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: December 22, 2011

RE: Buckeye Terminals, LLC / 089-30669-00320

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 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, 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 and IC 13-15-6-1 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 of 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.dot12/03/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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December 22, 2011

Jason Mengel
Buckeye Terminals, LLC
Five TEK Park,
9999 Hamilton BLVD
Breinigsville, PA 18031

Re: 089-30669-00320
Significant Source Modification to
Part 70 Renewal No.: T 089-26500-00320

Dear Mr. Mengel:

Buckeye Terminals, LLC, was issued a Part 70 Operating Permit Renewal on January 22, 2009, for a stationary bulk liquid fuel storage and transfer terminal. A letter requesting changes to this permit was received on June 29, 2011. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

One (1) Propylene storage and loading facility including:

(a) Two (2) 21,000 barrel storage pressure spheres, using a portable vapor control unit (VCU), or equivalent, to control point source VOC emissions.

(b) Twelve (12) stand propylene Railcar Unloading Rack, using a truck loading vapor control unit (VCU), or equivalent, to control point source VOC emissions.

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.

This significant source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

A copy of this permit is available on the Internet at: www.in.gov/ai/appfiles/idem-caats/.

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 Kimberly Cottrell, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Kimberly Cottrell or extension (3-0870), or dial (317) 233-0870.

Sincerely,

Donald F Robin for

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

Attachments:
Updated Permit, calculations, and technical support document

klc

cc: File – Lake County
Lake County Health Department
U.S. EPA, Region V
Northwest Regional Office
Compliance and Enforcement Branch
Interested Parties

Ms. Pat Sorensen
ERM
11350 N. Meridian, Suite 320
Carmel, IN 46032

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Significant Source Modification to a Part 70 Source
OFFICE OF AIR QUALITY

Buckeye Terminals, LLC
3823 Indianapolis Boulevard
East Chicago, Indiana 46312

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

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

Significant Source Modification No.: 089-30669-00320	
Original signed by: Donald F Robin for Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: December 22, 2011

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Attachment B: National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities [40 CFR Part 63, Subpart BBBBBB]

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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 pipeline breakout tank farm and bulk liquid fuel storage and transfer terminal.

Source Address:	3823 Indianapolis Boulevard, East Chicago, Indiana 46312
General Source Phone Number:	219-397-6666
SIC Code:	5171
County Location:	Lake
Source Location Status:	Attainment for 8-hour ozone standard Nonattainment for $PM_{2.5}$ standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Minor Source, under Nonattainment NSR Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 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:

INDIANAPOLIS BOULEVARD TERMINAL

(a) Ten (10) vertical domed internal floating roof storage tanks used to store petroleum products, constructed between 1935 and 1957, each tank is equipped with a primary and secondary seal:

(1) Tank 106 has a maximum design capacity of 1,054,484 gallons;

(2) Tank 107 has a maximum design capacity of 1,031,884 gallons;

(3) Tank 108 has a maximum design capacity of 1,054,783 gallons;

(4) Tank 112 has a maximum design capacity of 2,075,798 gallons;

(5) Tank 120 has a maximum design capacity of 2,853,291 gallons;

(6) Tank 123 has a maximum design capacity of 2,818,841 gallons;

(7) Tank 130 has a maximum design capacity of 3,915,368 gallons;

(8) Tank 131 has a maximum design capacity of 3,915,368 gallons;

(9) Tank 132 has a maximum design capacity of 3,915,368 gallons;

(10) Tank 133 has a maximum design capacity of 3,915,368 gallons.

(b) Two (2) internal floating roof above ground storage tanks (Tank 134 and Tank 135) used to store petroleum products constructed July 17, 1998. Each tank is equipped with a primary and secondary seal. Each tank has a maximum design capacity of 5,040,000 gallons.

(c) One (1) existing fixed roof tank, constructed in 1941 and modified July 17, 1998, into a new internal floating roof above ground storage tank (Tank 151) used to store petroleum products. The tank is equipped with a primary and secondary seal, and has a maximum design capacity of 5,040,000 gallons.

(d) One (1) vertical fixed roof cone storage tank (Tank 150), constructed in 1941, used to store petroleum distillates with a maximum true vapor pressure of 0.019 psia at 68°F. The tank has a maximum design capacity of 3,382,609 gallons.

PROPYLENE STORAGE AND LOADING FACILITY

(e) Two (2) 21,000 barrel storage pressure spheres, using a portable vapor control unit (VCU), or equivalent, to control point source VOC emissions.

(f) Twelve (12) stand propylene Loading rack, using a truck loading vapor control unit (VCU), or equivalent, to control point source VOC emissions.

(g) Fugitive VOC emissions from propylene storage and loading operations.

EAST COLUMBUS DRIVE TERMINAL

(h) One (1) 813,624 gallon external floating roof gasoline storage tank, identified as T-201, with primary and secondary seals, constructed in 1939.

(i) One (1) 653,100 gallon external floating roof gasoline storage tank, identified as T-202, with primary and secondary seals, constructed in 1939.

(j) Two (2) 2,956,380 gallon gasoline storage tanks, identified as T-801 and T-802, both-with primary and secondary seals, constructed in 1939. Tank T-801 is an external floating roof tank. Tank T-802 is a domed internal floating roof tank, dome added in 2010.

(k) One (1) 2,759,316 gallon external floating roof gasoline storage tank, identified as T-803, with primary and secondary seals, constructed in 1939.

(l) One (1) 2,853,732 gallon external floating roof gasoline storage tank, identified as T-804, with primary and secondary seals, constructed in 1939.

(m) One (1) 3,055,542 gallon domed internal floating roof gasoline/transmix storage tank, identified as T-805, with primary and secondary seals, constructed in 1939, dome added in 2010.

(n) One (1) 2,843,274 gallon external floating roof gasoline storage tank, identified as T-806, with primary and secondary seals, constructed in 1939.

(o) One (1) 616,938 gallon internal floating roof gasoline storage tank, identified as T-204, with a primary seal, constructed in 1939.

(p) One (1) 630,000 gallon internal floating roof gasoline storage tank, identified as T-207, with a primary seal, constructed in 1946.

(q) One (1) 696,695 gallon internal floating roof gasoline/transmix (a gasoline/distillate oil mixture) storage tank, identified as T-209, with a primary seal, constructed in 1946.

(r) One (1) 739,830 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-208, constructed in 1946.

(s) One (1) 964,824 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-240, constructed in 1968.

(t) One (1) 8,633,646 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2101, constructed in 1955.

(u) One (1) 8,618,190 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2102, constructed in 1955.

(v) One (1) 10,847,382 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2601, originally constructed in 1960 and later modified in 2002.

(w) One (1) 10,835,328 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2602, originally constructed in 1960 and later modified in 2002.

(x) Two (2) 635,040 gallon vertical fixed roof distillate/kerosene storage tanks, identified as T-205 and T-206, constructed in 1939.

(y) One (1) 3,410,988 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-807, constructed in 1939.

(z) Two (2) 15,204 gallon horizontal fixed roof gasoline additive storage tanks, identified as T-1501 and T-1502, both constructed in 1940.

(aa) One (1) 1,465,002 gallon domed internal floating roof gasoline storage tank, identified as T-401, with a primary seal, constructed in 1952.

(bb) Two (2) 2,857,890 gallon domed internal floating roof gasoline storage tanks, identified as T-809 and T-810, each with a primary seal, both constructed in 1952.

(cc) One (1) 2,841,552 gallon domed internal floating roof gasoline/transmix storage tank, identified as T-808, with a primary and seal, constructed in 1952.

(dd) Gasoline tank cleaning operation, identified as TNKCLN GAS.

(ee) One (1) tank truck loading rack (identified as RACK) used to load gasoline, distillate, and ethanol, with a maximum loading capacity of 324,000 gallons of liquid per hour, constructed in 1940 and later reconstructed in 1979, controlled by one (1) natural gas fired Vapor Combustion Unit (VCU), rated at maximum heat input rate of 1.6 MMBtu/hr, installed in 1997, and exhausting through one (1) stack identified as VCU.

(ff) One (1) VOC fractionator for separating gasoline and fuel oil of transmix tanks, identified as FRACT, venting 125 cubic feet of VOC vapor per minute during intermittent pressure relief with venting gas being controlled by VCU, and equipped with a 7.0 million British thermal units per hour natural gas fired reboiler;

(gg) VOC emissions from the following operations:

(1) Fugitive VOC emissions from the loading rack, identified as FLRACK.

(2) Filter change out service for gasoline tanks, identified as FILT1.

(3) Meter proving service, identified as PROVE.

(hh) A wastewater handling and treatment system, capable of treating 420,000 gallons of contaminated water per hour, including the following activities:

(1) Five (5) sumps for wastewater from tank water draw and roof drains;

(2) One (1) sump for wastewater from loading rack;

(3) One (1) 379,638 gallon internal floating roof waste water/gasoline storage tank, identified as T-103, constructed in 1939;

(4) One (1) dissolved air floatation oil/water separator, identified as TS DAF, with a maximum capacity of 12,000 gallons per hour;

(5) One (1) oil/water separator, identified as TS OWS/Separator No. 1, with a maximum capacity of 11,000 gallons per hour; and

(6) One (1) air stripper capable of processing a maximum of 23,000 gallons of water per hour.

A.3 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):

INDIANAPOLIS BOULEVARD TERMINAL

(a) Five (5) vertical fixed roof cone storage tanks used to store petroleum distillates with a maximum true vapor pressure of 0.019 psia at 68°F, constructed in 1941 [326 IAC 8-9]:

(1) Tank 103 has a maximum design capacity of 836,368 gallons;

(2) Tank 122 has a maximum design capacity of 2,853,291 gallons;

(3) Tank 140 has a maximum design capacity of 3,382,609 gallons;

(4) Tank 141 has a maximum design capacity of 3,382,609 gallons;

(5) Tank 142 has a maximum design capacity of 3,382,609 gallons.

(b) Two (2) horizontal distillate additive tanks, constructed in 2005:

(1) Tank AT-01 has a maximum design capacity of 12,000 gallons;

(2) Tank AT-02 has a maximum design capacity of 12,000 gallons.

ENTIRE SITE

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

A.4 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) The Part 70 Operating Permit, T089-26500-00320, 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. 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) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(i) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and

(ii) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent, 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 April 15 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(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.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit, where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, 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.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

(c) 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. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(d) 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 and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
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 and Enforcement 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.

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

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

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

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

(a) All terms and conditions of permits established prior to T089-26500-00320 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 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.16 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, 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, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 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
Permit Administration and Support Section, 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.18 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 or notice 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.19 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
Permit Administration and Support Section, 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a “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.20 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 2-3.

B.21 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.22 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.23 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.24 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 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.5 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.6 Fugitive Dust Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on October 7, 2002.

C.7 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
Compliance and Enforcement Branch, 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.8 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.9 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.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, 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 and Enforcement 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

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

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

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

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

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

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to 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 excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning 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 normal or usual manner of operation.

(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 record the reasonable response steps taken.

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

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ, that retesting in one hundred eighty (180) 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(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(ll)) 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(ll)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/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(ll)) 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.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. -Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that 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. This report shall be submitted not later than thirty (30) days ~~of~~ after the end of the reporting period.- The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, 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) 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.

(e) 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).

(f) 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
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) Two (2) internal floating roof above ground storage tanks (Tank 134 and Tank 135) used to store petroleum products constructed July 17, 1998. Each tank is equipped with a primary and secondary seal. Each tank has a maximum design capacity of 5,040,000 gallons.

(b) One (1) existing fixed roof tank, constructed in 1941 and modified July 17, 1998, into a new internal floating roof above ground storage tank (Tank 151) used to store petroleum products. The tank is equipped with a primary and secondary seal, and has a maximum design capacity of 5,040,000 gallons.

(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 Emission Offset Minor Limit [326 IAC 2-3]

Tank 134, Tank 135 and Tank 151 shall use a combined total of less than 677,663,000 gallons of petroleum product per twelve (12) consecutive month period with compliance determined at the end of each month. This usage limit is required to limit the potential to emit of VOC to less than 25 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-3 (Emission Offset) not applicable to these tanks modified in 1998 by Construction Permit CP-089-9508-00320.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)] [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for Tank 134, Tank 135 and Tank 151. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

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

D.1.3 Record Keeping Requirements [326 IAC 8-4-3(d)]

(a) The following records of petroleum liquid storage vessels (Tank 134, Tank 135, and Tank 151) shall be maintained for a period of two (2) years, unless otherwise specified. These records shall be made available to the commissioner upon written request:

(1) The types of volatile petroleum liquid stored.

(2) The maximum true vapor pressure of the liquid as stored.

(3) The results of the inspections performed on the storage vessels. 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).

(b) To document compliance with Condition D.1.1, monthly records shall be kept of the number of gallons of petroleum product each tank (Tank 134, Tank 135, and Tank 151) uses per twelve (12) consecutive month period.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

D.1.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

Ten (10) vertical domed internal floating roof storage tanks used to store petroleum products, constructed between 1935 and 1957. Each tank is equipped with a primary and secondary seal:

(1) Tank 106 has a maximum design capacity of 1,054,484 gallons;

(2) Tank 107 has a maximum design capacity of 1,031,884 gallons;

(3) Tank 108 has a maximum design capacity of 1,054,783 gallons;

(4) Tank 112 has a maximum design capacity of 2,075,798 gallons;

(5) Tank 120 has a maximum design capacity of 2,853,291 gallons;

(6) Tank 123 has a maximum design capacity of 2,818,841 gallons;

(7) Tank 130 has a maximum design capacity of 3,915,368 gallons;

(8) Tank 131 has a maximum design capacity of 3,915,368 gallons;

(9) Tank 132 has a maximum design capacity of 3,915,368 gallons;

(10) Tank 133 has a maximum design capacity of 3,915,368 gallons.

(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 8-9-4]

(a) Pursuant to 326 IAC 8-9-4(a)(2), Tank 106, Tank 107, Tank 108, Tank 112, Tank 120, Tank 123, Tank 130, Tank 131, Tank 132, and Tank 133 shall be installed with an internal floating roof meeting the standards in 326 IAC 8-9-4(c), as follows:

(1) The internal floating roof shall float on the liquid surface, but not necessarily in complete contact with it, inside a vessel that has a permanently affixed roof.

(2) The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the vessel is completely emptied or subsequently emptied and refilled.

(3) 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.

(4) Each internal floating roof shall be equipped with one (1) of the following closure devices between the wall of the 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).

(B) Two (2) seals mounted one (1) above the other so that each forms a continuous closure that completely covers the space between the wall of the 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 that consists of a metal sheet held vertically against the wall of the vessel by springs or weighted levers and that is connected by braces to the floating roof. A flexible coated fabric, or envelope, spans the annular space between the metal sheet and the floating roof.

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

(6) 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 shall be equipped with a cover or lid that shall be maintained in a closed position at all times (with 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.

(7) Automatic bleeder vents shall be equipped with a gasket and 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.

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

(9) 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 ninety (90) percent of the opening.

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

(b) Pursuant to 326 IAC 8-9-4(a)(4), Tank 106, Tank 107, Tank 108, Tank 112, Tank 120, Tank 123, Tank 130, Tank 131, Tank 132, and Tank 133 shall be installed with one (1) of the following:

(1) Emission control equipment.

(2) A schedule for vessel cleaning and installation of emission control equipment.

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

D.2.2 Testing and Procedures [326 IAC 8-9-5]

Pursuant to 326 IAC 8-9-5 (Volatile Organic Liquid Storage Vessels: Testing and Procedures), on and after May 1, 1996, except as provided in 326 IAC 8-9-4(a)(2), the owner or operator of each vessel equipped with an internal floating roof (Tank 106, Tank 107, Tank 108, Tank 112, Tank 120, Tank 123, Tank 130, Tank 131, Tank 132, and Tank 133) shall meet the following requirements:

(a) Visually inspect the internal floating roof, the primary seal, and the secondary seal, if one is in service, prior to filling the 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 vessel.

(b) 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 twelve (12) months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the 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 vessel from service within forty-five (45) days. If a failure that is detected during inspections required in this section cannot be repaired in forty-five (45) days and if the vessel cannot be emptied within forty-five (45) days, a thirty (30) day extension may be requested from the department in the inspection report required in 326 IAC 8-9-6(c)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(c) For vessels equipped with both primary and secondary seals:

(1) visually inspect the vessel as specified in paragraph (d) of this condition, at least every five (5) years; or

(2) visually inspect the vessel as specified in paragraph (b) of this condition.

(d) Visually inspect the internal floating roof, the primary seal, the secondary seal, if one is in service, gaskets, slotted membranes, and sleeve seals each time the 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 gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than ten (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 vessel with VOL. In no event shall the inspections required by this paragraph occur at intervals greater than ten (10) years in the case of vessels conducting the annual visual inspection as specified in paragraphs (b) and (c)(2) of this condition and at intervals no greater than five (5) years in the case of vessels specified in paragraph (c)(1) of this condition.

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

D.2.3 Record Keeping Requirements [326 IAC 8-4-3(d)]

(a) Pursuant to 326 IAC 8-4-3(d) (Petroleum Sources: Petroleum Liquid Storage Facilities), the owner or operator of Tank 106, Tank 107, Tank 108, Tank 112, Tank 120, Tank 123, Tank 130, Tank 131, Tank 132, and Tank 133 shall maintain the following records for a period of two (2) years. Such records shall be made available to the commissioner upon written request:

(1) The types of volatile petroleum liquid stored.

(2) The maximum true vapor pressure of the liquid as stored.

(3) The results of the inspections performed on the storage vessels.

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

D.2.4 Record Keeping and Reporting Requirements [326 IAC 8-9-6]

(a) Pursuant to 326 IAC 8-9-6(a), the owner or operator of Tank 106, Tank 107, Tank 108, Tank 112, Tank 120, Tank 123, Tank 130, Tank 131, Tank 132, and Tank 133 shall keep all records required by this condition for three (3) years unless specified otherwise. Records required by paragraph (b) shall be maintained for the life of the vessel.

(b) Pursuant to 326 IAC 8-9-6(b), the owner or operator of Tank 106, Tank 107, Tank 108, Tank 112, Tank 120, Tank 123, Tank 130, Tank 131, Tank 132, and Tank 133 shall maintain a record and submit to the department 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 vessel, or a schedule for installation of emission control equipment with a certification that the emission control equipment meets the applicable standards.

(c) Pursuant to 326 IAC 8-9-6(c), the owner or operator of Tank 106, Tank 107, Tank 108, Tank 112, Tank 120, Tank 123, Tank 130, Tank 131, Tank 132, and Tank 133 shall comply with the following record keeping and reporting requirements:

(1) Keep a record of each inspection performed as required by Conditions D.2.2(a) through (d). Each record shall identify the following:

(A) The vessel inspected by identification number.

(B) The date the vessel was inspected.

(C) The observed condition of each component of the control equipment, including the following:

(i) Seals.

(ii) Internal floating roof.

(iii) Fittings.

(2) If any of the conditions described in Condition D.2.2(b) are detected during the required annual visual inspection, a record shall be maintained and a report shall be furnished to the department within thirty (30) days of the inspection. Each report shall identify the following:

(A) The vessel by identification number.

(B) The nature of the defects.

(C) The date the vessel was emptied or the nature of and date the repair was made.

(3) After each inspection required by Condition D.2.2(c) 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 D.2.2(c)(2), a record shall be maintained and a report shall be furnished to the department within thirty (30) days of the inspection. The report shall identify the following:

(A) The vessel by identification number.

(B) The reason the vessel did not meet the specifications of Condition D.2.1(a), or Condition D.2.2 and list each repair made.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

D.2.5 Reporting Requirements [326 IAC 8-9-5]

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

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(a) One (1) vertical fixed roof cone storage tank (Tank 150), constructed in 1941 used to store petroleum distillates. The tank has a maximum design capacity of 3,382,609 gallons.

(b) The following insignificant tanks:

Five (5) vertical fixed roof cone storage tanks used to store petroleum distillates with a maximum true vapor pressure of 0.019 psia at 68°F, constructed in 1941:

(1) Tank 103 has a maximum design capacity of 836,368 gallons;

(2) Tank 122 has a maximum design capacity of 2,853,291 gallons;

(3) Tank 140 has a maximum design capacity of 3,382,609 gallons;

(4) Tank 141 has a maximum design capacity of 3,382,609 gallons;

(5) Tank 142 has a maximum design capacity of 3,382,609 gallons.

Two (2) horizontal distillate additive tanks, constructed in 2005:

(1) Tank AT-01 has a maximum design capacity of 12,000 gallons;

(2) Tank AT-02 has a maximum design capacity of 12,000 gallons.

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

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

D.3.1 Record Keeping and Reporting Requirements [326 IAC 8-9-6]

(a) Pursuant to 326 IAC 8-9-6(a) (Volatile Organic Liquid Storage Vessels: Record Keeping and Reporting Requirements), the Permittee shall keep all records for three (3) years unless specified otherwise for each vertical fixed roof cone storage tank (Tank 103, Tank 122, Tank 140, Tank 141, Tank 142, and Tank 150) and each horizontal distillate additive tank (AT-01 and AT-02).

(b) Pursuant to 326 IAC 8-9-6(b), the Permittee shall maintain these records for the life of the vessel and shall submit to IDEM, OAQ a report containing the following information for each vertical fixed roof cone storage tank (Tank 103, Tank 122, Tank 140, Tank 141, Tank 142, and Tank 150) and each horizontal distillate additive tank (AT-01 and AT-02):

(1) The vessel identification number.

(2) The vessel dimensions.

(3) The vessel capacity.

(c) Pursuant to 326 IAC 8-9-6(h), for each vertical fixed roof cone storage tank (Tank 103, Tank 122, Tank 140, Tank 141, Tank 142, and Tank 150), the Permittee shall maintain a record and notify the department within thirty (30) days when the maximum true vapor pressure of the liquid exceeds 0.75 psia.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

SECTION D.4 FACILITY OPERATION CONDITIONS

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

The total source, consisting of the following:

(1) Tank 106 has a maximum design capacity of 1,054,484 gallons;

(2) Tank 107 has a maximum design capacity of 1,031,884 gallons;

(3) Tank 108 has a maximum design capacity of 1,054,783 gallons;

(4) Tank 112 has a maximum design capacity of 2,075,798 gallons;

(5) Tank 120 has a maximum design capacity of 2,853,291 gallons;

(6) Tank 123 has a maximum design capacity of 2,818,841 gallons;

(7) Tank 130 has a maximum design capacity of 3,915,368 gallons;

(8) Tank 131 has a maximum design capacity of 3,915,368 gallons;

(9) Tank 132 has a maximum design capacity of 3,915,368 gallons;

(10) Tank 133 has a maximum design capacity of 3,915,368 gallons;

(11) Tank 134 has a maximum design capacity of 5,040,000 gallons;

(12) Tank 135 has a maximum design capacity of 5,040,000 gallons;

(13) Tank 151 has a maximum design capacity of 5,040,000 gallons.

(14) Tank 103 has a maximum design capacity of 836,368 gallons;

(15) Tank 122 has a maximum design capacity of 2,853,291 gallons;

(16) Tank 140 has a maximum design capacity of 3,382,609 gallons;

(17) Tank 141 has a maximum design capacity of 3,382,609 gallons;

(18) Tank 142 has a maximum design capacity of 3,382,609 gallons;

(19) Tank 150 has a maximum design capacity of 3,382,609 gallons.

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

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

D.4.1 General Record Keeping and Reports [326 IAC 8-7-8]

Pursuant to 326 IAC 8-7-8 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties: General Record Keeping and Reports), the Permittee shall comply with the following requirements:

(a) Records shall be kept for at least three (3) years.

(b) Records used to demonstrate that the source is exempt from the requirements of 326 IAC 8-7 shall be submitted to IDEM, OAQ or U.S. EPA within thirty (30) days of the receipt of a written request. If such records are not available, the source shall be considered to be subject to the emission limits contained in 326 IAC 8-7-3.

(c) The Permittee shall notify IDEM, OAQ at least thirty (30) days prior to the addition or modification of a facility which may result in a potential increase in VOC emissions.

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: PROPYLENE STORAGE AND LOADING FACILITY

(e) Two (2) 21,000 barrel storage pressure spheres. A portable vapor control unit (VCU), or equivalent, will be used to control point source VOC emissions.

(f) Twelve (12) stand propylene loading rack. A truck loading vapor control unit (VCU), or equivalent, will be used to control point source VOC emissions.

(g) Fugitive VOC emissions from propylene storage and loading operations.

(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.5.1 PSD Minor Limits [326 IAC 2-2]

(a) The VOC emissions from full ventdown events (for each sphere) shall not exceed 1.38 tons per twelve month period with compliance determined at the end of each month

(b) The VOC emissions from depressurization events (for each sphere) shall not exceed 2.39 tons per twelve month period with compliance determined at the end of each month.

(c) The VOC emissions from the propylene loading rack shall not exceed 16.22 tons per twelve month period with compliance determined at the end of each month.

(d) The VOC emissions from line purging shall not exceed 0.35 tons per twelve month period with compliance determined at the end of each month

(e) The VOC emissions from equipment leaks shall not exceed 2.80 tons per twelve month period with compliance determined at the end of each month. The equipment leaks shall be limited by conducting a Leak Detection and Repair (LDAR) Program as specified in Attachment C.

Compliance with these emission limits, along with the unrestricted potential emissions from propylene disconnect, will limit the potential to emit from this modification to less than forty (40) tons per year of VOC. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable to this modification approved under Source Modification No.: 089-30669-00320.

D.5.2 VOC BACT Limits [326 IAC 8-1-6]

(a) The Permittee shall use a vapor combustion unit (or equivalent) to control the VOC emissions from the propylene storage spheres

(b) The VOC emissions from full ventdown events (for each sphere) shall not exceed 1.38 tons per twelve month period with compliance determined at the end of each month.

(c) The VOC emissions from depressurization events (for each sphere) shall not exceed 2.39 tons per twelve month period with compliance determined at the end of each month.

(d) The VOC emissions from Tank Breathing losses (for each sphere) shall not exceed 1.0 tons per twelve month period with compliance determined at the end of each month.

D.5.3 Specific VOC Reduction Requirements for Lake/Porter/Clark/Floyd Counties [326 IAC 8-7-3]

Pursuant to 326 IAC 8-7-3, the Permittee shall achieve an overall VOC reduction from the propylene loading rack of at least ninety-eight percent (98%) by the documented reduction in use of VOC containing materials or install an add-on control system that achieves an overall control efficiency of ninety-eight percent (98%).

D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for the each sphere, the railcar loading rack, line purging, and equipment leaks and the vapor control units. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

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

D.5.5 Vapor Combustion Unit (VCU) Operation [326 IAC 2-7-6(1),(6)]

(a) The Vapor Combustion Units (VCUs) for VOC control shall be in operation at all times, when propylene is being loaded or unloaded from the spheres or railcars, and during all line purging events.

(b) Pursuant to 326 IAC 8-7-9(1-2), the control system for the propylene loading rack shall be operated and maintained according to the manufacturer's recommendations but may be modified based on the results of the initial or subsequent compliance test or upon the written request of IDEM, OAQ, and the operating and maintenance procedures shall be followed upon startup.

D.5.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate the compliance status with Conditions D.5.1(a) and D.5.2(a) and (b), the Permittee shall perform testing to verify the VOC emissions from vapor combustion unit (VCU) utilizing methods as approved by the Commissioner during full ventdown no later than the first full ventdown event.

(b) In order to demonstrate the compliance status with Conditions D.5.1(b) and (d) and D.5.2(a) and (c), the Permittee shall perform testing to verify the VOC emissions from vapor combustion unit (VCU) utilizing methods as approved by the Commissioner during depressurization periods no later than the second depressurization event.

(c) Within one hundred eighty (180) days of operation of the propylene loading rack, and in order to demonstrate the compliance status with Conditions D.5.1(c), the Permittee shall perform testing to verify the VOC emissions from vapor combustion unit (VCU) utilizing methods as approved by the Commissioner.

(d) Testing required by paragraphs (a), (b), and (c) of this condition shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration, alternating spheres for depressurization and ventdown events. Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

(e) Pursuant to 326 IAC 8-7-9(4) and in order to demonstrate compliance with Condition D.5.3, the Permittee shall test the control system for the propylene loading rack according to the following schedule and under the following situations:

(1) An initial compliance test shall be conducted within ninety (90) days of startup, of the propylene loading rack or upon written request by IDEM, OAQ, or the U.S. EPA, testing shall be repeated and every two (2) years after the date of the initial test.

(2) A compliance test shall also be conducted whenever the owner or operator chooses to operate a control system under conditions different from those that were in place at the time of the previous test.

(3) If the owner or operator chooses to change the method of compliance with 326 IAC 8-7-3, a compliance test shall be performed within three (3) months of the change.

Pursuant to 326 IAC 8-7-9(5), all compliance tests shall be conducted according to a protocol approved by the department at least thirty (30) days before the test. The protocol shall contain, at a minimum, the following information:

(A) Test procedures.

(B) Operating and control system parameters.

(C) Type of VOC containing process material being used.

(D) The process and control system parameters which will be monitored during the test.

D.5.7 Volatile Organic Compounds (VOC)

(a) In order to ensure compliance with the VOC emission limitations in Conditions D.5.1(a), D.5.1(b), D.5.2(a), and D.5.2(b), and , the Permittee shall use the following methodology to calculate VOC emissions from the Propylene Storage Spheres (Sphere 1 and Sphere 2)

E_S = (M_S x EV_S) x (1.0 - VCU DRE) / 2000 lb/ton

Where E_S = VOC Emissions, tons/month
M_S = Mass removed, lb/event
= 137,563 lb/ sphere full ventdown event
= 29,830 lb/ sphere pressure bleedoff event
EV_S = Number of Events, events/month
VCU DRE = VOC Destruction Efficiency, %, as determined during the most recent valid compliance demonstration

(b) In order to ensure compliance with the VOC emission limitations in Condition D.5.1(c), the Permittee shall use the following methodology to calculate VOC emissions from the Railcar Loading Rack

E_R = (M_R x EV_R) x (1.0 - VCU DRE) / 2000 lb/ton

Where E_R = VOC Emissions, tons/month
M_R = Mass removed, lb/event
EV_R = Number of Events, events/month
= 2,046 lb/ railcar bleedoff event
VCU DRE = VOC Destruction Efficiency, %, as determined during the most recent valid compliance demonstration

(c) In order to ensure compliance with the VOC emission limitations in Condition D.5.1(d), the Permittee shall use the following methodology to calculate VOC emissions from the Line Purging

E_P = (M_P x EV_P) x (1.0 - VCU DRE) / 2000 lb/ton

Where E_P = VOC Emissions, tons/month
M_P = Mass removed, lb/event
= 8,774 lb/ line purging event
EV_P = Number of Events, events/month
VCU DRE = VOC Destruction Efficiency, %, as determined during the most recent valid compliance demonstration

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

D.5.8 Vapor Combustion Unit Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) The Permittee shall install and maintain a monitor to detect the presence of a pilot flame. The presence of a pilot flame shall be monitored using a heat-sensing device at all times when the vapors are being vented to the VCU. The monitor shall be equipped with a computer system which will not allow for the propylene loading or unloading operations from the spheres or railcars, and line purging events when the presence of a flame is not detected during periods when propylene vapors are being vented to the VCU.

