(2)(A)(iii), any portion of the projected actual emissions that could have been accommodated by the emission unit and are unrelated to the project shall be excluded. For the proposed pipeline expansion projects, this includes the emissions related to potential tank throughput increases that could have been accommodated by the terminals and which are unrelated to the proposed project.

³ Baseline actual emissions are calculated for the 2005 and 2006 actual withdrawal loss emissions.