(b) Pursuant to 326 IAC 8-7-10(a)(1), the Permittee shall install and utilize a temperature monitoring device capable of continuously recording the temperature of the gas stream in the combustion zone of the incinerator shall be used for controlling VOC emissions from the propylene loading rack . The temperature monitoring device shall have an accuracy of one percent (1%) of the temperature being measured in degrees centigrade or plus or minus five-tenths degree Centigrade (+/- 0.5 °C), whichever is greater.

D.5.9 Monthly Visible Checks for Liquid Leaks

(a) Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling propylene shall be inspected during the loading and unloading of spheres and railcars and line purging events for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.

(b) If abnormal leakage is observed, the Permittee shall take reasonable response steps. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligations with regard to responding to the reasonable response steps required by this condition.

(c) All checks for visible liquid leaks made to comply with this condition shall be conducted in accordance with Section C - Compliance Monitoring.

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

D.5.10 Record Keeping Requirements

(a) To document the compliance status with Conditions D.5.1, D.5.2, and D.5.7, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.5.1 and D.5.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The mass of VOC removed during full sphere ventdown, sphere pressure bleedoff, railcar bleedoff, and line purging.

(2) The number of ventdown or flaring events (full sphere ventdown, sphere pressure bleedoff, railcar bleedoff, and line purging).

(3) The removal efficiency of each vapor control unit; and

(4) Records of Leak Detection and Repair activities, including

(1) the number of leaking component of each type,

(2) the duration of the leak, and

(3) the methods used for detection and repair.

(b) To document the compliance status with Condition D.5.9, the Permittee shall maintain records of monthly checks for liquid leaks of the Loading Rack and VCU stack exhausts.

(c) Pursuant to 326 IAC 8-7-9(3) and to document the compliance status with Condition D.5.5(b), the Permittee shall maintain a copy of the operating and maintenance procedures for the vapor control unit used to control VOC emissions from the propylene loading rack in a convenient location at the source property and as close to the control system as possible for the reference by plant personnel and IDEM, OAQ, inspectors.

(d) Pursuant to 326 IAC 8-7-10(b) and to document the compliance status with Condition D.5.8(b), the Permittee shall maintain the following records for the vapor control unit used to control VOC emissions from the propylene loading rack:

(1) A log of the operating time of the facility and the facility's capture system, control device, and monitoring equipment.

(2) A maintenance log for the capture system, the control device, and the monitoring equipment detailing all routine and nonroutine maintenance performed. The log shall include the dates and duration of any outages of the capture system, the control device, or the monitoring system.

(3) The following additional records shall be maintained for facilities using thermal incinerators:

(A) Continuous records of the temperature in the gas stream in the combustion zone of the incinerator.

(B) Records of all three (3) hour periods of operation for which the average combustion temperature of the gas stream in the combustion zone was more than fifty degrees Fahrenheit (50°F) below the combustion zone temperature which existed during the most recent compliance test that demonstrated that the facility was in compliance.

(4) Information requirements in subdivision (3)(B) shall be submitted to IDEM, OAQ, within thirty (30) days of occurrence. The following information shall accompany the submittal:

(A) The name and location of the facility.

(B) Identification of the control system where the excess emission occurred and the facility it served.

(C) The time, date, and duration of the exceedance.

(D) Corrective action taken.

(e) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

D.5.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.5.1 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days following the end of each quarter. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(34). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: EAST COLUMBUS DRIVE TERMINAL

(h) One (1) 813,624 gallon external floating roof gasoline storage tank, identified as T-201, with primary and secondary seals, constructed in 1939.

(i) One (1) 653,100 gallon external floating roof gasoline storage tank, identified as T-202, with primary and secondary seals, constructed in 1939.

(j) Two (2) 2,956,380 gallon gasoline storage tanks, identified as T-801 and T-802, both-with primary and secondary seals, constructed in 1939. Tank T-801 is an external floating roof tank. Tank T-802 is a domed internal floating roof tank, dome added in 2010.

(k) One (1) 2,759,316 gallon external floating roof gasoline storage tank, identified as T-803, with primary and secondary seals, constructed in 1939.

(l) One (1) 2,853,732 gallon external floating roof gasoline storage tank, identified as T-804, with primary and secondary seals, constructed in 1939.

(m) One (1) 3,055,542 gallon domed internal floating roof gasoline/transmix storage tank, identified as T-805, with primary and secondary seals, constructed in 1939, dome added in 2010.

(n) One (1) 2,843,274 gallon external floating roof gasoline storage tank, identified as T-806, with primary and secondary seals, constructed in 1939.

(o) One (1) 616,938 gallon internal floating roof gasoline storage tank, identified as T-204, with a primary seal, constructed in 1939.

(p) One (1) 630,000 gallon internal floating roof gasoline storage tank, identified as T-207, with a primary seal, constructed in 1946.

(q) One (1) 696,695 gallon internal floating roof gasoline/transmix (a gasoline/distillate oil mixture) storage tank, identified as T-209, with a primary seal, constructed in 1946.

(r) One (1) 739,830 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-208, constructed in 1946.

(s) One (1) 964,824 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-240, constructed in 1968.

(t) One (1) 8,633,646 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2101, constructed in 1955.

(u) One (1) 8,618,190 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2102, constructed in 1955.

(v) One (1) 10,847,382 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2601, originally constructed in 1960 and later modified in 2002.

(w) One (1) 10,835,328 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2602, originally constructed in 1960 and later modified in 2002.

(x) Two (2) 635,040 gallon vertical fixed roof distillate/kerosene storage tanks, identified as T-205 and T-206, constructed in 1939.

(y) One (1) 3,410,988 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-807, constructed in 1939.

(z) Two (2) 15,204 gallon horizontal fixed roof gasoline additive storage tanks, identified as T-1501 and T-1502, both constructed in 1940.

(aa) One (1) 1,465,002 gallon domed internal floating roof gasoline storage tank, identified as T-401, with a primary seal, constructed in 1952.

(bb) Two (2) 2,857,890 gallon domed internal floating roof gasoline storage tanks, identified as T-809 and T-810, each with a primary seal, both constructed in 1952.

(cc) One (1) 2,841,552 gallon domed internal floating roof gasoline/transmix storage tank, identified as T-808, with a primary and seal, constructed in 1952.

(dd) Gasoline tank cleaning operation, identified as TNKCLN GAS.

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

Pursuant to 326 IAC 8-4-3, Tank Nos. T-103, T-201, T-202, T-204, T-207, T-209, T-401, T-801, T-802, T-803, T-804, T-805, T-806, T-808, T-809 and T-810 are subject to the following:

(a) For External Fixed Roof Tanks

(1) The facility must be retrofitted with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall unless the source has been retrofitted with equally effective alternative control which has been approved.

(2) The facility is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials.

(3) All openings, except stub drains, are equipped with covers, lids, or seals such that:

(A) the cover, lid, or seal is in the closed position at all times except when in actual use;

(B) automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(C) rim vents, if provided are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

(b) For External Floating Roof Tanks

The owner of a facility subject to this subsection shall not store a petroleum liquid in that facility unless:

(1) The facility has been fitted with:

a continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or

a closure or other device approved by the commissioner which is equally effective.

(2) All seal closure devices meet the following requirements:

(A) there are no visible holes, tears, or other openings in the seal(s) or seal fabric;

(B) the seal(s) are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall;

(C) 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 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.

(3) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves are:

(A) equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and

(B) equipped with projections into the tank which remain below the liquid surface at all times.

(4) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(5) Rim vents are set to open when the roof is being floated off the roof leg supports or at the manufacturers recommended setting; and

(6) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least ninety percent (90%) of the area of the opening.

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-9-4]

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

(a) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, an internal floating roof meeting the following specifications:

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

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

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

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

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

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

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

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

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

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

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

(b) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, an external floating roof meeting the following specifications:

(i) Each external floating roof shall be equipped with a closure device between the wall of the vessel and the roof edge. The closure device shall consist of two (2) seals, one (1) above the other. The lower seal shall be referred to as the primary seal; the upper seal shall be referred to as the secondary seal.

(ii) Except as provided in 326 IAC 8-9-5(c)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and vessel wall and shall be either a liquid-mounted seal or a shoe seal.

(iii) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the vessel in a continuous fashion except as allowed in 326 IAC 8-9-5(c)(4).

(iv) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.

(v) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times, without visible gap, except when the device is in actual use.

(vi) Automatic bleeder vents shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(vii) Rim vents shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents shall be gasketed.

(viii) Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least ninety percent (90%) of the area of the opening.

(ix) The roof shall be floating on the liquid at all times, for example, off the roof leg supports, except when the vessel is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(c) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, a closed vent system and control device meeting the following specifications:

(i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, 40 CFR 60.485(b).

(ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (40 CFR 60.18) of the General Provisions.

(d) A system equivalent to those described in paragraphs a, b and c as provided in 326 IAC 8-9-4.

(e) The testing procedures are required under 326 IAC 8-9-5. The record keeping and reporting are required under 326 IAC 8-9-6.

(f) On or before May 1, 1996, the Permittee of each vessel with a capacity greater than or equal to thirty-nine thousand (39,000) gallons, that stores VOL with a maximum true vapor pressure greater than or equal to eleven and one-tenth (11.1) psia shall equip each vessel with a closed vent system meeting the standards of paragraph (c).

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

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

D.6.3 Testing and Procedures [326 IAC 8-9-5]

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

(a) Except as provided in section 326 IAC 8-9-4(a)(2), the Permittee of each vessel equipped with an internal floating roof shall meet the following requirements.

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

(2) For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the Permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator (IDEM) in the inspection report required in 326 IAC 8-9-6(c)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(3) For vessels equipped with both primary and secondary seals:

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

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

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

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

(b) Except as provided in 326 IAC 8-9-4(a)(3), the Permittee of each vessel equipped with an external floating roof shall meet the following requirements:

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

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

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

(C) If any source ceases to store VOL for a period of one (1) year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for purposes of this subdivision.

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

(A) Measure seal gaps, if any, at one (1) or more floating roof levels when the roof is floating off the roof leg supports.

(B) Measure seal gaps around the entire circumference of the vessel in each place where a one-eighth (c) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the vessel and measure the circumferential distance of each such location.

(C) The total surface area of each gap described in clause (B) shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

(3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each by the nominal diameter of the vessel and compare each ratio to the respective standards in subdivision (4).

(4) Make necessary repairs or empty the vessel within forty-five (45) days of identification of seals not meeting the requirements listed in clauses (A) and (B) as follows:

(A) The accumulated area of gaps between the vessel wall and the mechanical shoe or liquid-mounted primary seal shall not exceed ten (10) square inches per foot of vessel diameter, and the width of any portion of any gap shall not exceed one and five-tenths (1.5) inches. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(B) The secondary seal shall meet the following requirements:

(i) The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in subdivision (2)(C).

(ii) The accumulated area of gaps between the vessel wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed one (1) square inch per foot of vessel diameter, and the width of any portion of any gap shall not exceed five-tenths (0.5) inch. There shall be no gaps between the vessel wall and the secondary seal when used in combination with a vapor-mounted primary seal.

(iii) There shall be no holes, tears, or other openings in the seal or seal fabric.

(C) If a failure that is detected during inspections required in subdivision (1) cannot be repaired within forty-five (45) days and if the vessel cannot be emptied within forty-five (45) days, a thirty (30) day extension may be requested from the department in the inspection report required in 326 IAC 8-9-6(d)(3). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(5) Notify the department thirty (30) days in advance of any gap measurements required by subdivision (1) to afford the department the opportunity to have an observer present.

(6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. For all visual inspections, the following requirements apply:

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

(B) The Permittee shall notify the department in writing at least thirty (30) days prior to the filling or refilling of each vessel to afford the department the opportunity to inspect the vessel prior to the filling. If the inspection required by this subdivision is not planned and the Permittee could not have known about the inspection thirty (30) days in advance of refilling the vessel, the Permittee shall notify the department at least seven (7) days prior to the refilling of the vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the department at least seven (7) days prior to the refilling.

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

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

D.6.4 Record Keeping Requirements [326 IAC 8-9-6]

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

(a) Pursuant to Condition D.1.3 and 326 IAC 8-9-6, the Permittee of the internal floating roof gasoline storage tanks shall keep copies of all reports and records for at least three (3) years. The Permittee of the internal floating roof tanks shall meet the following requirements:

(1) Keep a record of each inspection performed as required by 326 IAC 8-9-5(b)(1) through 326 IAC 8-9-5(b)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

(2) If any of the conditions described in 326 IAC 8-9-5(b)(2) are detected during the annual visual inspection, a record shall be maintained and a report shall be furnished to the department within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

(3) After each inspection required by 326 IAC 8-9-5(b)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 326 IAC 8-9-5(b)(3)(B), a record shall be maintained and a report shall be furnished to the department within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 326 IAC 8-9-4(a)(1)(A), 326 IAC 8-9-4(a)(2)(A), or 326 IAC 8-9-5(b), and list each repair made.

(b) Pursuant to Condition D.1.3 and 326 IAC 8-9-6, the Permittee of the external floating roof gasoline storage tanks shall keep copies of all reports and records for at least three (3) years. The Permittee of the external floating roof tanks shall meet the following requirements:

(1) Keep a record of each gap measurement performed as required by 326 IAC 8-9-5(c). Each record shall identify the vessel in which the measurement was made and shall contain the date of measurement, the raw data obtained in the measurement and the calculations described in 326 IAC 8-9-5(c)(2) and (c)(3).

(2) Within sixty (60) days of performing the seal gap measurements required by 326 IAC 8-9-5(c)(1), furnish the department with a report that contains the date of measurement, the raw data obtained in the measurement, and the calculations described in 326 IAC 8-9-5(c)(2) and (c)(3).

(3) After each seal gap measurement that detects gaps exceeding the limitations specified in 326 IAC 8-9-5(c), submit a report to the department within thirty (30) days of the inspection. The report shall identify the vessel and contain the information specified in subdivision (2) and the date the vessel was emptied or the repairs made and date of repair.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

EAST COLUMBUS DRIVE TERMINAL

(ee) One (1) tank truck loading rack (identified as RACK) used to load gasoline, distillate, and ethanol, with a maximum loading capacity of 324,000 gallons of liquid per hour, constructed in 1940 and later reconstructed in 1979, controlled by one (1) natural gas fired Vapor Combustion Unit (VCU), rated at maximum heat input rate of 1.6 MMBtu/hr, installed in 1997, and exhausting through one (1) stack identified as VCU.

(ff) One (1) VOC fractionator for separating gasoline and fuel oil of transmix tanks, identified as FRACT, venting 125 cubic feet of VOC vapor per minute during intermittent pressure relief with venting gas being controlled by VCU, and equipped with a 7.0 million British thermal units per hour natural gas fired reboiler;

(gg) VOC emissions from the following operations:

(1) Fugitive VOC emissions from the loading rack, identified as FLRACK.
(2) Filter change out service for gasoline tanks, identified as FILT1.
(3) Meter proving service, identified as PROVE.

(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.7.1 Hazardous Air Pollutants [326 IAC 2-4.1] [326 IAC 8-4-4]

The VOC capture efficiency from the loading rack will be 97.3% and the VOC emissions from the loading rack shall be less than 35 mg per liter of gasoline loaded by the loading rack.

Compliance with the above limit combined with potential single and combined HAP emissions from other emission units shall limit the source wide HAP emissions to less than 10 tons per year for any single HAP and less than 25 tons per year for combined HAPs; therefore, the requirements of 326 IAC 2-4.1 are not applicable to the loading rack.

D.7.2 Volatile Organic Compounds (VOC) [326 IAC 8-4-4]

Pursuant to 326 IAC 8-4-4, the Permittee shall not permit the loading of gasoline into any transport unless:

(a) The gasoline loading equipment is equipped with a vapor control system in good working order, which will control VOC emissions to the atmosphere from the equipment being controlled to no more than 80 milligrams per liter of gasoline loaded.

(b) Displaced vapors and gases are vented only to the vapor control system.

(c) A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

(d) All loading and vapor lines are equipped with fittings which make vapor-tight connections and which will be closed upon disconnection.

If employees of the owner of the source are not present during loading, it shall be the responsibility of the owner of the transport to make certain the vapor control system is attached to the transport. The owner of the source shall take all reasonable steps to insure that owners of transports loading at the terminal during unsupervised times comply with this rule.

D.7.3 Volatile Organic Compounds (VOC) [326 IAC 8-4-9]

Pursuant to 326 IAC 8-4-9, the Permittee shall:

(a) The Permittee, which owns and operates a vapor control system subject to this rule shall:

(1) Design and operate the applicable system and the gasoline loading equipment in a manner that prevents:

(A) gauge pressure from exceeding four thousand five hundred (4,500) pascals and a vacuum from exceeding one thousand five hundred (1,500) pascals in the gasoline tank truck;

(B) a reading equal to or greater than one hundred percent (100%) of the lower explosive limit (LEL, measured as propane) at two and five-tenths (2.5) centimeters from all points on the perimeter of a potential leak source when measured by the method referenced in Appendix B of Control of Organic Compound leaks from Gasoline Tank Trucks and Vapor Collection Systems, EPA 450/2-78-051, or an equivalent procedure approved by IDEM during loading or unloading operations; and

(C) avoidable visible liquid leaks during loading or unloading operations.

(2) Repair and retest a vapor collection or control system that exceeds the limits in (a)(1) within fifteen (15) days.

(b) The permittee shall maintain records of all certification testing of the vapor balance or vapor control system which identify:

(1) the vapor balance, vapor collection or vapor control system,

(2) the date of the test and, if applicable, retest,

(3) the results of the test and, if applicable, retest.

The records shall be maintained in a legible, readily available condition for at least two (2) years after the date of the testing and, if applicable, retesting were completed.

(c) If IDEM, OAQ allows alternative test procedures, then such method shall be submitted to the U.S. EPA as a SIP revision.

(d) During compliance tests conducted under 326 IAC 3-6 (stack testing):

(1) each vapor balance or control system shall be tested applying the standards described in (a);

(2) testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there area any leaks from the hatches and the flanges of the gasoline transports;

(3) if any leak is detected, the transport cannot be used for the capacity of the compliance test of the bulk gas terminal.

The threshold for leaks shall be as follows:

(A) Ten thousand (10,000) parts per million methane for all bulk gas terminals.

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

D.7.4 VOC and HAPs [326 IAC 2-7-6(1),(6)]

The Vapor Combustion Unit (VCU) for VOC and HAPs control shall be in operation at all times, when the loading rack (RACK) is transferring gasoline or when the fractionator (FRACT) is venting vapor.

D.7.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.7.1 and D.7.2, the Permittee shall perform VOC testing at the vapor combustion unit (VCU) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

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

D.7.6 Vapor Combustion Unit Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]

The Permittee shall install and maintain a monitor to detect the presence of a pilot flame. The presence of a pilot flame shall be monitored using a heat-sensing device at all times when the vapors are being vented to the VCU. The monitor shall be equipped with a computer system which will not allow for the operation of the loading rack and the fractionator (FRACT) when the presence of a flame is not detected during periods when gasoline vapors are being vented to the VCU.

D.7.7 Monthly Visible Checks for Liquid Leaks [40 CFR 64]

(a) Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.

(b) If abnormal leakage is observed, the Permittee shall take reasonable response steps. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligations with regard to responding to the reasonable response steps required by this condition.

(c) All checks for visible liquid leaks made to comply with this condition shall be conducted in accordance with 326 IAC 8-4-9.

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

D.7.8 Record Keeping Requirements

(a) To document compliance with Condition D.2.3, the Permittee shall maintain records of all the required parameters listed in Condition D.2.3.

(b) To document compliance with Condition D.2.7, the Permittee shall maintain records of monthly checks for liquid leaks of the Loading Rack and VCU stack exhaust.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

SECTION E.1 FACILITY OPERATION CONDITIONS

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

INDIANAPOLIS BOULEVARD TERMINAL

(a) Two (2) internal floating roof above ground storage tanks (Tank 134 and Tank 135) used to store petroleum products, constructed July 17, 1998. Each tank is equipped with a primary and secondary seal. Each tank has a maximum design capacity of 5,040,000 gallons.

(b) One (1) existing fixed roof tank, constructed in 1941 and modified July 17, 1998, into a new internal floating roof above ground storage tank (Tank 151) used to store petroleum products. The tank is equipped with a primary and secondary seal, and has a maximum design capacity of 5,040,000 gallons.

PROPYLENE STORAGE AND LOADING FACILITY

(a) Two (2) 21,000 barrel storage pressure spheres, using a portable vapor control unit (VCU), or equivalent, to control point source VOC emissions.

(The information describing the process contained in this facility 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 [326 IAC 12-1] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for tanks 134, 135, 151, and the propylene storage spheres, except as otherwise specified in 40 CFR Part 60, Subpart Kb.

E.1.2 Standards of performance for volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced July 23, 1984 Requirements [40 CFR Part 60, Subpart Kb] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Kb, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart Kb which are incorporated by reference as 326 IAC 12), which are included as Attachment A, for tanks 134, 135, 151, and the propylene storage spheres, as specified as follows.

- 40 CFR 60.110b;
- 40 CFR 60.111b;
- 40 CFR 60.112b;
- 40 CFR 60.113b;
- 40 CFR 60.114b;
- 40 CFR 60.115b;
- 40 CFR 60.116b;
- 40 CFR 60.117b.

SECTION E.2NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

Emissions Unit Description:

INDIANAPOLIS BOULEVARD TERMINAL

(a) Ten (10) vertical domed internal floating roof storage tanks used to store petroleum products, constructed between 1935 and 1957, each tank is equipped with a primary and secondary seal:

(1) Tank 106 has a maximum design capacity of 1,054,484 gallons;

(2) Tank 107 has a maximum design capacity of 1,031,884 gallons;

(3) Tank 108 has a maximum design capacity of 1,054,783 gallons;

(4) Tank 112 has a maximum design capacity of 2,075,798 gallons;

(5) Tank 120 has a maximum design capacity of 2,853,291 gallons;

(6) Tank 123 has a maximum design capacity of 2,818,841 gallons;

(7) Tank 130 has a maximum design capacity of 3,915,368 gallons;

(8) Tank 131 has a maximum design capacity of 3,915,368 gallons;

(9) Tank 132 has a maximum design capacity of 3,915,368 gallons;

(10) Tank 133 has a maximum design capacity of 3,915,368 gallons.

(b) Two (2) internal floating roof above ground storage tanks (Tank 134 and Tank 135) used to store petroleum products constructed July 17, 1998. Each tank is equipped with a primary and secondary seal. Each tank has a maximum design capacity of 5,040,000 gallons.

(c) One (1) existing fixed roof tank, constructed in 1941 and modified July 17, 1998, into a new internal floating roof above ground storage tank (Tank 151) used to store petroleum products. The tank is equipped with a primary and secondary seal, and has a maximum design capacity of 5,040,000 gallons.

(d) One (1) vertical fixed roof cone storage tank (Tank 150), constructed in 1941, used to store petroleum distillates with a maximum true vapor pressure of 0.019 psia at 68°F. The tank has a maximum design capacity of 3,382,609 gallons.

EAST COLUMBUS DRIVE TERMINAL

(h) One (1) 813,624 gallon external floating roof gasoline storage tank, identified as T-201, with primary and secondary seals, constructed in 1939.

(i) One (1) 653,100 gallon external floating roof gasoline storage tank, identified as T-202, with primary and secondary seals, constructed in 1939.

(j) Two (2) 2,956,380 gallon gasoline storage tanks, identified as T-801 and T-802, both-with primary and secondary seals, constructed in 1939. Tank T-801 is an external floating roof tank. Tank T-802 is a domed internal floating roof tank, dome added in 2010.

(k) One (1) 2,759,316 gallon external floating roof gasoline storage tank, identified as T-803, with

primary and secondary seals, constructed in 1939.

(l) One (1) 2,853,732 gallon external floating roof gasoline storage tank, identified as T-804, with primary and secondary seals, constructed in 1939.

(m) One (1) 3,055,542 gallon domed internal floating roof gasoline/transmix storage tank, identified as T-805, with primary and secondary seals, constructed in 1939, dome added in 2010.

(n) One (1) 2,843,274 gallon external floating roof gasoline storage tank, identified as T-806, with primary and secondary seals, constructed in 1939.

(o) One (1) 616,938 gallon internal floating roof gasoline storage tank, identified as T-204, with a primary seal, constructed in 1939.

(p) One (1) 630,000 gallon internal floating roof gasoline storage tank, identified as T-207, with a primary seal, constructed in 1946.

(q) One (1) 696,695 gallon internal floating roof gasoline/transmix (a gasoline/distillate oil mixture) storage tank, identified as T-209, with a primary seal, constructed in 1946.

(r) One (1) 739,830 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-208, constructed in 1946.

(s) One (1) 964,824 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-240, constructed in 1968.

(t) One (1) 8,633,646 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2101, constructed in 1955.

(u) One (1) 8,618,190 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2102, constructed in 1955.

(v) One (1) 10,847,382 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2601, originally constructed in 1960 and later modified in 2002.

(w) One (1) 10,835,328 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2602, originally constructed in 1960 and later modified in 2002.

(x) Two (2) 635,040 gallon vertical fixed roof distillate/kerosene storage tanks, identified as T-205 and T-206, constructed in 1939.

(y) One (1) 3,410,988 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-807, constructed in 1939.

(z) Two (2) 15,204 gallon horizontal fixed roof gasoline additive storage tanks, identified as T-1501 and T-1502, both constructed in 1940.

(aa) One (1) 1,465,002 gallon domed internal floating roof gasoline storage tank, identified as T-401, with a primary seal, constructed in 1952.

(bb) Two (2) 2,857,890 gallon domed internal floating roof gasoline storage tanks, identified as T-809 and T-810, each with a primary seal, both constructed in 1952.

(cc) One (1) 2,841,552 gallon domed internal floating roof gasoline/transmix storage tank, identified as T-808, with a primary and seal, constructed in 1952.

(dd) Gasoline tank cleaning operation, identified as TNKCLN GAS.

(ee) One (1) tank truck loading rack (identified as RACK) used to load gasoline, distillate, and ethanol, with a maximum loading capacity of 324,000 gallons of liquid per hour, constructed in 1940 and later reconstructed in 1979, controlled by one (1) natural gas fired Vapor Combustion Unit (VCU), rated at maximum heat input rate of 1.6 MMBtu/hr, installed in 1997, and exhausting through one (1) stack identified as VCU.

(ff) One (1) VOC fractionator for separating gasoline and fuel oil of transmix tanks, identified as FRACT, venting 125 cubic feet of VOC vapor per minute during intermittent pressure relief with venting gas being controlled by VCU, and equipped with a 7.0 million British thermal units per hour natural gas fired reboiler;

(gg) VOC emissions from the following operations:

(1) Fugitive VOC emissions from the loading rack, identified as FLRACK.

(2) Filter change out service for gasoline tanks, identified as FILT1.

(3) Meter proving service, identified as PROVE.

(hh) A wastewater handling and treatment system, capable of treating 420,000 gallons of contaminated water per hour, including the following activities:

(1) Five (5) sumps for wastewater from tank water draw and roof drains;

(2) One (1) sump for wastewater from loading rack;

(3) One (1) 379,638 gallon internal floating roof waste water/gasoline storage tank, identified as T-103, constructed in 1939;

(4) One (1) dissolved air floatation oil/water separator, identified as TS DAF, with a maximum capacity of 12,000 gallons per hour;

(5) One (1) oil/water separator, identified as TS OWS/Separator No. 1, with a maximum capacity of 11,000 gallons per hour; and

(6) One (1) air stripper capable of processing a maximum of 23,000 gallons of water per hour.

Insignificant Activities: EAST COLUMBUS DRIVE TERMINAL

(a) Five (5) vertical fixed roof cone storage tanks used to store petroleum distillates with a maximum true vapor pressure of 0.019 psia at 68°F, constructed in 1941 [326 IAC 8-9]:

(1) Tank 103 has a maximum design capacity of 836,368 gallons;

(2) Tank 122 has a maximum design capacity of 2,853,291 gallons;

(3) Tank 140 has a maximum design capacity of 3,382,609 gallons;

(4) Tank 141 has a maximum design capacity of 3,382,609 gallons;

(5) Tank 142 has a maximum design capacity of 3,382,609 gallons.

(b) Two (2) horizontal distillate additive tanks, constructed in 2005:

(1) Tank AT-01 has a maximum design capacity of 12,000 gallons;

(2) Tank AT-02 has a maximum design capacity of 12,000 gallons.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.11098, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the emission units at this facility as specified in Table 3 to 40 CFR 63, Subpart BBBBBB in accordance with schedule in 40 CFR 63.11083.

E.2.2 National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities [40 CFR Part 63, Subpart BBBBBB]

Pursuant to 40 CFR 63.11083, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart BBBBBB (National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities), which are included as Attachment B, for the emission units at this facility:

- 40 CFR 63.11080
- 40 CFR 63.11081
- 40 CFR 63.11082
- 40 CFR 63.11083
- 40 CFR 63.11086
- 40 CFR 63.11087
- 40 CFR 63.11088
- 40 CFR 63.11089
- 40 CFR 63.11092
- 40 CFR 63.11093
- 40 CFR 63.11094
- 40 CFR 63.11095
- 40 CFR 63.11098
- 40 CFR 63.11099
- 40 CFR 63.11100
- Table 1 to Subpart BBBBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Storage Tanks
- Table 2 to Subpart BBBBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Loading Racks
- Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions

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

Source Name: Buckeye Terminals, LLC
Source Address: 3823 Indianapolis Boulevard, East Chicago, Indiana 46312
Part 70 Permit No.: T089-26500-00320

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 AND ENFORCEMENT 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: Buckeye Terminals, LLC
Source Address: 3823 Indianapolis Boulevard, East Chicago, Indiana 46312
Part 70 Permit No.: T089-26500-00320

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), no later than four (**4**) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance and Enforcement Branch); and
- The Permittee must submit notice in writing or by facsimile no later than 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 Describe: 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: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Buckeye Terminals, LLC
Source Address: 3823 Indianapolis Boulevard, East Chicago, Indiana 46312
Part 70 Permit No.: T089-26500-00320
Facility: Tank 134, Tank 135, and Tank 151
Parameter: VOC Usage
Limit: Less than the combined total of 677,663,000 gallons petroleum products per 12 consecutive month period

QUARTER: _____ YEAR: _____

Month	VOC Usage for This Month (gallons)	VOC Usage for Previous 11 Months (gallons)	VOC Usage for 12-Month Period (gallons)

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Buckeye Terminals, LLC
Source Address: 3823 Indianapolis Boulevard, East Chicago, Indiana 46312
Part 70 Permit No.: T089-26500-00320
Facility: Sphere 1
Parameter: VOC Emissions
Limit: Full Ventdown: 1.38 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Depressurization: 2.39 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

$E_S = (M_S \times EV_S) \times (1.0 - \text{VCU DRE}) / 2000$ lb/ton

Where E_S = VOC Emissions, tons/month
M_S = Mass removed, lb/event
= 137,563 lb/ sphere full ventdown event
= 29,830 lb/ sphere pressure bleedoff event
EV_S = Number of Events, events/month
VCU DRE = VOC Removal Efficiency, %, as determined during the most recent valid compliance demonstration

QUARTER: _____ YEAR: _____

Month	VOC Emissions for This Month (tons)		VOC Emissions for Previous 11 Months (tons)		VOC Emissions for 12-Month Period (tons)	
	full ventdown	depress-urization	full ventdown	depress-urization	full ventdown	depress-urization

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Buckeye Terminals, LLC
Source Address: 3823 Indianapolis Boulevard, East Chicago, Indiana 46312
Part 70 Permit No.: T089-26500-00320
Facility: Sphere 2
Parameter: VOC Emissions
Limit: Full Ventdown: 1.38 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Depressurization: 2.39 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

$E_S = (M_S \times EV_S) \times (1.0 - \text{VCU DRE}) / 2000$ lb/ton

Where E_S = VOC Emissions, tons/month
M_S = Mass removed, lb/event
= 137,563 lb/ sphere full ventdown event
= 29,830 lb/ sphere pressure bleedoff event
EV_S = Number of Events, events/month
VCU DRE = VOC Removal Efficiency, %, as determined during the most recent valid compliance demonstration

QUARTER: _____ YEAR: _____

Month	VOC Emissions for This Month (tons)		VOC Emissions for Previous 11 Months (tons)		VOC Emissions for 12-Month Period (tons)	
	full ventdown	depress-urization	full ventdown	depress-urization	full ventdown	depress-urization

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Buckeye Terminals, LLC
Source Address: 3823 Indianapolis Boulevard, East Chicago, Indiana 46312
Part 70 Permit No.: T089-26500-00320
Facility: Propylene Loading Rack
Parameter: VOC Emissions
Limit: 16.22 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

$E_R = (M_R \times EV_R) \times (1.0 - \text{VCU DRE}) / 2000$ lb/ton

Where E_R = VOC Emissions, tons/month
M_R = Mass removed, lb/event
= 2,046 lb/ railcar bleedoff event
EV_R = Number of Events, events/month
VCU DRE = VOC Removal Efficiency, %, as determined during the most recent valid compliance demonstration

QUARTER: _____ YEAR: _____

Month	VOC Emissions for This Month (tons)	VOC Emissions for Previous 11 Months (tons)	VOC Emissions for 12-Month Period (tons)

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Buckeye Terminals, LLC
Source Address: 3823 Indianapolis Boulevard, East Chicago, Indiana 46312
Part 70 Permit No.: T089-26500-00320
Facility: Line Purging
Parameter: VOC Emissions
Limit: 0.35 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

$E_P = (M_P \times EV_P) \times (1.0 - VCU\ DRE) / 2000$ lb/ton

Where E_P = VOC Emissions, tons/month
M_P = Mass removed, lb/event
= 8,774 lb/ line purging event
EV_P = Number of Events, events/month
VCU DRE = VOC Removal Efficiency, %, as determined during the most recent valid compliance demonstration

QUARTER: _____ YEAR: _____

Month	VOC Emissions for This Month (tons)	VOC Emissions for Previous 11 Months (tons)	VOC Emissions for 12-Month Period (tons)

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY

COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 OPERATING PERMIT

QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Buckeye Terminals, LLC
Source Address: 3823 Indianapolis Boulevard, East Chicago, Indiana 46312
Part 70 Permit No.: T089-26500-00320

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

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, 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".	
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
☐ 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: _____

Attachment A

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 Part 60, Subpart Kb]

Source Description and Location

Source Name:	Buckeye Terminals, LLC
Source Location:	3823 Indianapolis Boulevard, East Chicago, Indiana 46312
County:	Lake
SIC Code:	5171
Part 70 Operating Permit Renewal No.:	T089-26500-00320
Permit Renewal Issuance Date:	January 22, 2009
Significant Permit Modification No.:	089-30673-00320
Permit Reviewer:	Kimberly Cottrell

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

Source: 52 FR 11429, Apr. 8, 1987, unless otherwise noted.

§ 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.

(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 m^3 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 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 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 m^3 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 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.

(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 Cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.

(A) One end of the mechanical shoe 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 cm^2 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.

(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 §61.112b(a)(1) or §60.113b(a)(3) and list each repair made.

(b) After installing control equipment in accordance with §61.112b(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 m^3 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 m^3 but less than 151 m^3 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 m^3 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 m^3 but less than 151 m^3 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 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).

[52 FR 11429, Apr. 8, 1987, as amended at 52 FR 22780, June 16, 1987]

Attachment B

National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities [40 CFR Part 63, Subpart BBBBBB]

Source Description and Location

Source Name:	Buckeye Terminals, LLC
Source Location:	3823 Indianapolis Boulevard, East Chicago, Indiana 46312
County:	Lake
SIC Code:	5171
Part 70 Operating Permit Renewal No.:	T089-26500-00320
Permit Renewal Issuance Date:	January 22, 2009
Significant Permit Modification No.:	089-30673-00320
Permit Reviewer:	Kimberly Cottrell

Subpart BBBBBB—National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities

Source: 73 FR 1933, Jan. 10, 2008, unless otherwise noted.

What This Subpart Covers

§ 63.11080 What is the purpose of this subpart?

This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from area source gasoline distribution bulk terminals, bulk plants, and pipeline facilities. This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

§ 63.11081 Am I subject to the requirements in this subpart?

(a) The affected source to which this subpart applies is each area source bulk gasoline terminal, pipeline breakout station, pipeline pumping station, and bulk gasoline plant identified in paragraphs (a)(1) through (4) of this section. You are subject to the requirements in this subpart if you own or operate one or more of the affected area sources identified in paragraphs (a)(1) through (4) of this section.

(1) A bulk gasoline terminal that is not subject to the control requirements of 40 CFR part 63, subpart R (§§63.422, 63.423, and 63.424) or 40 CFR part 63, subpart CC (§§63.646, 63.648, 63.649, and 63.650).

(2) A pipeline breakout station that is not subject to the control requirements of 40 CFR part 63, subpart R (§§63.423 and 63.424).

(3) A pipeline pumping station.

(4) A bulk gasoline plant.

(b) If you are an owner or operator of affected sources, as defined in (a)(1) through (4) of this section, you are not required to meet the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71 as a result of being subject to this subpart. However, you are still subject to the requirement to apply for and obtain a permit under 40 CFR part 70 or 40 CFR part 71 if you meet one or more of the applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR part 71.3(a) and (b).

§ 63.11082 What parts of my affected source does this subpart cover?

(a) The emission sources to which this subpart applies are gasoline storage tanks, gasoline loading racks, vapor collection-equipped gasoline cargo tanks, and equipment components in vapor or liquid gasoline service that meet the criteria specified in Tables 1 through 3 to this subpart.

(b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in §63.11081 at the time you commenced operation.

(c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in §63.2.

(d) An affected source is an existing affected source if it is not new or reconstructed.

§ 63.11083 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section.

(1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008.

(2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011.

(c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the average daily throughput, as specified in option 1 of Table 2 to this subpart, you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart.

Emission Limitations and Management Practices

§ 63.11086 What requirements must I meet if my facility is a bulk gasoline plant?

Each owner or operator of an affected bulk gasoline plant, as defined in §63.11100, must comply with the requirements of paragraphs (a) through (i) of this section.

(a) Except as specified in paragraph (b), you must only load gasoline into storage tanks and cargo tanks at your facility by utilizing submerged filling, as defined in §63.11100, and, as specified in paragraph (a)(1) or paragraph (a)(2) of this section.

(1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank.

(2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank.

(b) The emission sources listed in paragraphs (b)(1) through (2) of this section are not required to comply with the control requirements in paragraph (a) of this section, but must comply only with the requirements in paragraph (d) of this section.

(1) Gasoline storage tanks with a capacity of less than 250 gallons.

(2) Gasoline storage tanks that are subject to subpart CCCCCC of this part.

(c) You must perform a monthly leak inspection of all equipment in gasoline service according to the requirements specified in §63.11089(a) through (d).

(d) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

(1) Minimize gasoline spills;

(2) Clean up spills as expeditiously as practicable;

(3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

(4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

(e) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008 unless you meet the requirements in paragraph (g) of this section. The Initial Notification must contain the information specified in paragraphs (e)(1) through (4) of this section. The notification must be submitted to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13.

(1) The name and address of the owner and the operator.

(2) The address (i.e., physical location) of the bulk plant.

(3) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a), (b), (c), and (d) of this section that apply to you.

(4) A brief description of the bulk plant, including the number of storage tanks in gasoline service, the capacity of each storage tank in gasoline service, and the average monthly gasoline throughput at the affected source.

(f) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, by the compliance date specified in §63.11083 unless you meet the requirements in paragraph (g) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy and must indicate whether the source has complied with the requirements of this subpart. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (e) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (e) of this section.

(g) If, prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in §63.11086(a), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (e) or paragraph (f) of this section.

(h) You must comply with the requirements of this subpart by the applicable dates specified in §63.11083.

(i) You must keep applicable records and submit reports as specified in §63.11094(d) and (e) and §63.11095(c).

§ 63.11087 What requirements must I meet for gasoline storage tanks if my facility is a bulk gasoline terminal, pipeline breakout station, or pipeline pumping station?

(a) You must meet each emission limit and management practice in Table 1 to this subpart that applies to your gasoline storage tank.

(b) You must comply with the requirements of this subpart by the applicable dates specified in §63.11083, except that storage vessels equipped with floating roofs and not meeting the requirements of paragraph (a) of this section must be in compliance at the first degassing and cleaning activity after January 10, 2011 or by January 10, 2018, whichever is first.

(c) You must comply with the applicable testing and monitoring requirements specified in §63.11092(e).

(d) You must submit the applicable notifications as required under §63.11093.

(e) You must keep records and submit reports as specified in §§63.11094 and 63.11095.

(f) If your gasoline storage tank is subject to, and complies with, the control requirements of 40 CFR part 60, subpart Kb of this chapter, your storage tank will be deemed in compliance with this section. You must report this determination in the Notification of Compliance Status report under §63.11093(b).

§ 63.11088 What requirements must I meet for gasoline loading racks if my facility is a bulk gasoline terminal, pipeline breakout station, or pipeline pumping station?

(a) You must meet each emission limit and management practice in Table 2 to this subpart that applies to you.

(b) As an alternative for railcar cargo tanks to the requirements specified in Table 2 to this subpart, you may comply with the requirements specified in §63.422(e).

(c) You must comply with the requirements of this subpart by the applicable dates specified in §63.11083.

(d) You must comply with the applicable testing and monitoring requirements specified in §63.11092.

(e) You must submit the applicable notifications as required under §63.11093.

(f) You must keep records and submit reports as specified in §§63.11094 and 63.11095.

§ 63.11089 What requirements must I meet for equipment leak inspections if my facility is a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station?

(a) Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable.

(b) A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.

(c) Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak, except as provided in paragraph (d) of this section.

(d) Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report specified in §63.11095(b), the reason(s) why the repair was not feasible and the date each repair was completed.

(e) You must comply with the requirements of this subpart by the applicable dates specified in §63.11083.

(f) You must submit the applicable notifications as required under §63.11093.

(g) You must keep records and submit reports as specified in §§63.11094 and 63.11095.

Testing and Monitoring Requirements

§ 63.11092 What testing and monitoring requirements must I meet?

(a) Each owner or operator subject to the emission standard in §63.11088 for gasoline loading racks must comply with the requirements in paragraphs (a) through (d) of this section.

(1) Conduct a performance test on the vapor processing and collection systems according to either paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section.

(i) Use the test methods and procedures in §60.503 of this chapter, except a reading of 500 parts per million shall be used to determine the level of leaks to be repaired under §60.503(b) of this chapter.

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).

(2) If you are operating your gasoline loading rack in compliance with an enforceable State, local, or tribal rule or permit that requires your loading rack to meet an emission limit of 80 milligrams (mg), or less, per liter of gasoline loaded (mg/l), you may submit a statement by a responsible official of your facility certifying the compliance status of your loading rack in lieu of the test required under paragraph (a)(1) of this section.

(3) If you have conducted performance testing on the vapor processing and collection systems within 5 years prior to January 10, 2008, and the test is for the affected facility and is representative of current or anticipated operating processes and conditions, you may submit the results of such testing in lieu of the test required under paragraph (a)(1) of this section, provided the testing was conducted using the test methods and procedures in §60.503 of this chapter. Should the Administrator deem the prior test data unacceptable, the facility is still required to meet the requirement to conduct an initial performance test within 180 days of the compliance date specified in §63.11083; thus, previous test reports should be submitted as soon as possible after January 10, 2008.

(4) The performance test requirements of §63.11092(a) do not apply to flares defined in §63.11100 and meeting the flare requirements in §63.11(b). The owner or operator shall demonstrate that the flare and associated vapor collection system is in compliance with the requirements in §63.11(b) and 40 CFR 60.503(a), (b), and (d).

(b) For each performance test conducted under paragraph (a)(1) of this section, the owner or operator shall determine a monitored operating parameter value for the vapor processing system using the procedures specified in paragraphs (b)(1) through (5) of this section.

(1) Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall install, calibrate, certify, operate, and maintain, according to the manufacturer's specifications, a continuous monitoring system (CMS) while gasoline vapors are displaced to the vapor processor systems specified in paragraphs (b)(1)(i) through (iv) of this section. During the performance test, continuously record the operating parameter as specified under paragraphs (b)(1)(i) through (iv) of this section.

(i) Where a carbon adsorption system is used, the owner or operator shall monitor the operation of the system as specified in paragraphs (b)(1)(i)(A) or (B) of this section.

(A) A continuous emissions monitoring system (CEMS) capable of measuring organic compound concentration shall be installed in the exhaust air stream.

(B) As an alternative to paragraph (b)(1)(i)(A) of this section, you may choose to meet the requirements listed in paragraph (b)(1)(i)(B)(*1*) and (*2*) of this section.

(*1*) Carbon adsorption devices shall be monitored as specified in paragraphs (b)(1)(i)(B)(*1*)(*i*),(*ii*), and (*iii*) of this section.

(*i*) Vacuum level shall be monitored using a pressure transmitter installed in the vacuum pump suction line, with the measurements displayed on a gauge that can be visually observed. Each carbon bed shall be observed during one complete regeneration cycle on each day of operation of the loading rack to determine the maximum vacuum level achieved.

(*ii*) Conduct annual testing of the carbon activity for the carbon in each carbon bed. Carbon activity shall be tested in accordance with the butane working capacity test of the American Society for Testing and Materials (ASTM) Method D 5228–92 (incorporated by reference, see §63.14), or by another suitable procedure as recommended by the manufacturer.

(*iii*) Conduct monthly measurements of the carbon bed outlet volatile organic compounds (VOC) concentration over the last 5 minutes of an adsorption cycle for each carbon bed, documenting the highest measured VOC concentration. Measurements shall be made using a portable analyzer, in accordance with 40 CFR part 60, Appendix A–7, EPA Method 21 for open-ended lines.

(*2*) Develop and submit to the Administrator a monitoring and inspection plan that describes the owner or operator's approach for meeting the requirements in paragraphs (b)(1)(i)(B)(*2*)(*i*) through (*v*) of this section.

(*i*) The lowest maximum required vacuum level and duration needed to assure regeneration of the carbon beds shall be determined by an engineering analysis or from the manufacturer's recommendation and shall be documented in the monitoring and inspection plan.

(*ii*) The owner or operator shall verify, during each day of operation of the loading rack, the proper valve sequencing, cycle time, gasoline flow, purge air flow, and operating temperatures. Verification shall be through visual observation or through an automated alarm or shutdown system that monitors and records system operation.

(*iii*) The owner or operator shall perform semi-annual preventive maintenance inspections of the carbon adsorption system according to the recommendations of the manufacturer of the system.

(*iv*) The monitoring plan developed under paragraph (*2*) of this section shall specify conditions that would be considered malfunctions of the carbon adsorption system during the inspections or automated monitoring performed under paragraphs (b)(1)(i)(B)(*2*)(*i*) through (*iii*) of this section, describe specific corrective actions that will be taken to correct any malfunction, and define what the owner or operator would consider to be a timely repair for each potential malfunction.

(*v*) The owner or operator shall document the maximum vacuum level observed on each carbon bed from each daily inspection and the maximum VOC concentration observed from each carbon bed on each monthly inspection as well as any system malfunction, as defined in the monitoring and inspection plan, and any activation of the automated alarm or shutdown system with a written entry into a log book or other permanent form of record. Such record shall also include a description of the corrective action taken and whether such corrective actions were taken in a timely manner, as defined in the monitoring and inspection plan, as well as an estimate of the amount of gasoline loaded during the period of the malfunction.

(ii) Where a refrigeration condenser system is used, a continuous parameter monitoring system (CPMS) capable of measuring temperature shall be installed immediately downstream from the outlet to the condenser section. Alternatively, a CEMS capable of measuring organic compound concentration may be installed in the exhaust air stream.

(iii) Where a thermal oxidation system other than a flare is used, the owner or operator shall monitor the operation of the system as specified in paragraphs (b)(1)(iii)(A) or (B) of this section.

(A) A CPMS capable of measuring temperature shall be installed in the firebox or in the ductwork immediately downstream from the firebox in a position before any substantial heat exchange occurs.

(B) As an alternative to paragraph (b)(1)(iii)(A) of this section, you may choose to meet the requirements listed in paragraphs (b)(1)(iii)(B)(*1*) and (*2*) of this section.

(*1*) The presence of a thermal oxidation system pilot flame shall be monitored using a heat-sensing device, such as an ultraviolet beam sensor or a thermocouple, installed in proximity to the pilot light to indicate the presence of a flame.

(*2*) Develop and submit to the Administrator a monitoring and inspection plan that describes the owner or operator's approach for meeting the requirements in paragraphs (b)(1)(iii)(B)(*2*)(*i*) through (*v*) of this section.

(*i*) The thermal oxidation system shall be equipped to automatically prevent gasoline loading operations from beginning at any time that the pilot flame is absent.

(*ii*) The owner or operator shall verify, during each day of operation of the loading rack, the proper operation of the assist-air blower, the vapor line valve, and the emergency shutdown system. Verification shall be through visual observation or through an automated alarm or shutdown system that monitors and records system operation.

(*iii*) The owner or operator shall perform semi-annual preventive maintenance inspections of the thermal oxidation system according to the recommendations of the manufacturer of the system.

(*iv*) The monitoring plan developed under paragraph (*2*) of this section shall specify conditions that would be considered malfunctions of the thermal oxidation system during the inspections or automated monitoring performed under paragraphs (b)(1)(iii)(B)(*2*)(*ii*) and (*iii*) of this section, describe specific corrective actions that will be taken to correct any malfunction, and define what the owner or operator would consider to be a timely repair for each potential malfunction.

(*v*) The owner or operator shall document any system malfunction, as defined in the monitoring and inspection plan, and any activation of the automated alarm or shutdown system with a written entry into a log book or other permanent form of record. Such record shall also include a description of the corrective action taken and whether such corrective actions were taken in a timely manner, as defined in the monitoring and inspection plan, as well as an estimate of the amount of gasoline loaded during the period of the malfunction.

(iv) Monitoring an alternative operating parameter or a parameter of a vapor processing system other than those listed in paragraphs (b)(1)(i) through (iii) of this section will be allowed upon demonstrating to the Administrator's satisfaction that the alternative parameter demonstrates continuous compliance with the emission standard in §63.11088(a).

(2) Where a flare meeting the requirements in §63.11(b) is used, a heat-sensing device, such as an ultraviolet beam sensor or a thermocouple, must be installed in proximity to the pilot light to indicate the presence of a flame.

(3) Determine an operating parameter value based on the parameter data monitored during the performance test, supplemented by engineering assessments and the manufacturer's recommendations.

(4) Provide for the Administrator's approval the rationale for the selected operating parameter value, monitoring frequency, and averaging time, including data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the emission standard in §63.11088(a).

(5) If you have chosen to comply with the performance testing alternatives provided under paragraph (a)(2) or paragraph (a)(3) of this section, the monitored operating parameter value may be determined according to the provisions in paragraph (b)(5)(i) or paragraph (b)(5)(ii) of this section.

(i) Monitor an operating parameter that has been approved by the Administrator and is specified in your facility's current enforceable operating permit. At the time that the Administrator requires a new performance test, you must determine the monitored operating parameter value according to the requirements specified in paragraph (b) of this section.

(ii) Determine an operating parameter value based on engineering assessment and the manufacturer's recommendation and submit the information specified in paragraph (b)(4) of this section for approval by the Administrator. At the time that the Administrator requires a new performance test, you must determine the monitored operating parameter value according to the requirements specified in paragraph (b) of this section.

(c) For performance tests performed after the initial test required under paragraph (a) of this section, the owner or operator shall document the reasons for any change in the operating parameter value since the previous performance test.

(d) Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall comply with the requirements in paragraphs (d)(1) through (4) of this section.

(1) Operate the vapor processing system in a manner not to exceed or not to go below, as appropriate, the operating parameter value for the parameters described in paragraph (b)(1) of this section.

(2) In cases where an alternative parameter pursuant to paragraph (b)(1)(iv) or paragraph (b)(5)(i) of this section is approved, each owner or operator shall operate the vapor processing system in a manner not to exceed or not to go below, as appropriate, the alternative operating parameter value.

(3) Operation of the vapor processing system in a manner exceeding or going below the operating parameter value, as appropriate, shall constitute a violation of the emission standard in §63.11088(a), except as specified in paragraph (d)(4) of this section.

(4) For the monitoring and inspection, as required under paragraphs (b)(1)(i)(B)(*2*) and (b)(1)(iii)(B)(*2*) of this section, malfunctions that are discovered shall not constitute a violation of the emission standard in §63.11088(a) if corrective actions as described in the monitoring and inspection plan are followed. The owner or operator must:

(i) Initiate corrective action to determine the cause of the problem within 1 hour;

(ii) Initiate corrective action to fix the problem within 24 hours;

(iii) Complete all corrective actions needed to fix the problem as soon as practicable consistent with good air pollution control practices for minimizing emissions;

(iv) Minimize periods of start-up, shutdown, or malfunction; and

(v) Take any necessary corrective actions to restore normal operation and prevent the recurrence of the cause of the problem.

(e) Each owner or operator subject to the emission standard in §63.11087 for gasoline storage tanks shall comply with the requirements in paragraphs (e)(1) through (3) of this section.

(1) If your gasoline storage tank is equipped with an internal floating roof, you must perform inspections of the floating roof system according to the requirements of §60.113b(a) if you are complying with option 2(b) in Table 1 to this subpart, or according to the requirements of §63.1063(c)(1) if you are complying with option 2(d) in Table 1 to this subpart.

(2) If your gasoline storage tank is equipped with an external floating roof, you must perform inspections of the floating roof system according to the requirements of §60.113b(b) if you are complying with option 2(c) in Table 1 to this subpart, or according to the requirements of §63.1063(c)(2) if you are complying with option 2(d) in Table 1 to this subpart.

(3) If your gasoline storage tank is equipped with a closed vent system and control device, you must conduct a performance test and determine a monitored operating parameter value in accordance with the requirements in paragraphs (a) through (d) of this section, except that the applicable level of control specified in paragraph (a)(2) of this section shall be a 95-percent reduction in inlet total organic compounds (TOC) levels rather than 80 mg/l of gasoline loaded.

(f) The annual certification test for gasoline cargo tanks shall consist of the test methods specified in paragraphs (f)(1) or (f)(2) of this section.

(1) *EPA Method 27, Appendix A–8, 40 CFR part 60.* Conduct the test using a time period (t) for the pressure and vacuum tests of 5 minutes. The initial pressure (P_i) for the pressure test shall be 460 millimeters (mm) of water (18 inches of water), gauge. The initial vacuum (V_i) for the vacuum test shall be 150 mm of water (6 inches of water), gauge. The maximum allowable pressure and vacuum changes (Δ p, Δ v) for all affected gasoline cargo tanks is 3 inches of water, or less, in 5 minutes.

(2) *Railcar bubble leak test procedures.* As an alternative to the annual certification test required under paragraph (1) of this section for certification leakage testing of gasoline cargo tanks, the owner or operator may comply with paragraphs (f)(2)(i) and (ii) of this section for railcar cargo tanks, provided the railcar cargo tank meets the requirement in paragraph (f)(2)(iii) of this section.

(i) Comply with the requirements of 49 CFR 173.31(d), 49 CFR 179.7, 49 CFR 180.509, and 49 CFR 180.511 for the periodic testing of railcar cargo tanks.

(ii) The leakage pressure test procedure required under 49 CFR 180.509(j) and used to show no indication of leakage under 49 CFR 180.511(f) shall be ASTM E 515–95, BS EN 1593:1999, or another bubble leak test procedure meeting the requirements in 49 CFR 179.7, 49 CFR 180.505, and 49 CFR 180.509.

(iii) The alternative requirements in this paragraph (f)(2) may not be used for any railcar cargo tank that collects gasoline vapors from a vapor balance system and the system complies with a Federal, State, local, or tribal rule or permit. A vapor balance system is a piping and collection system designed to collect gasoline vapors displaced from a storage vessel, barge, or other container being loaded, and routes the displaced gasoline vapors into the railcar cargo tank from which liquid gasoline is being unloaded.

[73 FR 1933, Jan. 10, 2008 as amended at 73 FR 12276, Mar. 7, 2008]

Notifications, Records, and Reports

§ 63.11093 What notifications must I submit and when?

(a) Each owner or operator of an affected source under this subpart must submit an Initial Notification as specified in §63.9(b). If your facility is in compliance with the requirements of this subpart at the time the Initial Notification is due, the Notification of Compliance Status required under paragraph (b) of this section may be submitted in lieu of the Initial Notification.

(b) Each owner or operator of an affected source under this subpart must submit a Notification of Compliance Status as specified in §63.9(h). The Notification of Compliance Status must specify which of the compliance options included in Table 1 to this subpart is used to comply with this subpart.

(c) Each owner or operator of an affected bulk gasoline terminal under this subpart must submit a Notification of Performance Test, as specified in §63.9(e), prior to initiating testing required by §63.11092(a) or §63.11092(b).

(d) Each owner or operator of any affected source under this subpart must submit additional notifications specified in §63.9, as applicable.

§ 63.11094 What are my recordkeeping requirements?

(a) Each owner or operator of a bulk gasoline terminal or pipeline breakout station whose storage vessels are subject to the provisions of this subpart shall keep records as specified in §60.115b of this chapter if you are complying with options 2(a), 2(b), or 2(c) in Table 1 to this subpart, except records shall be kept for at least 5 years. If you are complying with the requirements of option 2(d) in Table 1 to this subpart, you shall keep records as specified in §63.1065.

(b) Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall keep records of the test results for each gasoline cargo tank loading at the facility as specified in paragraphs (b)(1) through (3) of this section.

(1) Annual certification testing performed under §63.11092(f)(1) and periodic railcar bubble leak testing performed under §63.11092(f)(2).

(2) The documentation file shall be kept up-to-date for each gasoline cargo tank loading at the facility. The documentation for each test shall include, as a minimum, the following information:

(i) *Name of test:* Annual Certification Test—Method 27 or Periodic Railcar Bubble Leak Test Procedure.

(ii) Cargo tank owner's name and address.

(iii) Cargo tank identification number.

(iv) Test location and date.

(v) Tester name and signature.

(vi) *Witnessing inspector, if any:* Name, signature, and affiliation.

(vii) *Vapor tightness repair:* Nature of repair work and when performed in relation to vapor tightness testing.

(viii) *Test results:* Test pressure; pressure or vacuum change, mm of water; time period of test; number of leaks found with instrument; and leak definition.

(3) If you are complying with the alternative requirements in §63.11088(b), you must keep records documenting that you have verified the vapor tightness testing according to the requirements of the Administrator.

(c) As an alternative to keeping records at the terminal of each gasoline cargo tank test result as required in paragraph (b) of this section, an owner or operator may comply with the requirements in either paragraph (c)(1) or paragraph (c)(2) of this section.

(1) An electronic copy of each record is instantly available at the terminal.

(i) The copy of each record in paragraph (c)(1) of this section is an exact duplicate image of the original paper record with certifying signatures.

(ii) The Administrator is notified in writing that each terminal using this alternative is in compliance with paragraph (c)(1) of this section.

(2) For facilities that use a terminal automation system to prevent gasoline cargo tanks that do not have valid cargo tank vapor tightness documentation from loading (e.g., via a card lock-out system), a copy of the documentation is made available (e.g., via facsimile) for inspection by the Administrator's delegated representatives during the course of a site visit, or within a mutually agreeable time frame.

(i) The copy of each record in paragraph (c)(2) of this section is an exact duplicate image of the original paper record with certifying signatures.

(ii) The Administrator is notified in writing that each terminal using this alternative is in compliance with paragraph (c)(2) of this section.

(d) Each owner or operator subject to the equipment leak provisions of §63.11089 shall prepare and maintain a record describing the types, identification numbers, and locations of all equipment in gasoline service. For facilities electing to implement an instrument program under §63.11089, the record shall contain a full description of the program.

(e) Each owner or operator of an affected source subject to equipment leak inspections under §63.11089 shall record in the log book for each leak that is detected the information specified in paragraphs (e)(1) through (7) of this section.

(1) The equipment type and identification number.

(2) The nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell).

(3) The date the leak was detected and the date of each attempt to repair the leak.

(4) Repair methods applied in each attempt to repair the leak.

(5) “Repair delayed” and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak.

(6) The expected date of successful repair of the leak if the leak is not repaired within 15 days.

(7) The date of successful repair of the leak.

(f) Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall:

(1) Keep an up-to-date, readily accessible record of the continuous monitoring data required under §63.11092(b) or §63.11092(e). This record shall indicate the time intervals during which loadings of gasoline cargo tanks have occurred or, alternatively, shall record the operating parameter data only during such loadings. The date and time of day shall also be indicated at reasonable intervals on this record.

(2) Record and report simultaneously with the Notification of Compliance Status required under §63.11093(b):

(i) All data and calculations, engineering assessments, and manufacturer's recommendations used in determining the operating parameter value under §63.11092(b) or §63.11092(e); and

(ii) The following information when using a flare under provisions of §63.11(b) to comply with §63.11087(a):

(A) Flare design (i.e., steam-assisted, air-assisted, or non-assisted); and

(B) All visible emissions (VE) readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required under §63.11092(e)(3).

(3) Keep an up-to-date, readily accessible copy of the monitoring and inspection plan required under §63.11092(b)(1)(i)(B)(*2*) or §63.11092(b)(1)(iii)(B)(*2*).

(4) Keep an up-to-date, readily accessible record of all system malfunctions, as specified in §63.11092(b)(1)(i)(B)(*2*)(*v*) or §63.11092(b)(1)(iii)(B)(*2*)(*v*).

(5) If an owner or operator requests approval to use a vapor processing system or monitor an operating parameter other than those specified in §63.11092(b), the owner or operator shall submit a description of planned reporting and recordkeeping procedures.

§ 63.11095 What are my reporting requirements?

(a) Each owner or operator of a bulk terminal or a pipeline breakout station subject to the control requirements of this subpart shall include in a semiannual compliance report to the Administrator the following information, as applicable:

(1) For storage vessels, if you are complying with options 2(a), 2(b), or 2(c) in Table 1 to this subpart, the information specified in §60.115b(a), §60.115b(b), or §60.115b(c) of this chapter, depending upon the control equipment installed, or, if you are complying with option 2(d) in Table 1 to this subpart, the information specified in §63.1066.

(2) For loading racks, each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility.

(3) For equipment leak inspections, the number of equipment leaks not repaired within 15 days after detection.

(b) Each owner or operator of an affected source subject to the control requirements of this subpart shall submit an excess emissions report to the Administrator at the time the semiannual compliance report is submitted. Excess emissions events under this subpart, and the information to be included in the excess emissions report, are specified in paragraphs (b)(1) through (5) of this section.

(1) Each instance of a non-vapor-tight gasoline cargo tank loading at the facility in which the owner or operator failed to take steps to assure that such cargo tank would not be reloaded at the facility before vapor tightness documentation for that cargo tank was obtained.

(2) Each reloading of a non-vapor-tight gasoline cargo tank at the facility before vapor tightness documentation for that cargo tank is obtained by the facility in accordance with §63.11094(b).

(3) Each exceedance or failure to maintain, as appropriate, the monitored operating parameter value determined under §63.11092(b). The report shall include the monitoring data for the days on which exceedances or failures to maintain have occurred, and a description and timing of the steps taken to repair or perform maintenance on the vapor collection and processing systems or the CMS.

(4) Each instance in which malfunctions discovered during the monitoring and inspections required under §63.11092(b)(1)(i)(B)(*2*) and (b)(1)(iii)(B)(*2*) were not resolved according to the necessary corrective actions described in the monitoring and inspection plan. The report shall include a description of the malfunction and the timing of the steps taken to correct the malfunction.

(5) For each occurrence of an equipment leak for which no repair attempt was made within 5 days or for which repair was not completed within 15 days after detection:

(i) The date on which the leak was detected;

(ii) The date of each attempt to repair the leak;

(iii) The reasons for the delay of repair; and

(iv) The date of successful repair.

(c) Each owner or operator of a bulk gasoline plant or a pipeline pumping station shall submit a semiannual excess emissions report, including the information specified in paragraphs (a)(3) and (b)(5) of this section, only for a 6-month period during which an excess emission event has occurred. If no excess emission events have occurred during the previous 6-month period, no report is required.

[73 FR 1933, Jan. 10, 2008 as amended at 73 FR 12276, Mar. 7, 2008]

Other Requirements and Information

§ 63.11098 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions apply to you.

§ 63.11099 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as the applicable State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities specified in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.11086 through 63.11088 and §63.11092. Any owner or operator requesting to use an alternative means of emission limitation for storage vessels in Table 1 to this subpart must follow either the provisions in §60.114b of this chapter if you are complying with options 2(a), 2(b), or 2(c) in Table 1 to this subpart, or the provisions in §63.1064 if you are complying with option 2(d) in Table 1 to this subpart.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

§ 63.11100 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act (CAA), in subparts A, K, Ka, Kb, and XX of part 60 of this chapter, or in subparts A, R, and WW of this part. All terms defined in both subpart A of part 60 of this chapter and subparts A, R, and WW of this part shall have the meaning given in subparts A, R, and WW of this part. For purposes of this subpart, definitions in this section supersede definitions in other parts or subparts.

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this subpart).

Bulk gasoline plant means any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank and has a gasoline throughput of less than 20,000 gallons per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State, or local law and discoverable by the Administrator and any other person.

Bulk gasoline terminal means any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank and has a gasoline throughput of 20,000 gallons per day or greater. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State, or local law and discoverable by the Administrator and any other person.

Equipment means each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in the gasoline liquid transfer and vapor collection systems. This definition also includes the entire vapor processing system except the exhaust port(s) or stack(s).

Flare means a thermal oxidation system using an open (without enclosure) flame.

Gasoline cargo tank means a delivery tank truck or railcar which is loading gasoline or which has loaded gasoline on the immediately previous load.

In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.

Monthly means once per calendar month at regular intervals of no less than 28 days and no more than 35 days.

Operating parameter value means a value for an operating or emission parameter of the vapor processing system (e.g., temperature) which, if maintained continuously by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with the applicable emission standard. The operating parameter value is determined using the procedures specified in §63.11092(b).

Pipeline breakout station means a facility along a pipeline containing storage vessels used to relieve surges or receive and store gasoline from the pipeline for re-injection and continued transportation by pipeline or to other facilities.

Pipeline pumping station means a facility along a pipeline containing pumps to maintain the desired pressure and flow of product through the pipeline and not containing storage vessels.

Submerged filling means, for the purposes of this subpart, the filling of a gasoline cargo tank or a stationary storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in §63.11086(a) from the bottom of the tank. Bottom filling of gasoline cargo tanks or storage tanks is included in this definition.

Vapor collection-equipped gasoline cargo tank means a gasoline cargo tank that is outfitted with the equipment necessary to transfer vapors, displaced during the loading of gasoline into the cargo tank, to a vapor processor system.

Vapor-tight gasoline cargo tank means the same as the definition of the term “vapor-tight gasoline tank truck” in §60.501, except that for this subpart the term “gasoline tank truck” means “gasoline cargo tank,” as defined in this section.

Table 1 to Subpart BBBBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Storage Tanks	
If you own or operate	**Then you must**
1. A gasoline storage tank with a capacity of less than 75 cubic meters (m^3)	Equip each gasoline storage tank with a fixed roof that is mounted to the storage tank in a stationary manner, and maintain all openings in a closed position at all times when not in use.
2. A gasoline storage tank with a capacity of greater than or equal to 75 m^3	(a) Reduce emissions of total organic HAP or TOC by 95 weight-percent with a closed vent system and control device as specified in §60.112b(a)(3) of this chapter; or

Table 1 to Subpart BBBBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Storage Tanks	
If you own or operate	**Then you must**
	(b) Equip each internal floating roof gasoline storage tank according to the requirements in §60.112b(a)(1) of this chapter, except for the secondary seal requirements under §60.112b(a)(1)(ii)(B) and the requirements in §60.112b(a)(1)(iv) through (ix) of this chapter; and
	(c) Equip each external floating roof gasoline storage tank according to the requirements in §60.112b(a)(2) of this chapter, except that the requirements of §60.112b(a)(2)(ii) of this chapter shall only be required if such storage tank does not currently meet the requirements of §60.112b(a)(2)(i) of this chapter; or
	(d) Equip and operate each internal and external floating roof gasoline storage tank according to the applicable requirements in §63.1063(a)(1) and (b), and equip each external floating roof gasoline storage tank according to the requirements of §63.1063(a)(2) if such storage tank does not currently meet the requirements of §63.1063(a)(1).

Table 2 to Subpart BBBBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Loading Racks	
If you own or operate	**Then you must**
1. A gasoline loading rack(s) at a bulk gasoline terminal with a gasoline throughput of 250,000 gallons per day, or greater	(a) Equip your loading rack(s) with a vapor collection system designed to collect the TOC vapors displaced from cargo tanks during product loading; and (b) Reduce emissions of TOC to less than or equal to 80 mg/l of gasoline loaded into gasoline cargo tanks at the loading rack; and
	(c) Design and operate the vapor collection system to prevent any TOC vapors collected at one loading rack from passing to another loading rack; and
	(d) Limit the loading of gasoline into gasoline cargo tanks that are vapor tight using the procedures specified in §60.502(e) through (j) of this chapter. For the purposes of this section, the term “tank truck” as used in §60.502(e) through (j) of this chapter means “cargo tank” as defined in §63.11100.
2. A gasoline loading rack(s) at a bulk gasoline terminal with a gasoline throughput of less than 250,000 gallons per day	(a) Use submerged filling with a submerged fill pipe that is no more than 6 inches from the bottom of the cargo tank. (b) Make records available within 24 hours of a request by the Administrator to document your gasoline throughput.

Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions			
Citation	**Subject**	**Brief description**	**Applies to subpart BBBBBB**
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes, specific requirements given in §63.11081.
§63.1(c)(2)	Title V permit	Requirements for obtaining a title V permit from the applicable permitting authority	Yes, §63.11081(b) of subpart BBBBBB exempts identified area sources from the obligation to obtain title V operating permits.
§63.2	Definitions	Definitions for part 63 standards	Yes, additional definitions in §63.11100.
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities and Circumvention	Prohibited activities; circumvention, severability	Yes.
§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes.
§63.6(a)	Compliance with Standards/Operation & Maintenance Applicability	General Provisions apply unless compliance extension; General Provisions apply to area sources that become major	Yes.
§63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f)	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources that Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	No.

Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions			
Citation	**Subject**	**Brief description**	**Applies to subpart BBBBBB**
§63.6(c)(1)–(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	No, §63.11083 specifies the compliance dates.
§63.6(c)(3)–(4)	[Reserved]		
§63.6(c)(5)	Compliance Dates for Existing Area Sources that Become Major	Area sources that become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)	No.
§63.6(d)	[Reserved]		
§63.6(e)(1)	Operation & Maintenance	Operate to minimize emissions at all times; correct malfunctions as soon as practicable; and operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met	Yes.
§63.6(e)(2)	[Reserved]		
§63.6(e)(3)	Startup, Shutdown, and Malfunction (SSM) plan	Requirement for SSM plan; content of SSM plan; actions during SSM	No.
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§63.6(f)(2)–(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g)(1)–(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h)(1)	Compliance with Opacity/VE Standards	You must comply with opacity/VE standards at all times except during SSM	No.
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	If standard does not State test method, use EPA Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter	No.
§63.6(h)(2)(ii)	[Reserved]		

Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions			
Citation	**Subject**	**Brief description**	**Applies to subpart BBBBBB**
§63.6(h)(2)(iii)	Using Previous Tests to Demonstrate Compliance with Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	No.
§63.6(h)(3)	[Reserved]		
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	No.
§63.6(h)(5)(i), (iii)–(v)	Conducting Opacity/VE Observations	Dates and schedule for conducting opacity/VE observations	No.
§63.6(h) (5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with 30 6-minute averages	No.
§63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Must keep records available and allow Administrator to inspect	No.
§63.6(h)(7)(i)	Report Continuous Opacity Monitoring System (COMS) Monitoring Data from Performance Test	Must submit COMS data with other performance test data	No.
§63.6(h)(7)(ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test	No.
§63.6(h)(7)(iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.
§63.6(h)(7)(iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to §63.8(e); COMS are properly maintained and operated according to §63.8(c) and data quality as §63.8(d)	No.
§63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	No.

Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions			
Citation	**Subject**	**Brief description**	**Applies to subpart BBBBBB**
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance	No.
§63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No.
§63.6(i)(1)–(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.
§63.7(a)(2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
§63.7(a)(3)	Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§63.7(b)(2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
§63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§63.7(e)(1)	Conditions for Conducting Performance Tests	Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM	Yes.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.

Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions			
Citation	**Subject**	**Brief description**	**Applies to subpart BBBBBB**
§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the notification of compliance status; keep data for 5 years	Yes.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§63.8(a)(2)	Performance Specifications	Performance specifications in appendix B of 40 CFR part 60 apply	Yes.
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in §63.11 apply	Yes.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	Yes.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	Yes.

Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions			
Citation	**Subject**	**Brief description**	**Applies to subpart BBBBBB**
§63.8(c)(1)(i)–(iii)	Routine and Predictable SSM	Follow the SSM plan for routine repairs; keep parts for routine repairs readily available; reporting requirements for SSM when action is described in SSM plan	Yes.
§63.8(c) (2)–(8)	CMS Requirements	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	Yes.
§63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions	No.
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	Yes.
§63.8(f) (1)–(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	Yes.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for CEMS	Yes.
§63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average	Yes.
§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§63.9(b) (1)–(2), (4)–(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.

Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions			
Citation	**Subject**	**Brief description**	**Applies to subpart BBBBBB**
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§63.9(g)	Additional Notifications When Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative	Yes, however, there are no opacity standards.
§63.9(h) (1)–(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§63.10(a)	Record-keeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
§63.10(b)(1)	Record-keeping/Reporting	General requirements; keep all records readily available; keep for 5 years	Yes.
§63.10(b)(2)(i)–(iv)	Records Related to SSM	Occurrence of each for operations (process equipment); occurrence of each malfunction of air pollution control equipment; maintenance on air pollution control equipment; actions during SSM	Yes.
§63.10(b)(2)(vi)–(xi)	CMS Records	Malfunctions, inoperative, out-of-control periods	Yes.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§63.10(b)(2)(xiv)	Records	All documentation supporting initial notification and notification of compliance status	Yes.
§63.10(b)(3)	Records	Applicability determinations	Yes.
§63.10(c)	Records	Additional records for CMS	No.

Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions			
Citation	**Subject**	**Brief description**	**Applies to subpart BBBBBB**
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§63.10(d)(5)	SSM Reports	Contents and submission	Yes.
§63.10(e)(1)–(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; 2–3 copies of COMS performance evaluation	No.
§63.10(e)(3)(i)–(iii)	Reports	Schedule for reporting excess emissions	Yes, note that §63.11095 specifies excess emission events for this subpart.
§63.10(e)(3)(iv)–(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)–(8) and 63.10(c)(5)–(13)	Yes, §63.11095 specifies excess emission events for this subpart.
§63.10(e)(3)(vi)–(viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS; requires all of the information in §§63.8(c)(7)–(8) and 63.10(c)(5)–(13)	Yes.
§63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	Yes.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.

Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions			
Citation	**Subject**	**Brief description**	**Applies to subpart BBBBBB**
§63.11(b)	Flares	Requirements for flares	Yes, the section references §63.11(b).
§63.12	Delegation	State authority to enforce standards	Yes.
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§63.14	Incorporations by Reference	Test methods incorporated by reference	Yes.
§63.15	Availability of Information	Public and confidential information	Yes.

Attachment C

Leak Detection and Repair Program for VOC Emissions from Equipment Leaks

Source Description and Location

Source Name:	Buckeye Terminals, LLC
Source Location:	3823 Indianapolis Boulevard, East Chicago, Indiana 46312
County:	Lake
SIC Code:	5171
Part 70 Operating Permit Renewal No.:	T089-26500-00320
Permit Renewal Issuance Date:	January 22, 2009
Significant Permit Modification No.:	089-30673-00320
Permit Reviewer:	Kimberly Cottrell

Leak Detection and Repair (LDAR)

Fugitive emissions from the equipment in propylene service. Each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in propylene service is an affected facility subject to the requirements of the site specific Leak Detection and Repair Program.

The VOC emissions from the equipment in propylene service shall be less than the emission limits in the table below:

Process	Control	VOC Limit
Fugitive Emissions from equipment in propylene service: valves, pumps, compressors, pressure relief device, sampling connection system, open-ended line and flange or other connector.	A site specific Leak Detection and Repair Program per the requirements of (a) through (f) below.	2.80 ton/yr

The site specific Leak Detection and Repair Program is comprised of the following requirements:

(a) The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart VV - Standards Of Performance For Equipment Leaks Of VOC In The Synthetic Organic Chemicals Manufacturing Industry For Which Construction, Reconstruction, Or Modification Commenced After January 5, 1981, And On Or Before November 7, 2006 which are incorporated by reference as 326 IAC 12-1-1, except as noted below. A copy of this rule is included as Attachment F. The following provisions are incorporated into the site specific leak detection and repair program:

(1) 40 CFR 60.481
(2) 40 CFR 60.482-1
(3) 40 CFR 60.482-2
(4) 40 CFR 60.482-3
(5) 40 CFR 60.482-4
(6) 40 CFR 60.482-5
(7) 40 CFR 60.482-6, except that, as propylene autocatalytically polymerizes, plugs for open ended lines will not be required
(8) 40 CFR 60.482-7
(9) 40 CFR 60.482-8
(10) 40 CFR 60.482-9
(11) 40 CFR 60.483-1
(12) 40 CFR 60.483-2

(13) 40 CFR 60.484
(14) 40 CFR 60.485
(15) 40 CFR 60.486
(16) 40 CFR 60.487
(17) 40 CFR 60.488

(b) Each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in propylene service is an affected facility and 40 CFR 60.480 is not incorporated into the program.

(c) The Permittee shall comply with the provisions of §§60.482-1 to 60.482-10 as soon as practicable, but no later than 180 days after initial startup.

(d) All terms have the meaning given to them in Subpart A of Part 60 or in subpart VV of part 60, except for the following:

(1) *Equipment* means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in propylene service and any devices or systems required by this subpart.

(2) *"In propylene service"* replaces "In VOC service", where it appears in §§60.481 to 60.488 and means that the equipment contains or contacts a fluid that is at least 10% propylene by weight.

(e) In addition to the use of 40 CFR 60 appendix A Method 21 to determine the presence of leaking sources, the Permittee may utilize the alternative work practice for monitoring equipment leaks provisions in 40 CFR 60.18(g).

(f) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1-1, apply to a facility described in this section when such facility is defined in 40 CFR Part 60, Subpart VV as an "affected facility," except when otherwise specified in 40 CFR Part 60, Subpart VV.

Attachment D

Standards Of Performance For Equipment Leaks Of VOC In The Synthetic Organic Chemicals Manufacturing Industry For Which Construction, Reconstruction, Or Modification Commenced After January 5, 1981, And On Or Before November 7, 2006 [40 CFR Part 60, Subpart VV]

Source Description and Location

Source Name:	Buckeye Terminals, LLC
Source Location:	3823 Indianapolis Boulevard, East Chicago, Indiana 46312
County:	Lake
SIC Code:	5171
Part 70 Operating Permit Renewal No.:	T089-26500-00320
Permit Renewal Issuance Date:	January 22, 2009
Significant Permit Modification No.:	089-30673-00320
Permit Reviewer:	Kimberly Cottrell

Subpart VV—Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006

Source: 48 FR 48335, Oct. 18, 1983, unless otherwise noted.

§ 60.480 Applicability and designation of affected facility.

(a)(1) The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry.

(2) The group of all equipment (defined in §60.481) within a process unit is an affected facility.

(b) Any affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after January 5, 1981, and on or before November 7, 2006, shall be subject to the requirements of this subpart.

(c) Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(d)(1) If an owner or operator applies for one or more of the exemptions in this paragraph, then the owner or operator shall maintain records as required in §60.486(i).

(2) Any affected facility that has the design capacity to produce less than 1,000 Mg/yr (1,102 ton/yr) of a chemical listed in §60.489 is exempt from §§60.482–1 through 60.482–10.

(3) If an affected facility produces heavy liquid chemicals only from heavy liquid feed or raw materials, then it is exempt from §§60.482–1 through 60.482–10.

(4) Any affected facility that produces beverage alcohol is exempt from §§60.482–1 through 60.482–10.

(5) Any affected facility that has no equipment in volatile organic compounds (VOC) service is exempt from §§60.482–1 through 60.482–10.

(e) *Alternative means of compliance* —(1) *Option to comply with part 65.* (i) Owners or operators may choose to comply with the provisions of 40 CFR part 65, subpart F, to satisfy the requirements of §§60.482 through 60.487 for an affected facility. When choosing to comply with 40 CFR part 65, subpart F, the requirements of §60.485(d), (e), and (f) and §60.486(i) and (j) still apply. Other provisions applying to an owner or operator who chooses to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(ii) *Part 60, subpart A* . Owners or operators who choose to comply with 40 CFR part 65, subpart F 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 that equipment. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (e)(1)(ii) do not apply to owners and operators of equipment subject to this subpart complying with 40 CFR part 65, subpart F, 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 F, must comply with 40 CFR part 65, subpart A.

(2) *Subpart VVa* . Owners or operators may choose to comply with the provisions of subpart VVa of this part 60 to satisfy the requirements of this subpart VV for an affected facility.

(f) *Stay of standards* . Owners or operators are not required to comply with the definition of “process unit” in §60.481 and the requirements in §60.482–1(g) of this subpart until the EPA takes final action to require compliance and publishes a document in theFederal Register.While the definition of “process unit” is stayed, owners or operators should use the following definition:

Process unit means components assembled to produce, as intermediate or final products, one or more of the chemicals listed in §60.489 of this part. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22607, May 30, 1984; 65 FR 61762, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000; 72 FR 64879, Nov. 16, 2007, 73 FR 31379, June 2, 2008; 73 FR 31375, June 2, 2008]

§ 60.481 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of part 60, and the following terms shall have the specific meanings given them.

Capital expenditure means, in addition to the definition in 40 CFR 60.2, an expenditure for a physical or operational change to an existing facility that:

(a) Exceeds P, the product of the facility's replacement cost, R, and an adjusted annual asset guideline repair allowance, A, as reflected by the following equation: $P = R \times A$, where

(1) The adjusted annual asset guideline repair allowance, A, is the product of the percent of the replacement cost, Y, and the applicable basic annual asset guideline repair allowance, B, divided by 100 as reflected by the following equation:

$A = Y \times (B \div 100)$;

(2) The percent Y is determined from the following equation: $Y = 1.0 - 0.575 \log X$, where X is 1982 minus the year of construction; and

(3) The applicable basic annual asset guideline repair allowance, B, is selected from the following table consistent with the applicable subpart:

Table for Determining Applicable Value for B

Subpart applicable to facility	Value of B to be used in equation
VV	12.5
DDD	12.5
GGG	7.0
KKK	4.5

Closed-loop system means an enclosed system that returns process fluid to the process.

Closed-purge system means a system or combination of systems and portable containers to capture purged liquids. Containers for purged liquids must be covered or closed when not being filled or emptied.

Closed vent system means a system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.

Connector means flanged, screwed, or other joined fittings used to connect two pipe lines or a pipe line and a piece of process equipment or that close an opening in a pipe that could be connected to another pipe. Joined fittings welded completely around the circumference of the interface are not considered connectors for the purpose of this subpart.

Control device means an enclosed combustion device, vapor recovery system, or flare.

Distance piece means an open or enclosed casing through which the piston rod travels, separating the compressor cylinder from the crankcase.

Double block and bleed system means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

Duct work means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.

Equipment means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart.

First attempt at repair means to take action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practices.

Fuel gas means gases that are combusted to derive useful work or heat.

Fuel gas system means the offsite and onsite piping and flow and pressure control system that gathers gaseous stream(s) generated by onsite operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in-process combustion equipment, such as furnaces and gas turbines, either singly or in combination.

Hard-piping means pipe or tubing that is manufactured and properly installed using good engineering judgment and standards such as ASME B31.3, Process Piping (available from the American Society of Mechanical Engineers, PO Box 2300, Fairfield, NJ 07007–2300).

In gas/vapor service means that the piece of equipment contains process fluid that is in the gaseous state at operating conditions.

In heavy liquid service means that the piece of equipment is not in gas/vapor service or in light liquid service.

In light liquid service means that the piece of equipment contains a liquid that meets the conditions specified in §60.485(e).

In-situ sampling systems means nonextractive samplers or in-line samplers.

In vacuum service means that equipment is operating at an internal pressure which is at least 5 kilopascals (kPa)(0.7 psia) below ambient pressure.

In VOC service means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight. (The provisions of §60.485(d) specify how to determine that a piece of equipment is not in VOC service.)

Liquids dripping means any visible leakage from the seal including spraying, misting, clouding, and ice formation.

Open-ended valve or line means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

Pressure release means the emission of materials resulting from system pressure being greater than set pressure of the pressure relief device.

Process improvement means routine changes made for safety and occupational health requirements, for energy savings, for better utility, for ease of maintenance and operation, for correction of design deficiencies, for bottleneck removal, for changing product requirements, or for environmental control.

Process unit means the components assembled and connected by pipes or ducts to process raw materials and to produce, as intermediate or final products, one or more of the chemicals listed in §60.489. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product. For the purpose of this subpart, process unit includes any feed, intermediate and final product storage vessels (except as specified in §60.482–1(g)), product transfer racks, and connected ducts and piping. A process unit includes all equipment as defined in this subpart.

Process unit shutdown means a work practice or operational procedure that stops production from a process unit or part of a process unit during which it is technically feasible to clear process material from a process unit or part of a process unit consistent with safety constraints and during which repairs can be accomplished. The following are not considered process unit shutdowns:

(1) An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours.

(2) An unscheduled work practice or operational procedure that would stop production from a process unit or part of a process unit for a shorter period of time than would be required to clear the process unit or part of the process unit of materials and start up the unit, and would result in greater emissions than delay of repair of leaking components until the next scheduled process unit shutdown.

(3) The use of spare equipment and technically feasible bypassing of equipment without stopping production.

Quarter means a 3-month period; the first quarter concludes on the last day of the last full month during the 180 days following initial startup.

Repaired means that equipment is adjusted, or otherwise altered, in order to eliminate a leak as defined in the applicable sections of this subpart and, except for leaks identified in accordance with §§60.482–2(b)(2)(ii) and (d)(6)(ii) and (iii), 60.482–3(f), and 60.482–10(f)(1)(ii), is re-monitored as specified in §60.485(b) to verify that emissions from the equipment are below the applicable leak definition.

Replacement cost means the capital needed to purchase all the depreciable components in a facility.

Sampling connection system means an assembly of equipment within a process unit used during periods of representative operation to take samples of the process fluid. Equipment used to take nonroutine grab samples is not considered a sampling connection system.

Sensor means a device that measures a physical quantity or the change in a physical quantity such as temperature, pressure, flow rate, pH, or liquid level.

Storage vessel means a tank or other vessel that is used to store organic liquids that are used in the process as raw material feedstocks, produced as intermediates or final products, or generated as wastes. Storage vessel does not include vessels permanently attached to motor vehicles, such as trucks, railcars, barges, or ships.

Synthetic organic chemicals manufacturing industry means the industry that produces, as intermediates or final products, one or more of the chemicals listed in §60.489.

Transfer rack means the collection of loading arms and loading hoses, at a single loading rack, that are used to fill tank trucks and/or railcars with organic liquids.

Volatile organic compounds or VOC means, for the purposes of this subpart, any reactive organic compounds as defined in §60.2 Definitions.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22607, May 30, 1984; 49 FR 26738, June 29, 1984; 60 FR 43258, Aug. 18, 1995; 65 FR 61762, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000; 72 FR 64879, Nov. 16, 2007]

Effective Date Note: At 73 FR 31375, June 2, 2008, in §60.481, the definition of “process unit” was stayed until further notice.

§ 60.482-1 Standards: General.

(a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§60.482–1 through 60.482–10 or §60.480(e) for all equipment within 180 days of initial startup.

(b) Compliance with §§60.482–1 to 60.482–10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in §60.485.

(c)(1) An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of §§60.482–2, 60.482–3, 60.482–5, 60.482–6, 60.482–7, 60.482–8, and 60.482–10 as provided in §60.484.

(2) If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of §§60.482–2, 60.482–3, 60.482–5, 60.482–6, 60.482–7, 60.482–8, or 60.482–10, an owner or operator shall comply with the requirements of that determination.

(d) Equipment that is in vacuum service is excluded from the requirements of §§60.482–2 to 60.482–10 if it is identified as required in §60.486(e)(5).

(e) Equipment that an owner or operator designates as being in VOC service less than 300 hours (hr)/yr is excluded from the requirements of §§60.482–2 through 60.482–10 if it is identified as required in §60.486(e)(6) and it meets any of the conditions specified in paragraphs (e)(1) through (3) of this section.

(1) The equipment is in VOC service only during startup and shutdown, excluding startup and shutdown between batches of the same campaign for a batch process.

(2) The equipment is in VOC service only during process malfunctions or other emergencies.

(3) The equipment is backup equipment that is in VOC service only when the primary equipment is out of service.

(f)(1) If a dedicated batch process unit operates less than 365 days during a year, an owner or operator may monitor to detect leaks from pumps and valves at the frequency specified in the following table instead of monitoring as specified in §§60.482–2, 60.482–7, and 60.483–2:

	Equivalent monitoring frequency time in use		
Operating time (percent of hours during year)	**Monthly**	**Quarterly**	**Semiannually**
0 to <25	Quarterly	Annually	Annually.
25 to <50	Quarterly	Semiannually	Annually.
50 to <75	Bimonthly	Three quarters	Semiannually.
75 to 100	Monthly	Quarterly	Semiannually.

(2) Pumps and valves that are shared among two or more batch process units that are subject to this subpart may be monitored at the frequencies specified in paragraph (f)(1) of this section, provided the operating time of all such process units is considered.

(3) The monitoring frequencies specified in paragraph (f)(1) of this section are not requirements for monitoring at specific intervals and can be adjusted to accommodate process operations. An owner or operator may monitor at any time during the specified monitoring period (e.g., month, quarter, year), provided the monitoring is conducted at a reasonable interval after completion of the last monitoring campaign. Reasonable intervals are defined in paragraphs (f)(3)(i) through (iv) of this section.

(i) When monitoring is conducted quarterly, monitoring events must be separated by at least 30 calendar days.

(ii) When monitoring is conducted semiannually (*i.e.* , once every 2 quarters), monitoring events must be separated by at least 60 calendar days.

(iii) When monitoring is conducted in 3 quarters per year, monitoring events must be separated by at least 90 calendar days.

(iv) When monitoring is conducted annually, monitoring events must be separated by at least 120 calendar days.

(g) If the storage vessel is shared with multiple process units, the process unit with the greatest annual amount of stored materials (predominant use) is the process unit the storage vessel is assigned to. If the storage vessel is shared equally among process units, and one of the process units has equipment subject to subpart VVa of this part, the storage vessel is assigned to that process unit. If the storage vessel is shared equally among process units, none of which have equipment subject to subpart VVa of this part, the storage vessel is assigned to any process unit subject to this subpart. If the predominant use of the storage vessel varies from year to year, then the owner or operator must estimate the predominant use initially and reassess every 3 years. The owner or operator must keep records of the information and supporting calculations that show how predominant use is determined. All equipment on the storage vessel must be monitored when in VOC service.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22608, May 30, 1984; 65 FR 78276, Dec. 14, 2000; 72 FR 64880, Nov. 16, 2007]

Effective Date Note: At 73 FR 31375, June 2, 2008, in §60.482–1, paragraph (g) was stayed until further notice.

§ 60.482-2 Standards: Pumps in light liquid service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485(b), except as provided in §60.482–1(c) and (f) and paragraphs (d), (e), and (f) of this section. A pump that

begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in §60.482–1(c) and (f) and paragraphs (d), (e), and (f) of this section.

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in §60.482–1(f).

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, the owner or operator shall follow the procedure specified in either paragraph (b)(2)(i) or (ii) of this section. This requirement does not apply to a pump that was monitored after a previous weekly inspection if the instrument reading for that monitoring event was less than 10,000 ppm and the pump was not repaired since that monitoring event.

(i) Monitor the pump within 5 days as specified in §60.485(b). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. The leak shall be repaired using the procedures in paragraph (c) of this section.

(ii) Designate the visual indications of liquids dripping as a leak, and repair the leak within 15 days of detection by eliminating the visual indications of liquids dripping.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in paragraphs (c)(2)(i) and (ii) of this section, where practicable.

(i) Tightening the packing gland nuts;

(ii) Ensuring that the seal flush is operating at design pressure and temperature.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this section, provided the requirements specified in paragraphs (d)(1) through (6) of this section are met.

(1) Each dual mechanical seal system is—

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482–10; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4)(i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(ii) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in either paragraph (d)(4)(ii)(A) or (B) of this section.

(A) Monitor the pump within 5 days as specified in §60.485(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(B) Designate the visual indications of liquids dripping as a leak.

(5)(i) Each sensor as described in paragraph (d)(3) of this section is checked daily or is equipped with an audible alarm.

(ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in paragraph (d)(5)(ii) of this section, a leak is detected.

(6)(i) When a leak is detected pursuant to paragraph (d)(4)(ii)(A) of this section, it shall be repaired as specified in paragraph (c) of this section.

(ii) A leak detected pursuant to paragraph (d)(5)(iii) of this section shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.

(iii) A designated leak pursuant to paragraph (d)(4)(ii)(B) of this section shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.

(e) Any pump that is designated, as described in §60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump:

(1) Has no externally actuated shaft penetrating the pump housing,

(2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in §60.485(c), and

(3) Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of §60.482–10, it is exempt from paragraphs (a) through (e) of this section.

(g) Any pump that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:

(1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and

(2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000; 72 FR 64880, Nov. 16, 2007]

§ 60.482-3 Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in §60.482–1(c) and paragraphs (h), (i), and (j) of this section.

(b) Each compressor seal system as required in paragraph (a) shall be:

(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482–10; or

(3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

(d) Each barrier fluid system as described in paragraph (a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in paragraph (d) shall be checked daily or shall be equipped with an audible alarm.

(2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e)(2), a leak is detected.

(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of §60.482–10, except as provided in paragraph (i) of this section.

(i) Any compressor that is designated, as described in §60.486(e) (1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a)–(h) if the compressor:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in §60.485(c); and

(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.

(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of §60.14 or §60.15 is exempt from paragraphs (a) through (e) and (h) of this section, provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of paragraphs (a) through (e) and (h) of this section.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000; 72 FR 64881, Nov. 16, 2007]

§ 60.482-4 Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in §60.485(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in §60.482–9.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in §60.485(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in §60.482–10 is exempted from the requirements of paragraphs (a) and (b) of this section.

(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §60.482–9.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000]

§ 60.482-5 Standards: Sampling connection systems.

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in §60.482–1(c) and paragraph (c) of this section.

(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall comply with the requirements specified in paragraphs (b)(1) through (4) of this section.

(1) Gases displaced during filling of the sample container are not required to be collected or captured.

(2) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied.

(3) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured.

(4) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either paragraph (b)(4)(i), (ii), (iii), or (iv) of this section.

(i) Return the purged process fluid directly to the process line.

(ii) Collect and recycle the purged process fluid to a process.

(iii) Capture and transport all the purged process fluid to a control device that complies with the requirements of §60.482–10.

(iv) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(A) A waste management unit as defined in §63.111, if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;

(B) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266;

(C) A facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261;

(D) A waste management unit subject to and operated in compliance with the treatment requirements of §61.348(a), provided all waste management units that collect, store, or transport the purged process fluid to the treatment unit are subject to and operated in compliance with the management requirements of §§61.343 through 61.347; or

(E) A device used to burn off-specification used oil for energy recovery in accordance with 40 CFR part 279, subpart G, provided the purged process fluid is not hazardous waste as defined in 40 CFR part 261.

(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

[60 FR 43258, Aug. 18, 1995, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000; 72 FR 64881, Nov. 16, 2007]

§ 60.482-6 Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482–1(c) and paragraphs (d) and (e) of this section.

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of this section.

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22607, May 30, 1984; 65 FR 78277, Dec. 14, 2000; 72 FR 64881, Nov. 16, 2007]

§ 60.482-7 Standards: Valves in gas/vapor service and in light liquid service.

(a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485(b) and shall comply with paragraphs (b) through (e) of this section, except as provided in paragraphs (f), (g), and (h) of this section, §60.482–1(c) and (f), and §§60.483–1 and 60.483–2.

(2) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to paragraphs (a)(2)(i) or (ii), except for a valve that replaces a leaking valve and except as provided in paragraphs (f), (g), and (h) of this section, §60.482–1(c), and §§60.483–1 and 60.483–2.

(i) Monitor the valve as in paragraph (a)(1) of this section. The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.

(ii) If the valves on the process unit are monitored in accordance with §60.483–1 or §60.483–2, count the new valve as leaking when calculating the percentage of valves leaking as described in §60.483–2(b)(5). If less than 2.0 percent of the valves are leaking for that process unit, the valve must be monitored for the first time during the next scheduled monitoring event for existing valves in the process unit or within 90 days, whichever comes first.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1)(i) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(ii) As an alternative to monitoring all of the valves in the first month of a quarter, an owner or operator may elect to subdivide the process unit into 2 or 3 subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The owner or operator must keep records of the valves assigned to each subgroup.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §60.482–9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;

(3) Tightening of packing gland nuts;

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:

(1) Has no external actuating mechanism in contact with the process fluid,

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in §60.485(c), and

(3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(g) Any valve that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:

(1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a), and

(2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in §60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:

(1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The process unit within which the valve is located either becomes an affected facility through §60.14 or §60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22608, May 30, 1984; 65 FR 61762, Oct. 17, 2000; 72 FR 64881, Nov. 16, 2007]

§ 60.482-8 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures:

(1) The owner or operator shall monitor the equipment within 5 days by the method specified in §60.485(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.

(2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under §§60.482–2(c)(2) and 60.482–7(e).

[48 CFR 48335, Oct. 18, 1983, as amended at 65 FR 78277, Dec. 14, 2000; 72 FR 64882, Nov. 16, 2007]

§ 60.482-9 Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit.

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves will be allowed if:

(1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with §60.482–10.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(f) When delay of repair is allowed for a leaking pump or valve that remains in service, the pump or valve may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 78277, Dec. 14, 2000; 72 FR 64882, Nov. 16, 2007]

§ 60.482-10 Standards: Closed vent systems and control devices.

(a) Owners or operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.

(b) Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.

(c) Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.

(d) Flares used to comply with this subpart shall comply with the requirements of §60.18.

(e) Owners or operators of control devices used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.

(f) Except as provided in paragraphs (i) through (k) of this section, each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2) of this section.

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the requirements specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this section:

(i) Conduct an initial inspection according to the procedures in §60.485(b); and

(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:

(i) Conduct an initial inspection according to the procedures in §60.485(b); and

(ii) Conduct annual inspections according to the procedures in §60.485(b).

(g) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (h) of this section.

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

(h) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(i) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section.

(j) Any parts of the closed vent system that are designated, as described in paragraph (l)(1) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (j)(1) and (j)(2) of this section:

(1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (f)(1)(i) or (f)(2) of this section; and

(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(k) Any parts of the closed vent system that are designated, as described in paragraph (l)(2) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (k)(1) through (k)(3) of this section:

(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) The process unit within which the closed vent system is located becomes an affected facility through §§60.14 or 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

(3) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

(l) The owner or operator shall record the information specified in paragraphs (l)(1) through (l)(5) of this section.

(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(3) For each inspection during which a leak is detected, a record of the information specified in §60.486(c).

(4) For each inspection conducted in accordance with §60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(5) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(m) Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

[48 FR 48335, Oct. 18, 1983, as amended at 51 FR 2702, Jan. 21, 1986; 60 FR 43258, Aug. 18, 1995; 61 FR 29878, June 12, 1996; 65 FR 78277, Dec. 14, 2000]

§ 60.483-1 Alternative standards for valves—allowable percentage of valves leaking.

(a) An owner or operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

(b) The following requirements shall be met if an owner or operator wishes to comply with an allowable percentage of valves leaking:

(1) An owner or operator must notify the Administrator that the owner or operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in §60.487(d).

(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.

(3) If a valve leak is detected, it shall be repaired in accordance with §60.482–7(d) and (e).

(c) Performance tests shall be conducted in the following manner:

(1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in §60.485(b).

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.

(d) Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent, determined as described in §60.485(h).

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000; 72 FR 64882, Nov. 16, 2007]

§ 60.483-2 Alternative standards for valves—skip period leak detection and repair.

(a)(1) An owner or operator may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.

(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in §60.487(d).

(b)(1) An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in §60.482–7.

(2) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(3) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(4) If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in §60.482–7 but can again elect to use this section.

(5) The percent of valves leaking shall be determined as described in §60.485(h).

(6) An owner or operator must keep a record of the percent of valves found leaking during each leak detection period.

(7) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for a process unit following one of the alternative standards in this section must be monitored in accordance with §60.482–7(a)(2)(i) or (ii) before the provisions of this section can be applied to that valve.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000; 72 FR 64882, Nov. 16, 2007]

§ 60.484 Equivalence of means of emission limitation.

(a) Each owner or operator subject to the provisions of this subpart may apply to the Administrator for determination of equivalence for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in this subpart.

(b) Determination of equivalence to the equipment, design, and operational requirements of this subpart will be evaluated by the following guidelines:

(1) Each owner or operator applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.

(2) The Administrator will compare test data for demonstrating equivalence of the means of emission limitation to test data for the equipment, design, and operational requirements.

(3) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.

(c) Determination of equivalence to the required work practices in this subpart will be evaluated by the following guidelines:

(1) Each owner or operator applying for a determination of equivalence shall be responsible for collecting and verifying test data to demonstrate equivalence of an equivalent means of emission limitation.

(2) For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the required work practice shall be demonstrated.

(3) For each affected facility, for which a determination of equivalence is requested, the emission reduction achieved by the equivalent means of emission limitation shall be demonstrated.

(4) Each owner or operator applying for a determination of equivalence shall commit in writing to work practice(s) that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practice.

(5) The Administrator will compare the demonstrated emission reduction for the equivalent means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4).

(6) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practice.

(d) An owner or operator may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.

(e)(1) After a request for determination of equivalence is received, the Administrator will publish a notice in the Federal Register and provide the opportunity for public hearing if the Administrator judges that the request may be approved.

(2) After notice and opportunity for public hearing, the Administrator will determine the equivalence of a means of emission limitation and will publish the determination in theFederal Register.

(3) Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design, or operational standard within the meaning of section 111(h)(1) of the Clean Air Act.

(f)(1) Manufacturers of equipment used to control equipment leaks of VOC may apply to the Administrator for determination of equivalence for any equivalent means of emission limitation that achieves a reduction in emissions of VOC achieved by the equipment, design, and operational requirements of this subpart.

(2) The Administrator will make an equivalence determination according to the provisions of paragraphs (b), (c), (d), and (e) of this section.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 72 FR 64882, Nov. 16, 2007]

§ 60.485 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the standards in §§60.482–1 through 60.482–10, 60.483, and 60.484 as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(c) The owner or operator shall determine compliance with the no detectable emission standards in §§60.482–2(e), 60.482–3(i), 60.482–4, 60.482–7(f), and 60.482–10(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260–73, 91, or 96, E168–67, 77, or 92, E169–63, 77, or 93 (incorporated by reference—see §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d) (1) and (2) of this section shall be used to resolve the disagreement.

(e) The owner or operator shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H_2O at 68 °F). Standard reference texts or ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H_2O at 68 °F) is equal to or greater than 20 percent by weight.

(3) The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

(g) The owner or operator shall determine compliance with the standards of flares as follows:

(1) Method 22 shall be used to determine visible emissions.

(2) A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.

(3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:

$$V_{max} = K_1 + K_2 H_T$$

Where:

V_{max}= Maximum permitted velocity, m/sec (ft/sec)

H_T= Net heating value of the gas being combusted, MJ/scm (Btu/scf).

K_1= 8.706 m/sec (metric units)

= 28.56 ft/sec (English units)

K_2= 0.7084 m^4 /(MJ-sec) (metric units)

= 0.087 ft^4 /(Btu-sec) (English units)

(4) The net heating value (H_T) of the gas being combusted in a flare shall be computed using the following equation:

$$H_T = K\sum_{i=1}^{n} C_i H_i$$

Where:

K = Conversion constant, 1.740×10^{-7} (g-mole)(MJ)/(ppm-scm-kcal) (metric units) = 4.674×10^{-6} [(g-mole)(Btu)/(ppm-scf-kcal)] (English units)

C_i= Concentration of sample component “i,” ppm

H_i= Net heat of combustion of sample component “i” at 25 °C and 760 mm Hg (77 °F and 14.7 psi), kcal/g-mole

(5) Method 18 or ASTM D6420–99 (2004) (where the target compound(s) are those listed in Section 1.1 of ASTM D6420–99, and the target concentration is between 150 parts per billion by volume and 100 parts per million by volume) and ASTM D2504–67, 77 or 88 (Reapproved 1993) (incorporated by reference—see §60.17) shall be used to determine the concentration of sample component “i.”

(6) ASTM D2382–76 or 88 or D4809–95 (incorporated by reference—see §60.17) shall be used to determine the net heat of combustion of component “i” if published values are not available or cannot be calculated.

(7) Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.

(h) The owner or operator shall determine compliance with §60.483–1 or §60.483–2 as follows:

(1) The percent of valves leaking shall be determined using the following equation:

$\%V_L = (V_L/V_T) * 100$

Where:

$\%V_L$= Percent leaking valves

V_L= Number of valves found leaking

V_T= The sum of the total number of valves monitored

(2) The total number of valves monitored shall include difficult-to-monitor and unsafe-to-monitor valves only during the monitoring period in which those valves are monitored.

(3) The number of valves leaking shall include valves for which repair has been delayed.

(4) Any new valve that is not monitored within 30 days of being placed in service shall be included in the number of valves leaking and the total number of valves monitored for the monitoring period in which the valve is placed in service.

(5) If the process unit has been subdivided in accordance with §60.482–7(c)(1)(ii), the sum of valves found leaking during a monitoring period includes all subgroups.

(6) The total number of valves monitored does not include a valve monitored to verify repair.

[54 FR 6678, Feb. 14, 1989, as amended at 54 FR 27016, June 27, 1989; 65 FR 61763, Oct. 17, 2000; 72 FR 64882, Nov. 16, 2007]

§ 60.486 Recordkeeping requirements.

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.

(b) When each leak is detected as specified in §§60.482–2, 60.482–3, 60.482–7, 60.482–8, and 60.483–2, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482–7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in §§60.482–2, 60.482–3, 60.482–7, 60.482–8, and 60.483–2, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) “Above 10,000” if the maximum instrument reading measured by the methods specified in §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

(5) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in §60.482–10 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in §60.482–10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(4) Periods when the closed vent systems and control devices required in §§60.482–2, 60.482–3, 60.482–4, and 60.482–5 are not operated as designed, including periods when a flare pilot light does not have a flame.

(5) Dates of startups and shutdowns of the closed vent systems and control devices required in §§60.482–2, 60.482–3, 60.482–4, and 60.482–5.

(e) The following information pertaining to all equipment subject to the requirements in §§60.482–1 to 60.482–10 shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of this subpart.

(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §§60.482–2(e), 60.482–3(i) and 60.482–7(f).

(ii) The designation of equipment as subject to the requirements of §60.482–2(e), §60.482–3(i), or §60.482–7(f) shall be signed by the owner or operator. Alternatively, the owner or operator may establish a mechanism with their permitting authority that satisfies this requirement.

(3) A list of equipment identification numbers for pressure relief devices required to comply with §60.482–4.

(4)(i) The dates of each compliance test as required in §§60.482–2(e), 60.482–3(i), 60.482–4, and 60.482–7(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(6) A list of identification numbers for equipment that the owner or operator designates as operating in VOC service less than 300 hr/yr in accordance with §60.482–1(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.

(f) The following information pertaining to all valves subject to the requirements of §60.482–7(g) and (h) and to all pumps subject to the requirements of §60.482–2(g) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.

(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) The following information shall be recorded for valves complying with §60.483–2:

(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.

(h) The following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in §§60.482–2(d)(5) and 60.482–3(e)(2) and explanation of the design criterion; and

(2) Any changes to this criterion and the reasons for the changes.

(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in §60.480(d):

(1) An analysis demonstrating the design capacity of the affected facility,

(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

(3) An analysis demonstrating that equipment is not in VOC service.

(j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(k) The provisions of §60.7 (b) and (d) do not apply to affected facilities subject to this subpart.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61763, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000; 72 FR 64883, Nov. 16, 2007]

§ 60.487 Reporting requirements.

(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial startup date.

(b) The initial semiannual report to the Administrator shall include the following information:

(1) Process unit identification.

(2) Number of valves subject to the requirements of §60.482–7, excluding those valves designated for no detectable emissions under the provisions of §60.482–7(f).

(3) Number of pumps subject to the requirements of §60.482–2, excluding those pumps designated for no detectable emissions under the provisions of §60.482–2(e) and those pumps complying with §60.482–2(f).

(4) Number of compressors subject to the requirements of §60.482–3, excluding those compressors designated for no detectable emissions under the provisions of §60.482–3(i) and those compressors complying with §60.482–3(h).

(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in §60.486:

(1) Process unit identification.

(2) For each month during the semiannual reporting period,

(i) Number of valves for which leaks were detected as described in §60.482–7(b) or §60.483–2,

(ii) Number of valves for which leaks were not repaired as required in §60.482–7(d)(1),

(iii) Number of pumps for which leaks were detected as described in §60.482–2(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),

(iv) Number of pumps for which leaks were not repaired as required in §60.482–2(c)(1) and (d)(6),

(v) Number of compressors for which leaks were detected as described in §60.482–3(f),

(vi) Number of compressors for which leaks were not repaired as required in §60.482–3(g)(1), and

(vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.

(d) An owner or operator electing to comply with the provisions of §§60.483–1 or 60.483–2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.

(e) An owner or operator shall report the results of all performance tests in accordance with §60.8 of the General Provisions. The provisions of §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

(f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of this section, provided that they comply with the requirements established by the State.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22608, May 30, 1984; 65 FR 61763, Oct. 17, 2000; 72 FR 64883, Nov. 16, 2007]

§ 60.488 Reconstruction.

For the purposes of this subpart:

(a) The cost of the following frequently replaced components of the facility shall not be considered in calculating either the “fixed capital cost of the new components” or the “fixed capital costs that would be required to construct a comparable new facility” under §60.15: pump seals, nuts and bolts, rupture disks, and packings.

(b) Under §60.15, the “fixed capital cost of new components” includes the fixed capital cost of all depreciable components (except components specified in §60.488 (a)) which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2-year period following the applicability date for the appropriate subpart. (See the “Applicability and designation of affected facility” section of the appropriate subpart.) For purposes of this paragraph, “commenced” means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.

[49 FR 22608, May 30, 1984]

§ 60.489 List of chemicals produced by affected facilities.

The following chemicals are produced, as intermediates or final products, by process units covered under this subpart. The applicability date for process units producing one or more of these chemicals is January 5, 1981.

CAS No.[a]	Chemical
105–57–7	Acetal.

CAS No.[a]	Chemical
75–07–0	Acetaldehyde.
107–89–1	Acetaldol.
60–35–5	Acetamide.
103–84–4	Acetanilide.
64–19–7	Acetic acid.
108–24–7	Acetic anhydride.
67–64–1	Acetone.
75–86–5	Acetone cyanohydrin.
75–05–8	Acetonitrile.
98–86–2	Acetophenone.
75–36–5	Acetyl chloride.
74–86–2	Acetylene.
107–02–8	Acrolein.
79–06–1	Acrylamide.
79–10–7	Acrylic acid.
107–13–1	Acrylonitrile.
124–04–9	Adipic acid.
111–69–3	Adiponitrile.
([b])	Alkyl naphthalenes.
107–18–6	Allyl alcohol.
107–05–1	Allyl chloride.
1321–11–5	Aminobenzoic acid.
111–41–1	Aminoethylethanolamine.
123–30–8	p-Aminophenol.
628–63–7, 123–92–2	Amyl acetates.
71–41–0[c]	Amyl alcohols.
110–58–7	Amyl amine.
543–59–9	Amyl chloride.
110–66–7[c]	Amyl mercaptans.
1322–06–1	Amyl phenol.
62–53–3	Aniline.
142–04–1	Aniline hydrochloride.
29191–52–4	Anisidine.

CAS No.[a]	Chemical
100–66–3	Anisole.
118–92–3	Anthranilic acid.
84–65–1	Anthraquinone.
100–52–7	Benzaldehyde.
55–21–0	Benzamide.
71–43–2	Benzene.
98–48–6	Benzenedisulfonic acid.
98–11–3	Benzenesulfonic acid.
134–81–6	Benzil.
76–93–7	Benzilic acid.
65–85–0	Benzoic acid.
119–53–9	Benzoin.
100–47–0	Benzonitrile.
119–61–9	Benzophenone.
98–07–7	Benzotrichloride.
98–88–4	Benzoyl chloride.
100–51–6	Benzyl alcohol.
100–46–9	Benzylamine.
120–51–4	Benzyl benzoate.
100–44–7	Benzyl chloride.
98–87–3	Benzyl dichloride.
92–52–4	Biphenyl.
80–05–7	Bisphenol A.
10–86–1	Bromobenzene.
27497–51–4	Bromonaphthalene.
106–99–0	Butadiene.
106–98–9	1-butene.
123–86–4	n-butyl acetate.
141–32–2	n-butyl acrylate.
71–36–3	n-butyl alcohol.
78–92–2	s-butyl alcohol.
75–65–0	t-butyl alcohol.
109–73–9	n-butylamine.

CAS No.[a]	Chemical
13952–84–6	s-butylamine.
75–64–9	t-butylamine.
98–73–7	p-tert-butyl benzoic acid.
107–88–0	1,3-butylene glycol.
123–72–8	n-butyraldehyde.
107–92–6	Butyric acid.
106–31–0	Butyric anhydride.
109–74–0	Butyronitrile.
105–60–2	Caprolactam.
75–1–50	Carbon disulfide.
558–13–4	Carbon tetrabromide.
56–23–5	Carbon tetrachloride.
9004–35–7	Cellulose acetate.
79–11–8	Chloroacetic acid.
108–42–9	m-chloroaniline.
95–51–2	o-chloroaniline.
106–47–8	p-chloroaniline.
35913–09–8	Chlorobenzaldehyde.
108–90–7	Chlorobenzene.
118–91–2, 535–80–8, 74–11–3[c]	Chlorobenzoic acid.
2136–81–4, 2136–89–2, 5216–25–1[c]	Chlorobenzotrichloride.
1321–03–5	Chlorobenzoyl chloride.
25497–29–4	Chlorodifluoromethane.
75–45–6	Chlorodifluoroethane.
67–66–3	Chloroform.
25586–43–0	Chloronaphthalene.
88–73–3	o-chloronitrobenzene.
100–00–5	p-chloronitrobenzene.
25167–80–0	Chlorophenols.
126–99–8	Chloroprene.
7790–94–5	Chlorosulfonic acid.
108–41–8	m-chlorotoluene.
95–49–8	o-chlorotoluene.

CAS No.[a]	Chemical
106–43–4	p-chlorotoluene.
75–72–9	Chlorotrifluoromethane.
108–39–4	m-cresol.
95–48–7	o-cresol.
106–44–5	p-cresol.
1319–77–3	Mixed cresols.
1319–77–3	Cresylic acid.
4170–30–0	Crotonaldehyde.
3724–65–0	Crotonic acid.
98–82–8	Cumene.
80–15–9	Cumene hydroperoxide.
372–09–8	Cyanoacetic acid.
506–77–4	Cyanogen chloride.
108–80–5	Cyanuric acid.
108–77–0	Cyanuric chloride.
110–82–7	Cyclohexane.
108–93–0	Cyclohexanol.
108–94–1	Cyclohexanone.
110–83–8	Cyclohexene.
108–91–8	Cyclohexylamine.
111–78–4	Cyclooctadiene.
112–30–1	Decanol.
123–42–2	Diacetone alcohol.
27576–04–1	Diaminobenzoic acid.
95–76–1, 95–82–9, 554–00–7, 608–27–5, 608–31–1, 626–43–7, 27134–27–6, 57311–92–9[c]	Dichloroaniline.
541–73–1	m-dichlorobenzene.
95–50–1	o-dichlorobenzene.
106–46–7	p-dichlorobenzene.
75–71–8	Dichlorodifluoromethane.
111–44–4	Dichloroethyl ether.
107–06–2	1,2-dichloroethane (EDC).
96–23–1	Dichlorohydrin.

CAS No.[a]	Chemical
26952–23–8	Dichloropropene.
101–83–7	Dicyclohexylamine.
109–89–7	Diethylamine.
111–46–6	Diethylene glycol.
112–36–7	Diethylene glycol diethyl ether.
111–96–6	Diethylene glycol dimethyl ether.
112–34–5	Diethylene glycol monobutyl ether.
124–17–4	Diethylene glycol monobutyl ether acetate.
111–90–0	Diethylene glycol monoethyl ether.
112–15–2	Diethylene glycol monoethyl ether acetate.
111–77–3	Diethylene glycol monomethyl ether.
64–67–5	Diethyl sulfate.
75–37–6	Difluoroethane.
25167–70–8	Diisobutylene.
26761–40–0	Diisodecyl phthalate.
27554–26–3	Diisooctyl phthalate.
674–82–8	Diketene.
124–40–3	Dimethylamine.
121–69–7	N,N-dimethylaniline.
115–10–6	N,N-dimethyl ether.
68–12–2	N,N-dimethylformamide.
57–14–7	Dimethylhydrazine.
77–78–1	Dimethyl sulfate.
75–18–3	Dimethyl sulfide.
67–68–5	Dimethyl sulfoxide.
120–61–6	Dimethyl terephthalate.
99–34–3	3,5-dinitrobenzoic acid.
51–28–5	Dinitrophenol.
25321–14–6	Dinitrotoluene.
123–91–1	Dioxane.
646–06–0	Dioxilane.

CAS No.[a]	Chemical
122–39–4	Diphenylamine.
101–84–8	Diphenyl oxide.
102–08–9	Diphenyl thiourea.
25265–71–8	Dipropylene glycol.
25378–22–7	Dodecene.
28675–17–4	Dodecylaniline.
27193–86–8	Dodecylphenol.
106–89–8	Epichlorohydrin.
64–17–5	Ethanol.
141–43–5[c]	Ethanolamines.
141–78–6	Ethyl acetate.
141–97–9	Ethyl acetoacetate.
140–88–5	Ethyl acrylate.
75–04–7	Ethylamine.
100–41–4	Ethylbenzene.
74–96–4	Ethyl bromide.
9004–57–3	Ethylcellulose.
75–00–3	Ethyl chloride.
105–39–5	Ethyl chloroacetate.
105–56–6	Ethylcyanoacetate.
74–85–1	Ethylene.
96–49–1	Ethylene carbonate.
107–07–3	Ethylene chlorohydrin.
107–15–3	Ethylenediamine.
106–93–4	Ethylene dibromide.
107–21–1	Ethylene glycol.
111–55–7	Ethylene glycol diacetate.
110–71–4	Ethylene glycol dimethyl ether.
111–76–2	Ethylene glycol monobutyl ether.
112–07–2	Ethylene glycol monobutyl ether acetate.
110–80–5	Ethylene glycol monoethyl ether.
111–15–9	Ethylene glycol monethyl ether acetate.

CAS No.[a]	Chemical
109–86–4	Ethylene glycol monomethyl ether.
110–49–6	Ethylene glycol monomethyl ether acetate.
122–99–6	Ethylene glycol monophenyl ether.
2807–30–9	Ethylene glycol monopropyl ether.
75–21–8	Ethylene oxide.
60–29–7	Ethyl ether
104–76–7	2-ethylhexanol.
122–51–0	Ethyl orthoformate.
95–92–1	Ethyl oxalate.
41892–71–1	Ethyl sodium oxalacetate.
50–00–0	Formaldehyde.
75–12–7	Formamide.
64–18–6	Formic acid.
110–17–8	Fumaric acid.
98–01–1	Furfural.
56–81–5	Glycerol.
26545–73–7	Glycerol dichlorohydrin.
25791–96–2	Glycerol triether.
56–40–6	Glycine.
107–22–2	Glyoxal.
118–74–1	Hexachlorobenzene.
67–72–1	Hexachloroethane.
36653–82–4	Hexadecyl alcohol.
124–09–4	Hexamethylenediamine.
629–11–8	Hexamethylene glycol.
100–97–0	Hexamethylenetetramine.
74–90–8	Hydrogen cyanide.
123–31–9	Hydroquinone.
99–96–7	p-hydroxybenzoic acid.
26760–64–5	Isoamylene.
78–83–1	Isobutanol.
110–19–0	Isobutyl acetate.

CAS No.[a]	Chemical
115–11–7	Isobutylene.
78–84–2	Isobutyraldehyde.
79–31–2	Isobutyric acid.
25339–17–7	Isodecanol.
26952–21–6	Isooctyl alcohol.
78–78–4	Isopentane.
78–59–1	Isophorone.
121–91–5	Isophthalic acid.
78–79–5	Isoprene.
67–63–0	Isopropanol.
108–21–4	Isopropyl acetate.
75–31–0	Isopropylamine.
75–29–6	Isopropyl chloride.
25168–06–3	Isopropylphenol.
463–51–4	Ketene.
([b])	Linear alkyl sulfonate.
123–01–3	Linear alkylbenzene (linear dodecylbenzene).
110–16–7	Maleic acid.
108–31–6	Maleic anhydride.
6915–15–7	Malic acid.
141–79–7	Mesityl oxide.
121–47–1	Metanilic acid.
79–41–4	Methacrylic acid.
563–47–3	Methallyl chloride.
67–56–1	Methanol.
79–20–9	Methyl acetate.
105–45–3	Methyl acetoacetate.
74–89–5	Methylamine.
100–61–8	n-methylaniline.
74–83–9	Methyl bromide.
37365–71–2	Methyl butynol.
74–87–3	Methyl chloride.

CAS No.[a]	Chemical
108–87–2	Methylcyclohexane.
1331–22–2	Methylcyclohexanone.
75–09–2	Methylene chloride.
101–77–9	Methylene dianiline.
101–68–8	Methylene diphenyl diisocyanate.
78–93–3	Methyl ethyl ketone.
107–31–3	Methyl formate.
108–11–2	Methyl isobutyl carbinol.
108–10–1	Methyl isobutyl ketone.
80–62–6	Methyl methacrylate.
77–75–8	Methylpentynol.
98–83–9	a-methylstyrene.
110–91–8	Morpholine.
85–47–2	a-naphthalene sulfonic acid.
120–18–3	b-naphthalene sulfonic acid.
90–15–3	a-naphthol.
135–19–3	b-naphthol.
75–98–9	Neopentanoic acid.
88–74–4	o-nitroaniline.
100–01–6	p-nitroaniline.
91–23–6	o-nitroanisole.
100–17–4	p-nitroanisole.
98–95–3	Nitrobenzene.
27178–83–2[c]	Nitrobenzoic acid (o,m, and p).
79–24–3	Nitroethane.
75–52–5	Nitromethane.
88–75–5	2-Nitrophenol.
25322–01–4	Nitropropane.
1321–12–6	Nitrotoluene.
27215–95–8	Nonene.
25154–52–3	Nonylphenol.
27193–28–8	Octylphenol.
123–63–7	Paraldehyde.

CAS No.[a]	Chemical
115–77–5	Pentaerythritol.
109–66–0	n-pentane.
109–67–1	1-pentene
127–18–4	Perchloroethylene.
594–42–3	Perchloromethyl mercaptan.
94–70–2	o-phenetidine.
156–43–4	p-phenetidine.
108–95–2	Phenol.
98–67–9, 585–38–6, 609–46–1, 1333–39–7[c]	Phenolsulfonic acids.
91–40–7	Phenyl anthranilic acid.
([b])	Phenylenediamine.
75–44–5	Phosgene.
85–44–9	Phthalic anhydride.
85–41–6	Phthalimide.
108–99–6	b-picoline.
110–85–0	Piperazine.
9003–29–6, 25036–29–7[c]	Polybutenes.
25322–68–3	Polyethylene glycol.
25322–69–4	Polypropylene glycol.
123–38–6	Propionaldehyde.
79–09–4	Propionic acid.
71–23–8	n-propyl alcohol.
107–10–8	Propylamine.
540–54–5	Propyl chloride.
115–07–1	Propylene.
127–00–4	Propylene chlorohydrin.
78–87–5	Propylene dichloride.
57–55–6	Propylene glycol.
75–56–9	Propylene oxide.
110–86–1	Pyridine.
106–51–4	Quinone.
108–46–3	Resorcinol.
27138–57–4	Resorcylic acid.

CAS No.[a]	Chemical
69–72–7	Salicylic acid.
127–09–3	Sodium acetate.
532–32–1	Sodium benzoate.
9004–32–4	Sodium carboxymethyl cellulose.
3926–62–3	Sodium chloroacetate.
141–53–7	Sodium formate.
139–02–6	Sodium phenate.
110–44–1	Sorbic acid.
100–42–5	Styrene.
110–15–6	Succinic acid.
110–61–2	Succinonitrile.
121–57–3	Sulfanilic acid.
126–33–0	Sulfolane.
1401–55–4	Tannic acid.
100–21–0	Terephthalic acid.
79–34–5[c]	Tetrachloroethanes.
117–08–8	Tetrachlorophthalic anhydride.
78–00–2	Tetraethyl lead.
119–64–2	Tetrahydronaphthalene.
85–43–8	Tetrahydrophthalic anhydride.
75–74–1	Tetramethyl lead.
110–60–1	Tetramethylenediamine.
110–18–9	Tetramethylethylenediamine.
108–88–3	Toluene.
95–80–7	Toluene-2,4-diamine.
584–84–9	Toluene-2,4-diisocyanate.
26471–62–5	Toluene diisocyanates (mixture).
1333–07–9	Toluenesulfonamide.
104–15–4[c]	Toluenesulfonic acids.
98–59–9	Toluenesulfonyl chloride.
26915–12–8	Toluidines.
87–61–6, 108–70–3, 120–82–1[c]	Trichlorobenzenes.
71–55–6	1,1,1-trichloroethane.

CAS No.[a]	Chemical
79–00–5	1,1,2-trichloroethane.
79–01–6	Trichloroethylene.
75–69–4	Trichlorofluoromethane.
96–18–4	1,2,3-trichloropropane.
76–13–1	1,1,2-trichloro-1,2,2-trifluoroethane.
121–44–8	Triethylamine.
112–27–6	Triethylene glycol.
112–49–2	Triethylene glycol dimethyl ether.
7756–94–7	Triisobutylene.
75–50–3	Trimethylamine.
57–13–6	Urea.
108–05–4	Vinyl acetate.
75–01–4	Vinyl chloride.
75–35–4	Vinylidene chloride.
25013–15–4	Vinyl toluene.
1330–20–7	Xylenes (mixed).
95–47–6	o-xylene.
106–42–3	p-xylene.
1300–71–6	Xylenol.
1300–73–8	Xylidine.

[a]CAS numbers refer to the Chemical Abstracts Registry numbers assigned to specific chemicals, isomers, or mixtures of chemicals. Some isomers or mixtures that are covered by the standards do not have CAS numbers assigned to them. The standards apply to all of the chemicals listed, whether CAS numbers have been assigned or not.

[b]No CAS number(s) have been assigned to this chemical, its isomers, or mixtures containing these chemicals.

[c]CAS numbers for some of the isomers are listed; the standards apply to all of the isomers and mixtures, even if CAS numbers have not been assigned.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61763, Oct. 17, 2000]

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD)
for a Part 70 Significant Permit Modification

Source Description and Location

Source Name:	Buckeye Terminals, LLC
Source Location:	400 East Columbus Drive, East Chicago, Indiana 46312
County:	Lake
SIC Code:	5171
Part 70 Operating Permit Renewal No.:	T089-26500-00320
Permit Renewal Issuance Date:	January 22, 2009
Significant Source Modification No.:	089-30669-00320
Significant Permit Modification No.:	089-30673-00320
Permit Reviewer:	Kimberly Cottrell

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T 089-26500-00320 on January 22, 2009. The source has not received any other approvals since issuance of the last renewal.

County Attainment Status

The source is located in Lake County.

Table 1: County Attainment Status

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; 148th 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	Attainment effective May 11, 2010, 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]The U. S. EPA has acknowledged in both the proposed and final rulemaking for this redesignation that the anti-backsliding provisions for the 1-hour ozone standard no longer apply as a result of the redesignation under the 8-hour ozone standard. Therefore, permits in Lake County are no longer subject to review pursuant to Emission Offset, 326 IAC 2-3.
Basic nonattainment designation effective federally April 5, 2005, for $PM_{2.5}$.

(a) Ozone Standards
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. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Lake County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(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 New Source Review Rule for $PM_{2.5}$ promulgated on May 8th, 2008, and effective on July 15th 2008. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Lake County has been classified as attainment or unclassifiable for PM_{10}, SO_2, NO_2, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as a petroleum storage and transfer unit with a total storage capapcity 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, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit 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:

Table 2: Source Status PTE

Pollutant	**Emissions** (ton/yr)
CO	>100
NO_X	<100
PM	<100
PM_{10}	<100
$PM_{2.5}$	<100
SO_2	<100
VOC	>100
GHGs	<100,000
Single HAP	<10
Total HAP	<25

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a 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) Emissions of GHGs are less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year.

(c) This existing stationary source is minor for NSR Nonattainment for $PM_{2.5}$ because the $PM_{2.5}$ emissions are less than 100 tons per year.

(d) 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)

(e) These emissions are based upon Part 70 Operating Permit Renewal No. T 089-26500-00320, issued on January 22, 2009, and Part 70 Operating Permit Renewal No. T 089-25957-00326, issued on October 21, 2008.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Buckeye Terminals, LLC on June 29, 2011, to install a propylene storage and loading facility, and to consolidate the operating permits for the Buckeye Terminals, LLC, located at 400 East Columbus Drive, in East Chicago, Indiana, and the Buckeye Terminals, LLC, located at 3823 Indianapolis Blvd, in East Chicago, Indiana. The permit changes are detailed in the Proposed Changes section of this Technical Support Document.

The following is a list of the proposed emission units and pollution control devices:

(a) Two (2) 21,000 barrel storage pressure spheres, using a portable vapor control unit (VCU), or equivalent, to control point source VOC emissions.

(b) Twelve (12) stand propylene Loading rack, using a truck loading vapor control unit (VCU), or equivalent, to control point source VOC emissions.

(c) Fugitive VOC emissions from propylene storage and loading operations.

Incorporation of these new emission units and the applicable requirements are Title I changes.

Enforcement Issues

There are no pending enforcement actions.

Stack Summary

There are no new or modified stacks due to this modification.

Emission Calculations

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

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.

Table 3: PTE Before Controls of the Modification

Pollutant	**Potential To Emit** (ton/yr)
CO	19.77
NO_X	3.63
PM	0.85
PM_{10}	0.85
$PM_{2.5}$	0.85
SO_2	0.0053
VOC	1,267.25

This source modification is subject to 326 IAC 2-7-10.5(f)(4) because the potential to emit VOC is greater than twenty-five (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 it involves case-by-case determination of emission limitations and standards and involves significant changes to existing monitoring, record keeping and reporting requirements.

Permit Level Determination – PSD and Nonattainment New Source Review

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 modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Table 4: Potential to Emit after Issuance (ton/yr)

Process / Emission Unit	**CO**	**NO_X**	**PM**	**PM_{10}**	**$PM_{2.5}$***	**SO_2**	**VOC**	**CO_2e**
Sphere 1 - full ventdown	0	0	0	0	0	0	1.38	0
Sphere 1 - depressure	0	0	0	0	0	0	2.39	0

Table 4: Potential to Emit after Issuance (ton/yr)								
Process / Emission Unit	**CO**	**NO_X**	**PM**	**PM_{10}**	**$PM_{2.5}$***	**SO_2**	**VOC**	**CO_2e**
Sphere 2 - full ventdown	0	0	0	0	0	0	1.38	0
Sphere 2 - depressure	0	0	0	0	0	0	2.39	0
Rail Loading Rack	0	0	0	0	0	0	16.22	0
Line Purging (both halves)	0	0	0	0	0	0	0.35	0
Propylene Disconnect Calculation	0	0	0	0	0	0	0.16	0
Emissions from Equipment Leaks	0	0	0	0	0	0	2.80	0
Emissions Resulting from Control Programs	19.77	3.63	0.85	0.85	0.85	0.0053	0	17,764
Total for Modification	**19.77**	**3.63**	**0.85**	**0.85**	**0.85**	**0.0053**	**27.07**	**17,764**
PSD Significant Level	100	40	25	15	NA	40	40	75,000
Nonattainment New Source Review Major Source Threshold	NA	NA	NA	NA	100	NA	NA	NA

*$PM_{2.5}$ listed is direct $PM_{2.5}$.

This modification to an existing major stationary source is not major for PSD because the emissions increases are less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

This modification to an existing minor stationary source for Nonattainment NSR is not major for Nonattainment NSR because the emissions increase of direct $PM_{2.5}$ is less than the Nonattainment NSR major source threshold. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment NSR requirements do not apply.

Federal Rule Applicability Determination

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

(a) New Source Performance Standards (NSPS)
The following units are subject to the 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):

PROPYLENE STORAGE AND LOADING FACILITY

Two (2) 21,000 barrel storage pressure spheres, using a portable vapor control unit (VCU), or equivalent, to control point source VOC emissions.

The propylene storage spheres are subject to the following portions of 40 CFR 60, Subpart Kb, which is incorporated by reference as 326 IAC 12.

- 40 CFR 60.110b;

- 40 CFR 60.111b;
- 40 CFR 60.112b;
- 40 CFR 60.113b;
- 40 CFR 60.114b;
- 40 CFR 60.115b;
- 40 CFR 60.116b;
- 40 CFR 60.117b.

The requirements of 40 CFR 60, Subpart Kb, were previously included in the operating permit for tanks 134, 135, and 151, at the INDIANAPOLIS BOULEVARD TERMINAL, and they are newly added requirements for the propylene storage spheres at the PROPYLENE STORAGE AND LOADING FACILITY.

Incorporation of these requirements is a Title I change.

(b) Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAPs)
There are no Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 61) included in the permit for this proposed modification.

(c) Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAPs)
The emission units at the EAST COLUMBUS DRIVE TERMINAL and the INDIANAPOLIS BOULEVARD TERMINAL are subject to the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities (40 CFR 63, Subpart BBBBBB). These emission units are subject to the following portions of 40 CFR 63, Subpart BBBBBB.

- 40 CFR 63.11080
- 40 CFR 63.11081
- 40 CFR 63.11082
- 40 CFR 63.11083
- 40 CFR 63.11086
- 40 CFR 63.11087
- 40 CFR 63.11088
- 40 CFR 63.11089
- 40 CFR 63.11092
- 40 CFR 63.11093
- 40 CFR 63.11094
- 40 CFR 63.11095
- 40 CFR 63.11098
- 40 CFR 63.11099
- 40 CFR 63.11100
- Table 1 to Subpart BBBBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Storage Tanks
- Table 2 to Subpart BBBBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Loading Racks
- Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions

The requirements of 40 CFR 63, Subpart BBBBBB, were previously included in the operating permit for the emission units at the EAST COLUMBUS DRIVE TERMINAL, and they are newly added requirements for the emission units at the INDIANAPOLIS BOULEVARD TERMINAL.

(d) Compliance Assurance Monitoring (CAM)
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 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 potential to emit VOC emissions before controls from line purging are less than the major source threshold; therefore, the requirements of 40 CFR 64 (CAM) are not applicable to line purging.

The VOC emissions from equipment leaks are fugitive ; therefore, the requirements of 40 CFR 64 (CAM) are not applicable to equipment leaks.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

Table 5: CAM Applicability Analysis

Emission Unit	**Control Device Used**	**Emission Limitation / Standard** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
Sphere 1 - VOC	portable VCU	Y	188.10	3.77	100	Y	N
Sphere 2 - VOC	portable VCU	Y	188.10	3.77	100	Y	N
Rail Loading Rack - VOC	truck mounted VCU	Y	811.20	16.22	100	Y	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to Sphere 1, Sphere 2, and the Rail Loading Rack for VOC emissions upon issuance of the Title V Renewal. A CAM plan must be submitted as part of the Renewal application.

State Rule Applicability Determination

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

326 IAC 2-1.1-5 (Non-attainment New Source Review)
Lake County has been designated as nonattainment for $PM_{2.5}$. Nonattainment New Source Review applicability is discussed under the Permit Level Determination – PSD and Nonattainment New Source Review section.

326 IAC 2-2 (PSD)
Since the unrestricted potential to emit of this modification is greater than forty (40) tons of VOC per year, this source has elected to limit the potential to emit of this modification as follows:

(a) The VOC emissions from full ventdown events (for each sphere) shall not exceed 1.38 tons per twelve month period with compliance determined at the end of each month

(b) The VOC emissions from depressurization events (for each sphere) shall not exceed 2.39 tons per twelve month period with compliance determined at the end of each month.

(c) The VOC emissions from the propylene loading rack shall not exceed 16.22 tons per twelve month period with compliance determined at the end of each month.

(d) The VOC emissions from line purging shall not exceed 0.35 tons per twelve month period with compliance determined at the end of each month

(e) The VOC emissions from equipment leaks shall not exceed 2.80 tons per twelve month period with compliance determined at the end of each month. The equipment leaks shall be limited by conducting a Leak Detection and Repair (LDAR) Program as specified in Attachment C.

Compliance with these emission limits, along with the unrestricted potential emissions from propylene disconnect, will limit the potential to emit from this modification to less than forty (40) tons per year of VOC. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable to this modification approved under Source Modification No.: 089-30669-00320.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of loading and unloading of the spheres and railcars 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 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.

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

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

326 IAC 6.8 PM Limitations for Lake County
This source is not subject to 326 IAC 6.8 because, eventhough it is located in Lake County, its PM PTE is less than 100 tons/year and actual emissions are less than 10 tons/year.

326 IAC 6-4 (Fugitive Dust Emissions)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) though (4) are violated pursuant to 326 IAC 6-4-5(c). Observations of visible emissions crossing the property line of the source at or near ground level must be made by a qualified representative of IDEM.

326 IAC 8-1-6 (New facilities; general reduction requirements)
Since the unrestricted potential to emit VOC from each sphere is greater than twenty-five (25) tons of VOC per year, an analysis of the best available control technology (BACT) for VOC reductions was performed to establish the requirements for reducing VOC emissions from these emission units. This analysis is included as Appendix B to this Technical Support Document. The following restrictions have been established as BACT:

(a) The Permittee shall use a vapor combustion unit (or equivalent) to control the VOC emissions from the propylene storage spheres

(b) The VOC emissions from full ventdown events (for each sphere) shall not exceed 1.38 tons per twelve month period with compliance determined at the end of each month.

(c) The VOC emissions from depressurization events (for each sphere) shall not exceed 2.39 tons per twelve month period with compliance determined at the end of each month.

(d) The VOC emissions from Tank Breathing losses (for each sphere) shall not exceed 1.0 tons per twelve month period with compliance determined at the end of each month.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)
This source is located in Lake County, and each propylene storage sphere has a capacity greater than 39,000 gallons and true vapor pressure greater than 1.52 psi. Since the spheres cannot be classified as either external fixed roof tanks or external floating roof tanks, the requirements of 326 IAC 8-4-3 are not applicable to the propylene storage spheres.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake/Porter/Clark/Floyd Counties)
This source is located in Lake County and has the potential to emit VOC that is greater than twenty-five (25) tons of VOC per year. However, pursuant to 326 IAC 8-7-2(a)(3)(Q), the VOC emissions from volatile organic liquids storage should not be counted when determining the applicability of 326 IAC 8-7.

For this modification, only the propylene loading rack is subject to the requirements in 326 IAC 8-7.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)
This source is located in Lake County and has stationary vessels used to store volatile organic liquid (VOL). However, pursuant to 326 IAC 8-9-2(8), this rule does not apply to stationary vessels that are subject to any provision of 40 CFR 60, Subpart Kb, New Source Performance Standard for Volatile Organic Liquid Storage.

326 IAC 9 (Carbon Monoxide Emission Limits)
Pursuant to 326 IAC 9 (Carbon Monoxide Emission Limits), the source is not subject to this rule because it commenced operation prior to March 21, 1972.

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.

Compliance Determination Requirements
The Compliance Determination Requirements applicable to this modification are as follows:

Table 6: Summary of Testing Requirements

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing	Limit or Requirement
Sphere 1	VCU	within 180 days of operation	VOC emission rates for full ventdown and depressurization (lb/event)	every 5 years (*alternating Spheres each test*)	326 IAC 2-2 326 IAC 8-1-6
Sphere 2	VCU				
Rail Loading Rack	VCU	within 180 days of operation	VOC emission rate (lb/event) 98% control	every 5 years	326 IAC 2-2 326 IAC 8-7

In order to ensure compliance with the 326 IAC 2-2 PSD Minor Limits and 326 IAC 8-1-6 BACT limits, the Permittee shall use vapor control units to control VOC emissions.

Compliance Monitoring Requirements
The compliance monitoring requirements applicable to this modification are as follows:

Table 7: Summary of Compliance Monitoring Requirements

Control Devices	Parameter	Frequency	Range	Excursions and Exceedances
VCUs	Pilot Flame	continuous	present/not present	Response steps
	Temperature	continuous, when operating	based on valid compliance demonstration	Response steps

These monitoring conditions are necessary because the vapor control units must operate properly to ensure compliance with the PSD Minor Limits pursuant to 326 IAC 2-2 (PSD) and 326 IAC 8-1-6 (VOC BACT limits, and 326 IAC 2-7 (Part 70).

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit Renewal No. T 089-26500-00320. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Change No. 1 Condition A.1 is updated as follows:

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 pipeline breakout tank farm **and bulk liquid fuel storage and transfer terminal**.

Source Address:	~~3821~~ **3823** Indianapolis Boulevard, East Chicago, Indiana 46312
~~Mailing Address:~~	~~5 TEK Park, 9999 Hamilton Blvd, Breinigsville, PA 18031~~
General Source Phone Number:	~~(610) 904-4491~~ **219-397-6666**
SIC Code:	~~4613~~ **5171**
County Location:	Lake
Source Location Status:	~~Nonattainment~~ **Attainment** for **8-hour** ozone **standard** Nonattainment for ~~particulate matter less than 2.5 microns (~~$PM_{2.5}$~~)~~ **standard** Attainment for all other criteria pollutants
Source Status:	Part 70 **Operating** Permit Program Major Source, under ~~Emission Offset~~ **PSD** Rules **Minor Source, under Nonattainment NSR** Minor Source, Section 112 of the Clean Air Act ~~Minor Source, under PSD and Nonattainment NSR~~ 1 of 28 Source Categories

Change No. 2 Condition A.2 is updated as follows to include the new equipment for the PROPYLENE STORAGE AND LOADING FACILITY and the existing equipment for the EAST COLUMBUS DRIVE TERMINAL.

A.2 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:

INDIANAPOLIS BOULEVARD TERMINAL

(a) Ten (10) vertical domed internal floating roof storage tanks used to store petroleum products, constructed between 1935 and 1957, each tank is equipped with a primary and secondary seal:

(1) Tank 106 has a maximum design capacity of 1,054,484 gallons;

(2) Tank 107 has a maximum design capacity of 1,031,884 gallons;

(3) Tank 108 has a maximum design capacity of 1,054,783 gallons;

(4) Tank 112 has a maximum design capacity of 2,075,798 gallons;

(5) Tank 120 has a maximum design capacity of 2,853,291 gallons;

(6) Tank 123 has a maximum design capacity of 2,818,841 gallons;

(7) Tank 130 has a maximum design capacity of 3,915,368 gallons;

(8) Tank 131 has a maximum design capacity of 3,915,368 gallons;

(9) Tank 132 has a maximum design capacity of 3,915,368 gallons;

(10) Tank 133 has a maximum design capacity of 3,915,368 gallons.

(b) Two (2) internal floating roof above ground storage tanks (Tank 134 and Tank 135) used to store petroleum products constructed July 17, 1998. Each tank is equipped with a primary and secondary seal. Each tank has a maximum design capacity of 5,040,000 gallons.

(c) One (1) existing fixed roof tank, constructed in 1941 and modified July 17, 1998, into a new internal floating roof above ground storage tank (Tank 151) used to store petroleum products. The tank is equipped with a primary and secondary seal, and has a maximum design capacity of 5,040,000 gallons.

(d) One (1) vertical fixed roof cone storage tank (Tank 150), constructed in 1941, used to store petroleum distillates with a maximum true vapor pressure of 0.019 psia at 68°F. The tank has a maximum design capacity of 3,382,609 gallons.

PROPYLENE STORAGE AND LOADING FACILITY

(e) Two (2) 21,000 barrel storage pressure spheres, using a portable vapor control unit (VCU), or equivalent, to control point source VOC emissions.

(f) Twelve (12) stand propylene Loading rack, using a truck loading vapor control unit (VCU), or equivalent, to control point source VOC emissions.

(g) Fugitive VOC emissions from propylene storage and loading operations.

EAST COLUMBUS DRIVE TERMINAL

(h) One (1) 813,624 gallon external floating roof gasoline storage tank, identified as T-201, with primary and secondary seals, constructed in 1939.

(i) One (1) 653,100 gallon external floating roof gasoline storage tank, identified as T-202, with primary and secondary seals, constructed in 1939.

(j) Two (2) 2,956,380 gallon gasoline storage tanks, identified as T-801 and T-802, both with primary and secondary seals, constructed in 1939. Tank T-801 is an external floating roof tank. Tank T-802 is a domed internal floating roof tank, dome added in 2010.

(k) One (1) 2,759,316 gallon external floating roof gasoline storage tank, identified as T-803, with primary and secondary seals, constructed in 1939.

(l) One (1) 2,853,732 gallon external floating roof gasoline storage tank, identified as T-804, with primary and secondary seals, constructed in 1939.

(m) One (1) 3,055,542 gallon domed internal floating roof gasoline/transmix storage tank, identified as T-805, with primary and secondary seals, constructed in 1939, dome added in 2010.

(n) One (1) 2,843,274 gallon external floating roof gasoline storage tank, identified as T-806, with primary and secondary seals, constructed in 1939.

(o) One (1) 616,938 gallon internal floating roof gasoline storage tank, identified as T-204, with a primary seal, constructed in 1939.

(p) One (1) 630,000 gallon internal floating roof gasoline storage tank, identified as T-207, with a primary seal, constructed in 1946.

(q) One (1) 696,695 gallon internal floating roof gasoline/transmix (a gasoline/distillate oil mixture) storage tank, identified as T-209, with a primary seal, constructed in 1946.

(r) One (1) 739,830 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-208, constructed in 1946.

(s) One (1) 964,824 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-240, constructed in 1968.

(t) One (1) 8,633,646 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2101, constructed in 1955.

(u) One (1) 8,618,190 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2102, constructed in 1955.

(v) One (1) 10,847,382 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2601, originally constructed in 1960 and later modified in 2002.

(w) One (1) 10,835,328 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2602, originally constructed in 1960 and later modified in 2002.

(x) Two (2) 635,040 gallon vertical fixed roof distillate/kerosene storage tanks, identified as T-205 and T-206, constructed in 1939.

(y) One (1) 3,410,988 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-807, constructed in 1939.

(z) Two (2) 15,204 gallon horizontal fixed roof gasoline additive storage tanks, identified as T-1501 and T-1502, both constructed in 1940.

(aa) One (1) 1,465,002 gallon domed internal floating roof gasoline storage tank, identified as T-401, with a primary seal, constructed in 1952.

(bb) Two (2) 2,857,890 gallon domed internal floating roof gasoline storage tanks, identified as T-809 and T-810, each with a primary seal, both constructed in 1952.

(cc) One (1) 2,841,552 gallon domed internal floating roof gasoline/transmix storage tank, identified as T-808, with a primary and seal, constructed in 1952.

(dd) Gasoline tank cleaning operation, identified as TNKCLN GAS.

(ee) One (1) tank truck loading rack (identified as RACK) used to load gasoline, distillate, and ethanol, with a maximum loading capacity of 324,000 gallons of liquid per hour, constructed in 1940 and later reconstructed in 1979, controlled by one (1) natural gas fired Vapor Combustion Unit (VCU), rated at maximum heat input rate of 1.6 MMBtu/hr, installed in 1997, and exhausting through one (1) stack identified as VCU.

(ff) One (1) VOC fractionator for separating gasoline and fuel oil of transmix tanks, identified as FRACT, venting 125 cubic feet of VOC vapor per minute during intermittent pressure relief with venting gas being controlled by VCU, and equipped with a 7.0 million British thermal units per hour natural gas fired reboiler;

(gg) VOC emissions from the following operations:

(1) Fugitive VOC emissions from the loading rack, identified as FLRACK.

(2) Filter change out service for gasoline tanks, identified as FILT1.

(3) Meter proving service, identified as PROVE.

(hh) A wastewater handling and treatment system, capable of treating 420,000 gallons of contaminated water per hour, including the following activities:

(1) Five (5) sumps for wastewater from tank water draw and roof drains;

(2) One (1) sump for wastewater from loading rack;

(3) One (1) 379,638 gallon internal floating roof waste water/gasoline storage tank, identified as T-103, constructed in 1939;

(4) One (1) dissolved air floatation oil/water separator, identified as TS DAF, with a maximum capacity of 12,000 gallons per hour;

(5) One (1) oil/water separator, identified as TS OWS/Separator No. 1, with a maximum capacity of 11,000 gallons per hour; and

(6) One (1) air stripper capable of processing a maximum of 23,000 gallons of water per hour.

Change No. 3 Condition A.3 is updated as follows to include the existing insignificant equipment for the EAST COLUMBUS DRIVE TERMINAL.

A.3 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):

INDIANAPOLIS BOULEVARD TERMINAL

(a) Five (5) vertical fixed roof cone storage tanks used to store petroleum distillates with a maximum true vapor pressure of 0.019 psia at 68°F, constructed in 1941 [326 IAC 8-9]:

(1) Tank 103 has a maximum design capacity of 836,368 gallons;

(2) Tank 122 has a maximum design capacity of 2,853,291 gallons;

(3) Tank 140 has a maximum design capacity of 3,382,609 gallons;

(4) Tank 141 has a maximum design capacity of 3,382,609 gallons;

(5) Tank 142 has a maximum design capacity of 3,382,609 gallons.

(b) Two (2) horizontal distillate additive tanks, constructed in 2005:

(1) Tank AT-01 has a maximum design capacity of 12,000 gallons;

(2) Tank AT-02 has a maximum design capacity of 12,000 gallons.

ENTIRE SITE

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

Change No. 4 Certain Conditions of Section B are updated as follows to incorporate recent changes made to the standard conditions of the Operating permit.

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,~~ **The Part 70 Operating Permit**, T089-26500-00320, 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) ...

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) ...

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

(a) ~~Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance~~**A** certification ~~submitted shall contain~~**required by this permit meets the requirements of 326 IAC 2-7-6(1) if:**

(i) **it contains a** certification by ~~the~~**a** "responsible official" ~~of truth, accuracy,~~**as defined by 326 IAC 2-7-1(34),** and ~~completeness. This~~

(ii) **the** certification ~~shall state~~**states** 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 Permittee may use** the attached Certification Form**, or its equivalent**, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) **A** ~~The~~ "responsible official" is defined at 326 IAC 2-7-1(34).

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

(a) The Permittee shall annually submit a compliance certification report ~~that~~**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. ~~The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent~~ **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~~**April 15** of each year to:

Indiana Department of Environmental Management
Compliance **and Enforcement** 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) ...

(c) The annual compliance certification report shall include the following:

(1) (5) ...

The submittal by the Permittee does require ~~the~~**a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "responsible official" as defined by 326 IAC 2-7-1(34).

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

(a) **A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:**

(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 ~~(6)]~~**the inspection schedule for said items or conditions; and**

~~(a)~~

(3) **Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.**

The Permittee shall implement the PMPs.

(b) **If required by specific condition(s) in Section D of this permit, where no PMP was previously required,** the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) ~~within~~**no later than** ninety (90) days after issuance of this permit ~~for the source as described in 326 IAC 1-6-3. At a minimum, the PMPs shall include~~**or ninety (90) days after initial start-up, whichever is later, including the following information on each facility**:

(1) - (3) ...

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The PMP extension notification does not require ~~the~~**a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "responsible official" as defined by 326 IAC 2-7-1(34).

~~(b~~**The Permittee shall implement the PMPs.**

(c) 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 **and their submittal** do not require ~~the~~**a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "responsible official" as defined by 326 IAC 2-7-1(34).

(~~c~~**d**) 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) - (3) ...

(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~~**and Enforcement Branch**), or

Telephone Number: 317-233-0178 (ask for **Office of Air Quality,** Compliance ~~Section~~**and Enforcement Branch**)
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 **and Enforcement** 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) - (C) ...

The notification which shall be submitted by the Permittee does not require ~~the~~**a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "responsible official" as defined by 326 IAC 2-7-1(34).

(6) ...

(c) - (g) ...

~~(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.~~

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

(a) ...

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

(b) - (g) ...

~~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~~**B.15** 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~~**a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "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) - (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(~~c~~**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~~**16** 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~~**a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "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~~**Permit Administration and Support Section**, 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**, pursuant to 326 IAC 2-7-4(a)(2)(D),** in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.~~18~~**17** Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] ~~[40 CFR 72]~~

(a) Permit amendments and ~~modification~~**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~~**Permit Administration and Support Section**, 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) ...

B.~~19~~**18** 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 **or notice** 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) ...

B.~~20~~**19** Operational Flexibility [326 IAC 2-7-10.5] [326 IAC 2-7-20]

(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) - (2) ...

(3) The changes do not result in emissions ~~that~~**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~~**Permit Administration and Support Section**, 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 ~~which document~~, 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) - (4) ...

The notification ~~that~~**which** shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require ~~the~~**a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
....

(d) Alternative Operating Scenarios [326 IAC 2-7-20(~~c~~**d**)]
...

(e) ...

B.~~21~~**20** 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 2-3.

B.~~23~~**22** Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) ...

(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~~**Permit Administration and Support Section**, Office of Air Quality
100 North Senate Avenue
MC 61-53~~,~~ IGCN 1003
Indianapolis, Indiana 46204-2251
~~The~~
Any such application ~~which shall be submitted by the Permittee~~ does require ~~the~~**a** certification ~~by the~~**that meets the requirements of 326 IAC 2-7-6(1) by a** "responsible official" as defined by 326 IAC 2-7-1(34).

(c) ...

Change No. 5 Certain Conditions of Section C are updated as follows to incorporate recent changes made to the standard conditions of the Operating permit.

C.2 Opacity [326 IAC 5-1~~]~~**]**

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

(a) - (b) ...

C.3 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. ~~326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.~~

C.4 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~~**or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit**.

~~C.6 Stack Height [326 IAC 1-7]~~

~~The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.~~

C.6 Fugitive Dust Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on October 7, 2002.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR ~~Part 61, Subpart M~~]**61, Subpart M]**

(a) - (c) ...

(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~~**Compliance and Enforcement Branch**, 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 **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
...

(f) Demolition and Renovation
...

(g) Indiana ~~Accredited~~**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 ~~Accredited~~**Licensed** Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana ~~Accredited~~**Licensed** Asbestos inspector is not federally enforceable.

C.8 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) **For performance testing required by this permit,** a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance ~~Data Section~~**and Enforcement Branch**, 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 **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "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 **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "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.

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1~~)]~~**)]**

Unless otherwise specified in this permit, **for** 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~~**allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such** monitoring ~~related to that equipment.~~**.** If due to circumstances beyond ~~its~~**the Permittee's** control, ~~that~~**any monitoring** equipment **required by this permit** cannot be installed and operated ~~within~~**no later than** ninety (90) days **after permit issuance or the date of initial startup, whichever is later**, 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 **and Enforcement** 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~~**a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "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.11 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.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

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

~~(a)~~ Upon detecting an excursion **where a response step is required by the D Section** or **an** exceedance~~,~~ **of a limitation in this permit:**

(a) The Permittee shall **take reasonable response steps to** 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 **excess** 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~~**. The response may include, but is** not limited to, the following:

(1) initial inspection and evaluation**;**

(2) recording that operations returned **or are returning** 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.~~**normal or usual manner of operation.**

(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:~~**record the reasonable response steps taken.**

~~(1) monitoring data;~~

~~(2) monitor performance data, if applicable; and~~

~~(3) corrective actions taken.~~

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

(a) When the results of a stack test performed in conformance with Section C ~~–~~**-** Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall ~~take appropriate response actions. The Permittee shall~~ submit a description of ~~these~~**its** response actions to IDEM, OAQ, ~~within thirty (30~~**no later than seventy-five (75**) days ~~of receipt~~**after the date** 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~~**no later than** one hundred ~~twenty (120~~**eighty (180**) days ~~of receipt of~~**after** the ~~original~~**date of the** test ~~results~~. Should the Permittee demonstrate to IDEM, OAQ**,** that retesting in one hundred ~~twenty (120~~**eighty (180**) 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~~**a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "responsible official" as defined by 326 IAC 2-7-1(34).

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

Pursuant to 326 IAC 2-6-3(a) ~~(a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b~~ (1), the Permittee shall submit by July 1 **of each year** 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~~**a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

(a) ...

(b) Unless otherwise specified in this permit, **for** all record keeping requirements not already legally required**, the Permittee** shall be ~~implemented within~~**allowed up to** ninety (90) days **from the date** of permit issuance **or the date of initial start-up, whichever is later, to begin such record keeping**.

(c) - (d) ...

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

(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~~.~~ **except that 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.** This report shall be submitted ~~within~~**not later than** thirty (30) days ~~of~~ **after** the end of the reporting period.~~-~~ The Quarterly Deviation and Compliance Monitoring Report shall include ~~the~~**a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "responsible official" as defined by 326 IAC 2-7-1(34). **A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.**

(b) The **address for** report ~~required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to~~**submittal is**:

Indiana Department of Environmental Management
Compliance ~~Data Section~~**and Enforcement Branch**, 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) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.~~ 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~~**e**) 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 other than an Electric Utility Steam Generating~~ 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~~**f**) The report for ~~a~~ project at an existing emissions~~ unit other than Electric Utility Steam Generating~~ 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~~**and Enforcement Branch**, Office of Air Quality
100 North Senate Avenue
MC 61-53~~,~~ IGCN 1003
Indianapolis, Indiana 46204-2251

(~~h~~**g**) 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.

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

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the **applicable** 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.~~

Change No. 6 Section D.5 is added to incorporate the requirements that are applicable to the PROPYLENE STORAGE AND LOADING FACILITY. Incorporation of these requirements is a Title I change.

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: PROPYLENE STORAGE AND LOADING FACILITY

(e) Two (2) 21,000 barrel storage pressure spheres. A portable vapor control unit (VCU), or equivalent, will be used to control point source VOC emissions.

(f) Twelve (12) stand propylene loading rack. A truck loading vapor control unit (VCU), or

equivalent, will be used to control point source VOC emissions.

(g) Fugitive VOC emissions from propylene storage and loading operations.

(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.5.1 PSD AND VOC BACT Minor Limits [326 IAC 2-2]

(a) The VOC emissions from full ventdown events (for each sphere) shall not exceed 1.38 tons per twelve month period with compliance determined at the end of each month,

(b) The VOC emissions from depressurization events (for each sphere) shall not exceed 2.39 tons per twelve month period with compliance determined at the end of each month.

(c) The VOC emissions from the propylene loading rack shall not exceed 16.22 tons per twelve month period with compliance determined at the end of each month.

(d) The VOC emissions from line purging shall not exceed 0.35 tons per twelve month period with compliance determined at the end of each month

(e) The VOC emissions from equipment leaks shall not exceed 2.80 tons per twelve month period with compliance determined at the end of each month. The equipment leaks shall be limited by conducting a Leak Detection and Repair (LDAR) Program as specified in Attachment C.

Compliance with these emission limits, along with the unrestricted potential emissions from propylene disconnect, will limit the potential to emit from this modification to less than forty (40) tons per year of VOC. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable to this modification approved under Source Modification No.: 089-30669-00320.

D.5.2 VOC BACT Limits [326 IAC 8-1-6]

(a) The Permittee shall use a vapor combustion unit (or equivalent) to control the VOC emissions from the propylene storage spheres

(b) The VOC emissions from full ventdown events (for each sphere) shall not exceed 1.38 tons per twelve month period with compliance determined at the end of each month.

(c) The VOC emissions from depressurization events (for each sphere) shall not exceed 2.39 tons per twelve month period with compliance determined at the end of each month.

(d) The VOC emissions from Tank Breathing losses (for each sphere) shall not exceed 1.0 tons per twelve month period with compliance determined at the end of each month.

D.5.3 Specific VOC Reduction Requirements for Lake/Porter/Clark/Floyd Counties [326 IAC 8-7-3]

Pursuant to 326 IAC 8-7-3, the Permittee shall achieve an overall VOC reduction from the propylene loading rack of at least ninety-eight percent (98%) by the documented reduction in use of VOC containing materials or install an add-on control system that achieves an overall control efficiency of ninety-eight percent (98%).

D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for the each sphere, the railcar loading rack, line purging, and equipment leaks and the vapor control units. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

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

D.5.5 Vapor Combustion Unit (VCU) Operation [326 IAC 2-7-6(1),(6)]

(a) The Vapor Combustion Units (VCUs) for VOC control shall be in operation at all times, when propylene is being loaded or unloaded from the spheres or railcars, and during all line purging events.

(b) Pursuant to 326 IAC 8-7-9(1-2), the control system for the propylene loading rack shall be operated and maintained according to the manufacturer's recommendations but may be modified based on the results of the initial or subsequent compliance test or upon the written request of IDEM, OAQ, and the operating and maintenance procedures shall be followed upon startup.

D.5.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate the compliance status with Conditions D.5.1(a) and D.5.2(a) and (b), the Permittee shall perform testing to verify the VOC emissions from vapor combustion unit (VCU) utilizing methods as approved by the Commissioner during full ventdown no later than the first full ventdown event.

(b) In order to demonstrate the compliance status with Conditions D.5.1(b) and (d) and D.5.2(a) and (c), the Permittee shall perform testing to verify the VOC emissions from vapor combustion unit (VCU) utilizing methods as approved by the Commissioner during depressurization and ventdown periods no later than the secon depressurization or ventdown event.

(c) Within one hundred eighty (180) days of operation of the propylene loading rack, and in order to demonstrate the compliance status with Conditions D.5.1(c), the Permittee shall perform testing to verify the VOC emissions from vapor combustion unit (VCU) utilizing methods as approved by the Commissioner during depressurization and ventdown periods.

(d) Testing required by paragraphs (a), (b), and (c) of this condition shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

(e) Pursuant to 326 IAC 8-7-9(4) and in order to demonstrate compliance with Condition D.5.3, the Permittee shall test the control system for the propylene loading rack according to the following schedule and under the following situations:

(1) An initial compliance test shall be conducted within ninety (90) days of startup, of the propylene loading rack or upon written request by IDEM, OAQ, or the U.S. EPA, testing shall be repeated and every two (2) years after the date of the initial test.

(2) A compliance test shall also be conducted whenever the owner or operator chooses to operate a control system under conditions different from those that were in place at the time of the previous test.

(3) If the owner or operator chooses to change the method of compliance with 326 IAC 8-7-3, a compliance test shall be performed within three (3) months of the change.

Pursuant to 326 IAC 8-7-9(5), all compliance tests shall be conducted according to a protocol approved by the department at least thirty (30) days before the test. The protocol shall contain, at a minimum, the following information:

(A) Test procedures.

(B) Operating and control system parameters.

(C) Type of VOC containing process material being used.

(D) The process and control system parameters which will be monitored during the test.

D.5.7 Volatile Organic Compounds (VOC)

(a) In order to ensure compliance with the VOC emission limitations in Conditions D.5.1(a), D.5.1(b), D.5.2(a), and D.5.2(b), and , the Permittee shall use the following methodology to calculate VOC emissions from the Propylene Storage Spheres (Sphere 1 and Sphere 2)

$E_S = (M_S \times EV_S) \times (1.0 - VCU\ DRE) / 2000$ **lb/ton**

Where E_S **= VOC Emissions, tons/month**
M_S **= Mass removed, lb/event**
= 137,563 lb/ sphere full ventdown event
= 29,830 lb/ sphere pressure bleedoff event
EV_S **= Number of Events, events/month**
VCU DRE = VOC Destruction Efficiency, %, as determined during the most recent valid compliance demonstration

(b) In order to ensure compliance with the VOC emission limitations in Condition D.5.1(c), the Permittee shall use the following methodology to calculate VOC emissions from the Railcar Loading Rack

$E_R = (M_R \times EV_R) \times (1.0 - VCU\ DRE) / 2000$ **lb/ton**

Where E_R = VOC Emissions, tons/month
M_R = Mass removed, lb/event
EV_R = Number of Events, events/month
= 2,046 lb/ railcar bleedoff event
VCU DRE = VOC Destruction Efficiency, %, as determined during the most recent valid compliance demonstration

(c) In order to ensure compliance with the VOC emission limitations in Condition D.5.1(d), the Permittee shall use the following methodology to calculate VOC emissions from the Line Purging

$$E_P = (M_P \times EV_P) \times (1.0 - \text{VCU DRE}) / 2000 \text{ lb/ton}$$

Where E_P = VOC Emissions, tons/month
M_P = Mass removed, lb/event
= 8,774 lb/ line purging event
EV_P = Number of Events, events/month
VCU DRE = VOC Destruction Efficiency, %, as determined during the most recent valid compliance demonstration

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

D.5.8 Vapor Combustion Unit Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) The Permittee shall install and maintain a monitor to detect the presence of a pilot flame. The presence of a pilot flame shall be monitored using a heat-sensing device at all times when the vapors are being vented to the VCU. The monitor shall be equipped with a computer system which will not allow for the propylene loading or unloading operations from the spheres or railcars, and line purging events when the presence of a flame is not detected during periods when propylene vapors are being vented to the VCU.

(b) Pursuant to 326 IAC 8-7-10(a)(1), the Permittee shall install and utilize a temperature monitoring device capable of continuously recording the temperature of the gas stream in the combustion zone of the incinerator shall be used for controlling VOC emissions from the propylene loading rack . The temperature monitoring device shall have an accuracy of one percent (1%) of the temperature being measured in degrees centigrade or plus or minus five-tenths degree Centigrade (+/- 0.5 °C), whichever is greater.

D.5.9 Monthly Visible Checks for Liquid Leaks

(a) Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling propylene shall be inspected during the loading and unloading of spheres and railcars and line purging events for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.

(b) If abnormal leakage is observed, the Permittee shall take reasonable response steps. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligations with regard to responding to the reasonable response steps required by this condition.

(c) All checks for visible liquid leaks made to comply with this condition shall be conducted in accordance with Section C – Compliance Monitoring.

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

D.5.10 Record Keeping Requirements

(a) To document the compliance status with Conditions D.5.1, D.5.2, and D.5.7, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.5.1 and D.5.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The mass of VOC removed during full sphere ventdown, sphere pressure bleedoff, railcar bleedoff, and line purging.

(2) The number of ventdown or flaring events (full sphere ventdown, sphere pressure bleedoff, railcar bleedoff, and line purging).

(3) The removal efficiency of each vapor control unit; and

(4) Records of Leak Detection and Repair activities, including

(1) the number of leaking component of each type,

(2) the duration of the leak, and

(3) the methods used for detection and repair.

(b) To document the compliance status with Condition D.5.9, the Permittee shall maintain records of monthly checks for liquid leaks of the Loading Rack and VCU stack exhausts.

(c) Pursuant to 326 IAC 8-7-9(3) and to document the compliance status with Condition D.5.5(b), the Permittee shall maintain a copy of the operating and maintenance procedures for the vapor control unit used to control VOC emissions from the propylene loading rack in a convenient location at the source property and as close to the control system as possible for the reference by plant personnel and IDEM, OAQ, inspectors.

(d) Pursuant to 326 IAC 8-7-10(b) and to document the compliance status with Condition D.5.8(b), the Permittee shall maintain the following records for the vapor control unit used to control VOC emissions from the propylene loading rack:

(1) A log of the operating time of the facility and the facility's capture system, control device, and monitoring equipment.

(2) A maintenance log for the capture system, the control device, and the monitoring equipment detailing all routine and nonroutine maintenance performed. The log shall include the dates and duration of any outages of the capture system, the control device, or the monitoring system.

(3) The following additional records shall be maintained for facilities using thermal incinerators:

(A) Continuous records of the temperature in the gas stream in the combustion zone of the incinerator.

(B) Records of all three (3) hour periods of operation for which the average combustion temperature of the gas stream in the combustion zone was more than fifty degrees Fahrenheit (50°F) below the combustion zone temperature which existed during the most recent compliance test that demonstrated that the facility was in compliance.

(4) Information requirements in subdivision (3)(B) shall be submitted to IDEM, OAQ, within thirty (30) days of occurrence. The following information shall accompany the submittal:

(A) The name and location of the facility.

(B) Identification of the control system where the excess emission occurred and the facility it served.

(C) The time, date, and duration of the exceedance.

(D) Corrective action taken.

(e) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

D.5.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.5.1 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days following the end of each quarter. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

Part 70 Quarterly Report

Facility: Sphere 1
Parameter: VOC Emissions
Limit: Full Ventdown: 1.38 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Depressurization: 2.39 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

$E_S = (M_S \times EV_S) \times (1.0 - VCU\ DRE) / 2000$ lb/ton

Where E_S = VOC Emissions, tons/month
M_S = Mass removed, lb/event
= 137,563 lb/ sphere full ventdown event
= 29,830 lb/ sphere pressure bleedoff event
EV_S = Number of Events, events/month
VCU DRE = VOC Removal Efficiency, %, as determined during the most recent valid compliance demonstration

Part 70 Quarterly Report

Facility: Sphere 2
Parameter: VOC Emissions
Limit: Full Ventdown: 1.38 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Depressurization: 2.39 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

$$E_S = (M_S \times EV_S) \times (1.0 - VCU\ DRE) / 2000\ lb/ton$$

Where E_S = VOC Emissions, tons/month
M_S = Mass removed, lb/event
= 137,563 lb/ sphere full ventdown event
= 29,830 lb/ sphere pressure bleedoff event
EV_S = Number of Events, events/month
VCU DRE = VOC Removal Efficiency, %, as determined during the most recent valid compliance demonstration

Part 70 Quarterly Report

Facility: Propylene Loading Rack
Parameter: VOC Emissions
Limit: 16.22 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

$$E_R = (M_R \times EV_R) \times (1.0 - VCU\ DRE) / 2000\ lb/ton$$

Where E_R = VOC Emissions, tons/month
M_R = Mass removed, lb/event
= 2,046 lb/ railcar bleedoff event
EV_R = Number of Events, events/month
VCU DRE = VOC Removal Efficiency, %, as determined during the most recent valid compliance demonstration

Part 70 Quarterly Report

Facility: Line Purging
Parameter: VOC Emissions
Limit: 0.35 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

$$E_P = (M_P \times EV_P) \times (1.0 - VCU\ DRE) / 2000\ lb/ton$$

Where E_P = VOC Emissions, tons/month
M_P = Mass removed, lb/event
= 8,774 lb/ line purging event
EV_P = Number of Events, events/month
VCU DRE = VOC Removal Efficiency, %, as determined during the most recent valid compliance demonstration

Change No. 7 Sections D.6 and D.7 are added to incorporate the requirements that are applicable to the existing equipment for the EAST COLUMBUS DRIVE TERMINAL.

SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: EAST COLUMBUS DRIVE TERMINAL

(h) One (1) 813,624 gallon external floating roof gasoline storage tank, identified as T-201, with primary and secondary seals, constructed in 1939.

(i) One (1) 653,100 gallon external floating roof gasoline storage tank, identified as T-202, with primary and secondary seals, constructed in 1939.

(j) Two (2) 2,956,380 gallon gasoline storage tanks, identified as T-801 and T-802, both-with primary and secondary seals, constructed in 1939. Tank T-801 is an external floating roof tank. Tank T-802 is a domed internal floating roof tank, dome added in 2010.

(k) One (1) 2,759,316 gallon external floating roof gasoline storage tank, identified as T-803, with primary and secondary seals, constructed in 1939.

(l) One (1) 2,853,732 gallon external floating roof gasoline storage tank, identified as T-804, with primary and secondary seals, constructed in 1939.

(m) One (1) 3,055,542 gallon domed internal floating roof gasoline/transmix storage tank, identified as T-805, with primary and secondary seals, constructed in 1939, dome added in 2010.

(n) One (1) 2,843,274 gallon external floating roof gasoline storage tank, identified as T-806, with primary and secondary seals, constructed in 1939.

(o) One (1) 616,938 gallon internal floating roof gasoline storage tank, identified as T-204, with a primary seal, constructed in 1939.

(p) One (1) 630,000 gallon internal floating roof gasoline storage tank, identified as T-207, with a primary seal, constructed in 1946.

(q) One (1) 696,695 gallon internal floating roof gasoline/transmix (a gasoline/distillate oil mixture) storage tank, identified as T-209, with a primary seal, constructed in 1946.

(r) One (1) 739,830 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-208, constructed in 1946.

(s) One (1) 964,824 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-240, constructed in 1968.

(t) One (1) 8,633,646 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2101, constructed in 1955.

(u) One (1) 8,618,190 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2102, constructed in 1955.

(v) One (1) 10,847,382 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2601, originally constructed in 1960 and later modified in 2002.

(w) One (1) 10,835,328 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2602, originally constructed in 1960 and later modified in 2002.

(x) Two (2) 635,040 gallon vertical fixed roof distillate/kerosene storage tanks, identified as T-205 and T-206, constructed in 1939.

(y) One (1) 3,410,988 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-807, constructed in 1939.

(z) Two (2) 15,204 gallon horizontal fixed roof gasoline additive storage tanks, identified as T-1501 and T-1502, both constructed in 1940.

(aa) One (1) 1,465,002 gallon domed internal floating roof gasoline storage tank, identified as T-401, with a primary seal, constructed in 1952.

(bb) Two (2) 2,857,890 gallon domed internal floating roof gasoline storage tanks, identified as T-809 and T-810, each with a primary seal, both constructed in 1952.

(cc) One (1) 2,841,552 gallon domed internal floating roof gasoline/transmix storage tank, identified as T-808, with a primary and seal, constructed in 1952.

(dd) Gasoline tank cleaning operation, identified as TNKCLN GAS.

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

Pursuant to 326 IAC 8-4-3, Tank Nos. T-103, T-201, T-202, T-204, T-207, T-209, T-401, T-801, T-802, T-803, T-804, T-805, T-806, T-808, T-809 and T-810 are subject to the following:

(a) For External Fixed Roof Tanks

(1) The facility must be retrofitted with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall unless the source has been retrofitted with equally effective alternative control which has been approved.

(2) The facility is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials.

(3) All openings, except stub drains, are equipped with covers, lids, or seals such that:

(A) the cover, lid, or seal is in the closed position at all times except when in actual use;

(B) automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(C) rim vents, if provided are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

(b) For External Floating Roof Tanks

The owner of a facility subject to this subsection shall not store a petroleum liquid in that facility unless:

(1) The facility has been fitted with:

a continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or

a closure or other device approved by the commissioner which is equally effective.

(2) All seal closure devices meet the following requirements:

(A) there are no visible holes, tears, or other openings in the seal(s) or seal fabric;

(B) the seal(s) are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall;

(C) 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 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.

(3) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves are:

(A) equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and

(B) equipped with projections into the tank which remain below the liquid surface at all times.

(4) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(5) Rim vents are set to open when the roof is being floated off the roof leg supports or at the manufacturers recommended setting; and

(6) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least ninety percent (90%) of the area of the opening.

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-9-4]

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

(a) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, an internal floating roof meeting the following specifications:

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

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

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

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

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

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

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

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

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

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

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

(b) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, an external floating roof meeting the following specifications:

(i) Each external floating roof shall be equipped with a closure device between the wall of the vessel and the roof edge. The closure device shall consist of two (2) seals, one (1) above the other. The lower seal shall be referred to as the primary seal; the upper seal shall be referred to as the secondary seal.

(ii) Except as provided in 326 IAC 8-9-5(c)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and vessel wall and shall be either a liquid-mounted seal or a shoe seal.

(iii) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the vessel in a continuous fashion except as allowed in 326 IAC 8-9-5(c)(4).

(iv) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.

(v) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times, without visible gap, except when the device is in actual use.

(vi) Automatic bleeder vents shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(vii) Rim vents shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer=s recommended setting. Automatic bleeder vents and rim space vents shall be gasketed.

(viii) Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least ninety percent (90%) of the area of the opening.

(ix) The roof shall be floating on the liquid at all times, for example, off the roof leg supports, except when the vessel is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(c) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, a closed vent system and control device meeting the following specifications:

(i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, 40 CFR 60.485(b).

(ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (40 CFR 60.18) of the General Provisions.

(d) A system equivalent to those described in paragraphs a, b and c as provided in 326 IAC 8-9-4.

(e) The testing procedures are required under 326 IAC 8-9-5. The record keeping and reporting are required under 326 IAC 8-9-6.

(f) On or before May 1, 1996, the Permittee of each vessel with a capacity greater than or equal to thirty-nine thousand (39,000) gallons, that stores VOL with a maximum true vapor pressure greater than or equal to eleven and one-tenth (11.1) psia shall equip each vessel with a closed vent system meeting the standards of paragraph (c).

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

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

D.6.3 Testing and Procedures [326 IAC 8-9-5]

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

(a) Except as provided in section 326 IAC 8-9-4(a)(2), the Permittee of each vessel equipped with an internal floating roof shall meet the following requirements.

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

(2) For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the Permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator (IDEM) in the inspection report required in 326 IAC 8-9-6(c)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(3) For vessels equipped with both primary and secondary seals:

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

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

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

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

(b) Except as provided in 326 IAC 8-9-4(a)(3), the Permittee of each vessel equipped with an external floating roof shall meet the following requirements:

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

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

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

(C) If any source ceases to store VOL for a period of one (1) year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for purposes of this subdivision.

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

(A) Measure seal gaps, if any, at one (1) or more floating roof levels when the roof is floating off the roof leg supports.

(B) Measure seal gaps around the entire circumference of the vessel in each place where a one-eighth (c) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the vessel and measure the circumferential distance of each such location.

(C) The total surface area of each gap described in clause (B) shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

(3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each by the nominal diameter of the vessel and compare each ratio to the respective standards in subdivision (4).

(4) Make necessary repairs or empty the vessel within forty-five (45) days of identification of seals not meeting the requirements listed in clauses (A) and (B) as follows:

(A) The accumulated area of gaps between the vessel wall and the mechanical shoe or liquid-mounted primary seal shall not exceed ten (10) square inches per foot of vessel diameter, and the width of any portion of any gap shall not exceed one and five-tenths (1.5) inches. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(B) The secondary seal shall meet the following requirements:

(i) The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in subdivision (2)(C).

(ii) The accumulated area of gaps between the vessel wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed one (1) square inch per foot of vessel diameter, and the width of any portion of any gap shall not exceed five-tenths (0.5) inch. There shall be no gaps between the vessel wall and the secondary seal when used in combination with a vapor-mounted primary seal.

(iii) There shall be no holes, tears, or other openings in the seal or seal fabric.

(C) If a failure that is detected during inspections required in subdivision (1) cannot be repaired within forty-five (45) days and if the vessel cannot be emptied within forty-five (45) days, a thirty (30) day extension may be requested from the department in the inspection report required in 326 IAC 8-9-6(d)(3). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(5) Notify the department thirty (30) days in advance of any gap measurements required by subdivision (1) to afford the department the opportunity to have an observer present.

(6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. For all visual inspections, the following requirements apply:

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

(B) The Permittee shall notify the department in writing at least thirty (30) days prior to the filling or refilling of each vessel to afford the department the opportunity to inspect the vessel prior to the filling. If the inspection required by this subdivision is not planned and the Permittee could not have known about the inspection thirty (30) days in advance of refilling the vessel, the Permittee shall notify the department at least seven (7) days prior to the refilling of the vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the department at least seven (7) days prior to the refilling.

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

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

D.6.4 Record Keeping Requirements [326 IAC 8-9-6]

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

(a) Pursuant to Condition D.1.3 and 326 IAC 8-9-6, the Permittee of the internal floating roof gasoline storage tanks shall keep copies of all reports and records for at least three (3) years. The Permittee of the internal floating roof tanks shall meet the following requirements:

(1) Keep a record of each inspection performed as required by 326 IAC 8-9-5(b)(1) through 326 IAC 8-9-5(b)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

(2) If any of the conditions described in 326 IAC 8-9-5(b)(2) are detected during the annual visual inspection, a record shall be maintained and a report shall be furnished to the department within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

(3) After each inspection required by 326 IAC 8-9-5(b)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 326 IAC 8-9-5(b)(3)(B), a record shall be maintained and a report shall be furnished to the department within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 326 IAC 8-9-4(a)(1)(A), 326 IAC 8-9-4(a)(2)(A), or 326 IAC 8-9-5(b), and list each repair made.

(b) Pursuant to Condition D.1.3 and 326 IAC 8-9-6, the Permittee of the external floating roof gasoline storage tanks shall keep copies of all reports and records for at least three (3) years. The Permittee of the external floating roof tanks shall meet the following requirements:

(1) Keep a record of each gap measurement performed as required by 326 IAC 8-9-5(c). Each record shall identify the vessel in which the measurement was made and shall contain the date of measurement, the raw data obtained in the measurement and the calculations described in 326 IAC 8-9-5(c)(2) and (c)(3).

(2) Within sixty (60) days of performing the seal gap measurements required by 326 IAC 8-9-5(c)(1), furnish the department with a report that contains the date of measurement, the raw data obtained in the measurement, and the calculations described in 326 IAC 8-9-5(c)(2) and (c)(3).

(3) After each seal gap measurement that detects gaps exceeding the limitations specified in 326 IAC 8-9-5(c), submit a report to the department within thirty (30) days of the inspection. The report shall identify the vessel and contain the information specified in subdivision (2) and the date the vessel was emptied or the repairs made and date of repair.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

EAST COLUMBUS DRIVE TERMINAL

(ee) One (1) tank truck loading rack (identified as RACK) used to load gasoline, distillate, and ethanol, with a maximum loading capacity of 324,000 gallons of liquid per hour, constructed in 1940 and later reconstructed in 1979, controlled by one (1) natural gas fired Vapor Combustion Unit (VCU), rated at maximum heat input rate of 1.6 MMBtu/hr, installed in 1997, and exhausting through one (1) stack identified as VCU.

(ff) One (1) VOC fractionator for separating gasoline and fuel oil of transmix tanks, identified as FRACT, venting 125 cubic feet of VOC vapor per minute during intermittent pressure relief with venting gas being controlled by VCU, and equipped with a 7.0 million British thermal units per hour natural gas fired reboiler;

(gg) VOC emissions from the following operations:

(1) Fugitive VOC emissions from the loading rack, identified as FLRACK.
(2) Filter change out service for gasoline tanks, identified as FILT1.
(3) Meter proving service, identified as PROVE.

(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.7.1 Hazardous Air Pollutants [326 IAC 2-4.1] [326 IAC 8-4-4]

The VOC capture efficiency from the loading rack will be 97.3% and the VOC emissions from the loading rack shall be less than 35 mg per liter of gasoline loaded by the loading rack.

Compliance with the above limit combined with potential single and combined HAP emissions from other emission units shall limit the source wide HAP emissions to less than 10 tons per year for any single HAP and less than 25 tons per year for combined HAPs; therefore, the requirements of 326 IAC 2-4.1 are not applicable to the loading rack.

D.7.2 Volatile Organic Compounds (VOC) [326 IAC 8-4-4]

Pursuant to 326 IAC 8-4-4, the Permittee shall not permit the loading of gasoline into any transport unless:

(a) The gasoline loading equipment is equipped with a vapor control system in good working order, which will control VOC emissions to the atmosphere from the equipment being controlled to no more than 80 milligrams per liter of gasoline loaded.

(b) Displaced vapors and gases are vented only to the vapor control system.

(c) A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

(d) All loading and vapor lines are equipped with fittings which make vapor-tight connections and which will be closed upon disconnection.

If employees of the owner of the source are not present during loading, it shall be the responsibility of the owner of the transport to make certain the vapor control system is attached to the transport. The owner of the source shall take all reasonable steps to insure that owners of transports loading at the terminal during unsupervised times comply with this rule.

D.7.3 Volatile Organic Compounds (VOC) [326 IAC 8-4-9]

Pursuant to 326 IAC 8-4-9, the Permittee shall:

(a) The Permittee, which owns and operates a vapor control system subject to this rule shall:

(1) Design and operate the applicable system and the gasoline loading equipment in a manner that prevents:

(A) gauge pressure from exceeding four thousand five hundred (4,500) pascals and a vacuum from exceeding one thousand five hundred (1,500) pascals in the gasoline tank truck;

(B) a reading equal to or greater than one hundred percent (100%) of the lower explosive limit (LEL, measured as propane) at two and five-tenths (2.5) centimeters from all points on the perimeter of a potential leak source when measured by the method referenced in Appendix B of Control of Organic Compound leaks from Gasoline Tank Trucks and Vapor Collection Systems, EPA 450/2-78-051, or an equivalent procedure approved by IDEM during loading or unloading operations; and

(C) avoidable visible liquid leaks during loading or unloading operations.

(2) Repair and retest a vapor collection or control system that exceeds the limits in (a)(1) within fifteen (15) days.

(b) The permittee shall maintain records of all certification testing of the vapor balance or vapor control system which identify:

(1) the vapor balance, vapor collection or vapor control system,

(2) the date of the test and, if applicable, retest,

(3) the results of the test and, if applicable, retest.

The records shall be maintained in a legible, readily available condition for at least two (2) years after the date of the testing and, if applicable, retesting were completed.

(c) If IDEM, OAQ allows alternative test procedures, then such method shall be submitted to the U.S. EPA as a SIP revision.

(d) During compliance tests conducted under 326 IAC 3-6 (stack testing):

(1) each vapor balance or control system shall be tested applying the standards described in (a);

(2) testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there area any leaks from the hatches and the flanges of the gasoline transports;

(3) if any leak is detected, the transport cannot be used for the capacity of the compliance test of the bulk gas terminal.

The threshold for leaks shall be as follows:

(A) Ten thousand (10,000) parts per million methane for all bulk gas terminals.

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

D.7.4 VOC and HAPs [326 IAC 2-7-6(1),(6)]

The Vapor Combustion Unit (VCU) for VOC and HAPs control shall be in operation at all times, when the loading rack (RACK) is transferring gasoline or when the fractionator (FRACT) is venting vapor.

D.7.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.7.1 and D.7.2, the Permittee shall perform VOC testing at the vapor combustion unit (VCU) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

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

D.7.6 Vapor Combustion Unit Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]

The Permittee shall install and maintain a monitor to detect the presence of a pilot flame. The presence of a pilot flame shall be monitored using a heat-sensing device at all times when the vapors are being vented to the VCU. The monitor shall be equipped with a computer system which will not allow for the operation of the loading rack and the fractionator (FRACT) when the presence of a flame is not detected during periods when gasoline vapors are being vented to the VCU.

D.7.7 Monthly Visible Checks for Liquid Leaks [40 CFR 64]

(a) Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.

(b) If abnormal leakage is observed, the Permittee shall take reasonable response steps. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligations with regard to responding to the reasonable response steps required by this condition.

(c) All checks for visible liquid leaks made to comply with this condition shall be conducted in accordance with 326 IAC 8-4-9.

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

D.7.8 Record Keeping Requirements

(a) To document compliance with Condition D.2.3, the Permittee shall maintain records of all the required parameters listed in Condition D.2.3.

(b) To document compliance with Condition D.2.7, the Permittee shall maintain records of monthly checks for liquid leaks of the Loading Rack and VCU stack exhaust.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

Change No. 8 Section E.1 is updated to incorporate the requirements for NSPS Kb (Standards of performance for volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced July 23, 1984 Requirements [40 CFR Part 60, Subpart Kb]) that are applicable to the existing equipment for the EAST COLUMBUS DRIVE TERMINAL.

SECTION E.1 FACILITY OPERATION CONDITIONS

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

INDIANAPOLIS BOULEVARD TERMINAL

(a) Two (2) internal floating roof above ground storage tanks (Tank 134 and Tank 135) used to store petroleum products, constructed July 17, 1998. Each tank is equipped with a primary and secondary seal. Each tank has a maximum design capacity of 5,040,000 gallons.

(b) One (1) existing fixed roof tank, constructed in 1941 and modified July 17, 1998, into a new internal floating roof above ground storage tank (Tank 151) used to store petroleum products. The tank is equipped with a primary and secondary seal, and has a maximum design capacity of 5,040,000 gallons.

PROPYLENE STORAGE AND LOADING FACILITY

(e) Two (2) 21,000 barrel storage pressure spheres. A portable vapor control unit (VCU), or equivalent, will be used to control point source VOC emissions.

(The information describing the process contained in this facility 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 [326 IAC 12-1] [40 CFR Part 60, Subpart A]

~~(a)~~ Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for tanks 134, 135 ~~and 151~~**, 151, and the propylene storage spheres,** except as otherwise specified in 40 CFR Part 60, Subpart Kb.

~~(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all 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~~

~~and,~~

~~IDEM Northwest Regional Office~~
~~8380 Louisiana Street~~
~~Merrillville, IN 46410~~

E.1.2 Standards of performance for volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced July 23, 1984 Requirements [40 CFR Part 60, Subpart Kb] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Kb, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart Kb which are incorporated by reference as 326 IAC 12 for tanks 134, 135 ~~and 151~~**, 151, and the propylene storage spheres,** as specified as follows.

- 40 CFR 60.110b;
- 40 CFR 60.111b;
- 40 CFR 60.112b;
- 40 CFR 60.113b;
- 40 CFR 60.114b;
- 40 CFR 60.115b;
- 40 CFR 60.116b;
- 40 CFR 60.117b.

Change No. 9 Section E.2 is added to incorporate the requirements for NESHAP BBBBBB (National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities [40 CFR Part 63, Subpart BBBBBB]) that are applicable to the new PROPYLENE STORAGE AND LOADING FACILITY and the existing equipment for the INDIANAPOLIS BOULEVARD TERMINAL and EAST COLUMBUS DRIVE TERMINAL.

SECTION E.2NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

Emissions Unit Description:

INDIANAPOLIS BOULEVARD TERMINAL

(a) Ten (10) vertical domed internal floating roof storage tanks used to store petroleum products, constructed between 1935 and 1957, each tank is equipped with a primary and secondary seal:

(1) Tank 106 has a maximum design capacity of 1,054,484 gallons;

(2) Tank 107 has a maximum design capacity of 1,031,884 gallons;

(3) Tank 108 has a maximum design capacity of 1,054,783 gallons;

(4) Tank 112 has a maximum design capacity of 2,075,798 gallons;

(5) Tank 120 has a maximum design capacity of 2,853,291 gallons;

(6) Tank 123 has a maximum design capacity of 2,818,841 gallons;

(7) Tank 130 has a maximum design capacity of 3,915,368 gallons;

(8) Tank 131 has a maximum design capacity of 3,915,368 gallons;

(9) Tank 132 has a maximum design capacity of 3,915,368 gallons;

(10) Tank 133 has a maximum design capacity of 3,915,368 gallons.

(b) Two (2) internal floating roof above ground storage tanks (Tank 134 and Tank 135) used to store petroleum products constructed July 17, 1998. Each tank is equipped with a primary and secondary seal. Each tank has a maximum design capacity of 5,040,000 gallons.

(c) One (1) existing fixed roof tank, constructed in 1941 and modified July 17, 1998, into a new internal floating roof above ground storage tank (Tank 151) used to store petroleum products. The tank is equipped with a primary and secondary seal, and has a maximum design capacity of 5,040,000 gallons.

(d) One (1) vertical fixed roof cone storage tank (Tank 150), constructed in 1941, used to store petroleum distillates with a maximum true vapor pressure of 0.019 psia at 68°F. The tank has a maximum design capacity of 3,382,609 gallons.

EAST COLUMBUS DRIVE TERMINAL

(h) One (1) 813,624 gallon external floating roof gasoline storage tank, identified as T-201, with primary and secondary seals, constructed in 1939.

(i) One (1) 653,100 gallon external floating roof gasoline storage tank, identified as T-202, with primary and secondary seals, constructed in 1939.

(j) Two (2) 2,956,380 gallon gasoline storage tanks, identified as T-801 and T-802, both-with primary and secondary seals, constructed in 1939. Tank T-801 is an external floating roof tank. Tank T-802 is a domed internal floating roof tank, dome added in 2010.

(k) One (1) 2,759,316 gallon external floating roof gasoline storage tank, identified as T-803, with primary and secondary seals, constructed in 1939.

(l) One (1) 2,853,732 gallon external floating roof gasoline storage tank, identified as T-804, with primary and secondary seals, constructed in 1939.

(m) One (1) 3,055,542 gallon domed internal floating roof gasoline/transmix storage tank, identified as T-805, with primary and secondary seals, constructed in 1939, dome added in 2010.

(n) One (1) 2,843,274 gallon external floating roof gasoline storage tank, identified as T-806, with primary and secondary seals, constructed in 1939.

(o) One (1) 616,938 gallon internal floating roof gasoline storage tank, identified as T-204,

with a primary seal, constructed in 1939.

(p) One (1) 630,000 gallon internal floating roof gasoline storage tank, identified as T-207, with a primary seal, constructed in 1946.

(q) One (1) 696,695 gallon internal floating roof gasoline/transmix (a gasoline/distillate oil mixture) storage tank, identified as T-209, with a primary seal, constructed in 1946.

(r) One (1) 739,830 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-208, constructed in 1946.

(s) One (1) 964,824 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-240, constructed in 1968.

(t) One (1) 8,633,646 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2101, constructed in 1955.

(u) One (1) 8,618,190 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2102, constructed in 1955.

(v) One (1) 10,847,382 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2601, originally constructed in 1960 and later modified in 2002.

(w) One (1) 10,835,328 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2602, originally constructed in 1960 and later modified in 2002.

(x) Two (2) 635,040 gallon vertical fixed roof distillate/kerosene storage tanks, identified as T-205 and T-206, constructed in 1939.

(y) One (1) 3,410,988 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-807, constructed in 1939.

(z) Two (2) 15,204 gallon horizontal fixed roof gasoline additive storage tanks, identified as T-1501 and T-1502, both constructed in 1940.

(aa) One (1) 1,465,002 gallon domed internal floating roof gasoline storage tank, identified as T-401, with a primary seal, constructed in 1952.

(bb) Two (2) 2,857,890 gallon domed internal floating roof gasoline storage tanks, identified as T-809 and T-810, each with a primary seal, both constructed in 1952.

(cc) One (1) 2,841,552 gallon domed internal floating roof gasoline/transmix storage tank, identified as T-808, with a primary and seal, constructed in 1952.

(dd) Gasoline tank cleaning operation, identified as TNKCLN GAS.

(ee) One (1) tank truck loading rack (identified as RACK) used to load gasoline, distillate, and ethanol, with a maximum loading capacity of 324,000 gallons of liquid per hour, constructed in 1940 and later reconstructed in 1979, controlled by one (1) natural gas fired Vapor Combustion Unit (VCU), rated at maximum heat input rate of 1.6 MMBtu/hr, installed in 1997, and exhausting through one (1) stack identified as VCU.

(ff) One (1) VOC fractionator for separating gasoline and fuel oil of transmix tanks, identified as FRACT, venting 125 cubic feet of VOC vapor per minute during intermittent

pressure relief with venting gas being controlled by VCU, and equipped with a 7.0 million British thermal units per hour natural gas fired reboiler;

(gg) VOC emissions from the following operations:

(1) Fugitive VOC emissions from the loading rack, identified as FLRACK.

(2) Filter change out service for gasoline tanks, identified as FILT1.

(3) Meter proving service, identified as PROVE.

(hh) A wastewater handling and treatment system, capable of treating 420,000 gallons of contaminated water per hour, including the following activities:

(1) Five (5) sumps for wastewater from tank water draw and roof drains;

(2) One (1) sump for wastewater from loading rack;

(3) One (1) 379,638 gallon internal floating roof waste water/gasoline storage tank, identified as T-103, constructed in 1939;

(4) One (1) dissolved air floatation oil/water separator, identified as TS DAF, with a maximum capacity of 12,000 gallons per hour;

(5) One (1) oil/water separator, identified as TS OWS/Separator No. 1, with a maximum capacity of 11,000 gallons per hour; and

(6) One (1) air stripper capable of processing a maximum of 23,000 gallons of water per hour.

Insignificant Activities: EAST COLUMBUS DRIVE TERMINAL

(a) Five (5) vertical fixed roof cone storage tanks used to store petroleum distillates with a maximum true vapor pressure of 0.019 psia at 68°F, constructed in 1941 [326 IAC 8-9]:

(1) Tank 103 has a maximum design capacity of 836,368 gallons;

(2) Tank 122 has a maximum design capacity of 2,853,291 gallons;

(3) Tank 140 has a maximum design capacity of 3,382,609 gallons;

(4) Tank 141 has a maximum design capacity of 3,382,609 gallons;

(5) Tank 142 has a maximum design capacity of 3,382,609 gallons.

(b) Two (2) horizontal distillate additive tanks, constructed in 2005:

(1) Tank AT-01 has a maximum design capacity of 12,000 gallons;

(2) Tank AT-02 has a maximum design capacity of 12,000 gallons.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.11098, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the tanks at this facility as specified in Table 3 to 40 CFR 63, Subpart BBBBBB in accordance with schedule in 40 CFR 63.11083.

E.2.2 National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities [40 CFR Part 63, Subpart BBBBBB]

Pursuant to 40 CFR 63.11083, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart BBBBBB (National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities), which are included as Attachment B for the tanks at this facility:

- **40 CFR 63.11080**
- **40 CFR 63.11081**
- **40 CFR 63.11082**
- **40 CFR 63.11083**
- **40 CFR 63.11086**
- **40 CFR 63.11087**
- **40 CFR 63.11088**
- **40 CFR 63.11089**
- **40 CFR 63.11092**
- **40 CFR 63.11093**
- **40 CFR 63.11094**
- **40 CFR 63.11095**
- **40 CFR 63.11098**
- **40 CFR 63.11099**
- **40 CFR 63.11100**
- **Table 1 to Subpart BBBBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Storage Tanks**
- **Table 2 to Subpart BBBBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Loading Racks**
- **Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions**

Change No. 10 The Certification and Reporting Forms are updated as follows:

CERTIFICATION and REPORTING FORMS

Source Name: Buckeye Terminals, LLC
Source Address: ~~3821~~**3823** Indianapolis Boulevard, East Chicago, Indiana 46312
~~Mailing Address: 5 TEK Park, 9999 Hamilton Blvd, Breinigsville, PA 18031~~
Part 70 Permit No.: T089-26500-00320

Part 70 Quarterly Report

Source Name: Buckeye Terminals, LLC
Source Address: ~~3821~~**3823** Indianapolis Boulevard, East Chicago, Indiana 46312

~~Mailing Address: 5 TEK Park, 9999 Hamilton Blvd, Breinigsville, PA 18031~~
Part 70 Permit No.: T089-26500-00320
Facility: Tank 134, Tank 135, and Tank 151
Parameter: VOC **Usage**
Limit: Less than the combined total of 677,663,000 gallons petroleum products per 12 consecutive month period

QUARTER: _____ YEAR: **_____**

QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Buckeye Terminals, LLC
Source Address: ~~3821~~**3823** Indianapolis Boulevard, East Chicago, Indiana 46312
~~Mailing Address: 5 TEK Park, 9999 Hamilton Blvd, Breinigsville, PA 18031~~
Part 70 Permit No.: T089-26500-00320

Conclusion and Recommendation

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Significant Source Modification No. 089-30669-00320 and Significant Permit Modification No. 089-30673-00320. The staff recommend to the Commissioner that this Significant Permit Modification be approved.

IDEM Contact

Questions regarding this proposed permit can be directed to:

Kimberly Cottrell
Indiana Department Environmental Management
Office of Air Quality
100 North Senate Avenue
MC 61-53, Room 1003
Indianapolis, Indiana 46204-2251
Toll free (within Indiana): 1-800-451-6027 extension 3-0870
Or dial directly: (317) 233-0870
Fax: (317)-232-6749 attn: Kimberly Cottrell
E-mail: kcottrel@idem.in.gov

Please refer to Significant Source Modification No. 089-30669-00320 and Significant Permit Modification No. 089-30673-00320 in all correspondence.

Indiana Department of Environmental Management
Office of Air Quality

Appendix A – Emission Calculations
Technical Support Document (TSD)
Significant Source Modification (SSM) of a Part 70 Source
Significant Permit Modification (SPM) of Part 70 Operating Permit

Source Description and Location

Company Name:	Buckeye Terminals, LLC
Address City IN Zip:	3823 Indianapolis Boulevard, East Chicago, IN 46312
County:	Lake
SIC / NAICS Code:	4226 424710
Part 70 Operating Permit No.:	T089-26500-00320
Issuance Date:	January 22, 2009
Significant Source Modification No.:	089-30669-00320
Significant Permit Modification No.:	089-30673-00320
Permit Reviewer:	Kimberly Cottrell
Date:	November 15, 2011

Summary of Potential to Emit

The tables below summarize the potential to emit calculations submitted by Buckeye Terminals, LLC. The subsequent pages of this document contain the calculations provided by Buckeye Terminals, LLC. IDEM has reviewed these calculations and verified their accuracy.

Uncontrolled Potential To Emit (ton/yr)								
Process / Emission Unit	**GHGs**	**CO**	**NO_X**	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**
Sphere 1 - full ventdown	0	0	0	0	0	0	0	68.78
Sphere 1 - depressure	0	0	0	0	0	0	0	119.32
Sphere 1 - breathing losses	0	0	0	0	0	0	0	1.00
Sphere 2 - full ventdown	0	0	0	0	0	0	0	68.78
Sphere 2 - depressure	0	0	0	0	0	0	0	119.32
Sphere 1 - breathing losses	0	0	0	0	0	0	0	1.00
Rail Loading Rack	0	0	0	0	0	0	0	811.20
Line Purging (both halves)	0	0	0	0	0	0	0	17.55
Propylene Disconnect Calculation	0	0	0	0	0	0	0	0.16
Emissions from Equipment Leaks	0	0	0	0	0	0	0	62.14
Emissions Resulting from Control Programs	17,764	19.77	3.63	0.85	0.85	0.85	0.0053	0
Totals:	**17,764**	**19.77**	**3.63**	**0.85**	**0.85**	**0.85**	**0.0053**	**1,269.25**

Limited Potential To Emit (ton/yr)								
Process / Emission Unit	**GHGs**	**CO**	**NO_X**	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**
Sphere 1 - full ventdown	0	0	0	0	0	0	0	1.38
Sphere 1 - depressure	0	0	0	0	0	0	0	2.39
Sphere 1 - breathing losses	0	0	0	0	0	0	0	1.00
Sphere 2 - full ventdown	0	0	0	0	0	0	0	1.38
Sphere 2 - depressure	0	0	0	0	0	0	0	2.39
Sphere 1 - breathing losses	0	0	0	0	0	0	0	1.00
Rail Loading Rack	0	0	0	0	0	0	0	16.22
Line Purging (both halves)	0	0	0	0	0	0	0	0.35
Propylene Disconnect Calculation	0	0	0	0	0	0	0	0.16
Emissions from Equipment Leaks	0	0	0	0	0	0	0	2.80
Emissions Resulting from Control Programs	17,764	19.77	3.63	0.85	0.85	0.85	0.0053	0
Totals:	**17,764**	**19.77**	**3.63**	**0.85**	**0.85**	**0.85**	**0.0053**	**29.06**

PSD Significant Threshold	75,000	100	40	25	15	NA	40	40
Nonattainment NSR Major Source Threshold	NA	NA	NA	NA	NA	100	NA	NA

Tank breathing losses will be minimal; therefore, a conservative estimate of 1 ton per year will be used to estimate breathing losses from each sphere.

Ventdown, Pressure Bleedoff, and Line Purging

	Full Ventdown	Pressure Bleedoff	Railcar Bleedoff	Line Purging (each half of line)	Units	Methodology
Design molecule	Propylene	Ethane	Propylene	Propylene		
	C_3H_6	C_2H_6	C_3H_6	C_3H_6		
V, Capacity	20,144	20,144	987	1,477	bbl	
	846,048	846,048	41,448	62,046	gallons	= Capacity (bbl) x Barrel Volume (gal/barrel)
	113,093	113,093	5,540	8,294	cubic feet	= Capacity (gal) / 7.481 gal/ft^3
P Initial	150	250	50	150	psig	
	164.7	264.7	64.7	164.7	psia	= P (psig) + 14.7
P Final	-14.7	200	0	0	psig	
	0	214.7	14.7	14.7	psia	
R	10.73				psia-ft^3/(R-lb-mol)	
T	70	70	70	95	F	
	530	530	530	555	R	= T (deg F) + 460
MW	42	30	42	42	lb/lb-mol	P V = n R T
m @ initial pressure	137,563	157,919	2,647	9,634	lb/event	m (lb) = n x MW = MW (lb/lb-mol) x $P_{initial}$ (psia) x V (ft^3) / (R {psia-ft^3/(deg R-lb-mol)} x T (deg R)
m @ final pressure	0	128,089	601	860	lb/event	m (lb) = n x MW = MW (lb/lb-mol) x P_{final} (psia) x V (ft^3) / (R {psia-ft^3/(deg R-lb-mol)} x T (deg R)
Total Mass Removed	137,563	29,830	2,046	8,774	lb/event	= m @ $P_{initial}$ - m @ P_{final}
				17,548	lb/event (both sides)	
Event Length and Frequency						
Time Elapsed per Event	72	96	1	6	hr/event	
Planned Events Per Year	1	8	793	2	1 full ventdown event per sphere per year; 8 pressure bleedoff events per sphere per yea	
VCU DRE	98.0%	98.0%	98.0%	98.0%		
VOC Emissions	2,751.27	596.60	40.92	175.48	lb/event, controlled	= Total Mass Removed (lb/event) x (1 - VCU DRE (%))
	1.38	0.30	0.02	0.09	ton/event, controlled	= Emissions (lb/event) / 2000 lb/ton
	1.38	2.39	16.22	0.18	ton/yr, controlled	= Emissions (ton/event) x Events per Year
Heat Loading to VCUs						
HHV	19,800	22,400	19,800	19,800	BTU/lb	
Heat Loading to VCU	2,724	3,537	52.42	191	MMBtu/event	= m @ $P_{initial}$ (lb/event) x HHV (Btu/lb) / 1000000 Btu/MMBtu
	37.83	36.85	52.42	31.79	MMBtu/hr	= Heat Loading to VCU (MMBtu/event) / Time elapsed per Event (hr/event)
Device Capacity	42.20	42.20	80.96	42.20	MMBtu/hr	Railcar Bleedoff Capacity is calculated as "Heat Load left for other purposes" on the following page
						42.2 MMBtu/hr is the Johns, Inc. nameplate capacity of the unit that is owned by Buckeye and will be transferred to this new location (as needed).
Supplemental Fuel (only for starting and ending the combustion event)						
Heat Loading for Pilot Flame	1.0	1.0	1.0	1.0	MMBtu/hr	
Combustion Airflows (only used to estimate particulate emissions)						
Combustion Air Ratio	2	2	2	2	ft^3/MMBtu	
Exhaust Flow Rate	4,540	4,422	6,290	3,815	CFM	= Heat Loading to VCU (MMBtu/hr) x Combustion Air Ratio (ft^3/MMBtu) x 60 min/hr

Unrestricted Potential To Emit

Emissions	AP-42 lb/MMBTU	Full Ventdown (per Sphere) (lb/event)	(lb/yr)	(tons/yr)	Sphere Depressure (per Sphere) (lb/event)	(lb/yr)	(tons/yr)	Rail Loading Rack (lb/event)	(lb/yr)	(tons/yr)	Line Purging (both halves) (lb/event)	(lb/yr)	(tons/yr)	Total Emissions (tons/yr)
VOC	DRE	137,563	137,563	68.78	29,830	238,639	119.32	2,046	1,622,392	811.20	17,548	35,096	17.55	1,017

Emissions Resulting from Control Programs

Combustion Emissions	AP-42 lb/MMBTU	Full Ventdown (per Sphere) (lb/event)	(lb/yr)	(tons/yr)	Sphere Depressure (per Sphere) (lb/event)	(lb/yr)	(tons/yr)	Rail Loading Rack (lb/event)	(lb/yr)	(tons/yr)	Line Purging* (both halves) (lb/event)	(lb/yr)	(tons/yr)	Total Emissions (tons/yr)
CO	0.37	1,034	1,034	0.52	1,344	10,755	5.38	19.76	15,673	7.84	145.60	291.19	0.1456	19.77
NO_X	0.068	190.11	190	0.10	247.07	1,977	0.99	3.63	2,881	1.44	26.76	53.52	0.0268	3.63
PM	40 ug/l	48.87	49	0.02	65.16	521	0.26	0.68	538	0.27	8.15	16.29	0.0081	0.85
SO_2	0.0001	0.2796	0.2796	0.0001	0.3633	2.9067	0.0015	0.0053	4.2361	0.0021	0.0394	0.08	0.0000	0.0053
VOC	DRE	2,751	2,751	1.38	596.60	4,773	2.39	40.92	32,448	16.22	350.96	701.93	0.35	24.10
CO_2	120	335,490	335,490	168	436,007	3,488,055	1,744	6,410	5,083,277	2,542	47,220	94,441	47.22	6,412
CH_4	0.0023	6.43	6.43	3.22E-03	8.36	66.85	3.34E-02	1.23E-01	97.43	4.87E-02	0.91	1.81	9.05E-04	1.23E-01
N_2O	0.0022	6.15	6.15	3.08E-03	7.99	63.95	3.20E-02	1.18E-01	93.19	4.66E-02	0.87	1.73	8.66E-04	1.18E-01
Control device/control program:		*to portable VCU*			*to portable VCU*			*to existing VCU*			*to portable VCU*			

Assumptions and Notes:

Combustion calculations based on AP-42 Section 13.5 (1991). Particulates based on a "lightly smoking" flare because this is the best comparisoin for the VCU ope
VOC destruction set at 98% for combustion per 40 CFR 60.18/40 CFR 63.11.
Sulfur set at minimal levels to not ignore potential emissions, far below typical fuel sulfur contents. The combustion sulfur factor is estimated.
Disconnect losses assume that vapors in the lines are lost to emissions
Device capacity assumes using Buckeye's John Zink PCES 6 VCU (42.4 mmBTU/hr capacity

GHGs:	Tons	GWP	CO_2e	CO_2e Factor
CO_2	6,412	1	6,412	6,412
CH_4	0.1229	21	2.58	54.20
N_2O	0.1176	310	36.44	11,298
Total			6,451	17,764

Emission Summary

Full Ventdown - Evacuation of the entire contents of the sphere through the portable vapor combustion unit on an as needed basis for internal inspection or maintenanc
One full ventdown event per tank per year is included in the emission estimate as a worst case emission leve
Sphere Depressure - Evacuation of the light materials (i.e. ethane) that are entrained in the incoming propylene and which accumulate over time at the top of the spher
The ethane will be bled off through the portable combustion unit several times per year as warranted. Eight sphere depressure events per year are assume
Since the depressure events are likely to include some propylene, the depressure event emissions are calculated assuming 100% VOC even though ethane is not a VO
Rail Rack - As the railcars are filled, any vapors present from the previous load will be displaced and routed to the existing vapor combusto
Line purging - Intermittent line purging to conduct inspection or maintenance routed through the existing vapor combustor or portable vapor combustor.
Propylene Loading - Emission of propylene upon disconnection based on the amount that is present in the length of pipe or flexible hose between the last valve and the c
Equipment leaks - fugitive emissions from components in propylene service, see calculations below

Methodology

CO, NO_X, & SO_2 Emissions from control programs (lb/event) = Emission Factor (lb/MMBtu) x { Heat Loading to VCU (MMBtu/hr) + Heat Loading for Pilot Flame (MMBtu/hr) } x Time Elapsed per Event
PM Emissions from control programs (lb/event) = { Emission Factor (ug/L) / 4.54e+8 ug/lb } x Exhaust Flow Rate (ft3/min) x 3.781 L/gal x 7.481 gal/ft3 x Time Elapsed per Event (hr/event) x 60 min/h
Uncontrolled VOC Emissions (lb/event) = Total Mass Removed [m = (MW x P x V) / (R x T)]
VOC Emissions from control programs (lb/event) = Total Mass Removed (lb/event) x (1 - VCU DRE (%))

CO, NO_X, & SO_2 Emissions from control programs (lb/yr) = Emission Factor (lb/MMBtu) x { Heat Loading to VCU (MMBtu/hr) + Heat Loading for Pilot Flame (MMBtu/hr) } x 8760 hr/yr
PM Emissions from control programs (lb/yr) = { Emission Factor (ug/L) / 4.54e+8 ug/lb } x Exhaust Flow Rate (ft3/min) x 3.781 L/gal x 7.481 gal/ft3 x 8760 hr/yr x 60 min/h
Uncontrolled VOC Emissions (lb/yr) = Emissions (lb/event) x Maximum Possible No. Events per Year (i.e., 8760 hr/yr
Controlled Emissions (lb/yr) = Emissions (lb/event) x Events per Yea

*Line Purging Emissions are doubled because there are 2 halves of the line to be purge

Emissions (ton/yr) = Emissions (lb/yr) / 2000 lb/to

VCU Capacity Calculations

Inlet Pressure	12	in H_2O
Minimum Operating temperature	1,400	F
Maximum Operating temperature	2,000	F
# of rack loading spots	4	
# of trucks loaded per hour/rack	4	
Average Truck Load Capacity	8,000	gal/truck load
	1,069.38	ft^3/truck trailer
Organic Vapor Loss Rate	32.0	lb organic/load
Expected HC concentration in stream	40%	
Expected air concentration of HC	60%	
Max waste gas flow rate	936.0	CFM
Max HC content	42.2%	
Max LHV	1,624	BTU/scf
Max Heating Capacity of Load	91.20	MMBTU/hr
Density of gasoline vapors	0.160	lb/ft^3
Volumetric Flowrate of gasoline vapors	199.67	ft^3/load
	3,194.75	ft^3/hr
	53.25	CFM
Expected VCU Header Flow Rate	133.11	CFM
Flow Capacity (minus VCU Header)	802.89	CFM
Flow from Railcar Bleedoff	92.34	CFM
Minimum Dilution Air Requirement	126.47	CFM *(at max HC content)*
Total Flow From Railcar Venting	218.81	CFM
Remaining Flow Capacity after Railcar Venting	584.07	CFM
Heat Value of Gasoline Vapors	20,000	BTU/lb
Mass of Gasoline Vapors	512.00	lb/hr
Rack Heat Load	10.24	MMBTU/hr
Heat Load left	80.96	MMBTU/hr
Heat Load From Railcar Bleedoff	52.42	MMBTU/hr
Heat Load Remaining	28.55	MMBTU/hr

Abbreviations:

HC = hydrocarbon
LHV = lower heating value
VCU = vapor control unit
CFM = cubic feet per minute
MMBtu = million British thermal units
F = degrees Fahrenheit

Assumptions/Methodology:

Organic Vapor Loss Rate	Gasoline loading today (as VOC); Estimated by Buckeye Terminals (based on the standard used for gasoline based on molecular weight ratios of gasoline to propylene).
Expected HC concentration in stream	Standard design basis for gasoline loading racks GACT/MACT.
Expected air concentration of HC	Standard design basis for gasoline loading racks GACT/MACT.
Max waste gas flow rate	Displacement of vapors as vessel is filled.
Max HC content	Design specification of the device.
Max LHV	Design specification of the device.
Max Heating Capacity of Load	Max Heating Capacity of Load (MMBtu/hr) = Max LHV/1000000 x Max waste gas flow rate x 60 min/hr
Density of gasoline vapors	calculated on the following pages
Volumetric Flowrate of gasoline vapors	Vol. gas vapors (ft^3/load) = Organic Vapor Loss Rate (lb Org./load) / Density of gas vapors (lb/ft^3)
	Volumetric Flowrate of gas vapors (ft^3/hr) = Vol. gas vapors (ft^3/load) x No. trucks per loading rack x No. of loading racks = 199.67 x 4 x 4
	Volumetric Flowrate of gas vapors (CFM) = Volumetric Flowrate of gas vapors (ft^3/hr) / 60 min/hr
Expected VCU Header Flow Rate	Expected VCU Header Flow Rate (CFM) = Vol. gas vapors (CFM) / Expected HC conc. (%) = 53.25 CFM / 40%
Flow Capacity (minus VCU Header)	Flow Capacity (minus VCU Header) (CFM) = Max waste flow rate - Expected VCU Header flow rate = 936 CFM - 133.11 CFM
Flow from Railcar Bleedoff	Flowrate from Railcar Bleedoff (CFM) = Railcar Bleedoff Rate for propylene (ft^3/hr) / 60 min/hr = 5540 ft3/hr / 60 min/hr
Minimum Dilution Air Requirement	Minimum Dilution Air Requirement (CFM) = Railcar Bleedoff Rate for propylene (CFM) / (Max HC Content (%) - Railcar Bleedoff Rate for propylene (CFM)) = 92.34 /42.2% - 92.34
Total Flow From Railcar Venting	Total Flow From Railcar Venting (CFM) = Flow from Railcar Bleedoff (CFM) + Minimum Dilution Air Requirement (CFM) = 126.47 + 92.34
Remaining Flow Capacity after Railcar Venting	Remaining Flow Capacity after Railcar Venting (CFM) = Flow Capacity (minus VCU Header) (CFM) - Total Flow From Railcar Venting (CFM)
Heat Value of Gasoline Vapors	Standard Heating Value of gasoline vapors used for design purposes.
Mass of Gasoline Vapors	Mass of gasoline vapors (lb/hr) = Organic Vapor Loss Rate (lb org./load) x No. trucks per loading rack x No. of loading racks = 32 x 4 x4
Rack Heat Load	Rack Heat Load (MMBtu/hr) = Mass of gas vapors (lb/hr) x Heat Value of gas vapors (Btu/lb) / 1,000,000 Btu/MMBtu
Heat Load left	Heat Load left (MMBtu/hr) = Max Heating Capacity of Load (MMBtu/hr) - Rack Heat Load (MMBtu/hr)
Heat Load From Railcar Bleedoff	from propylene
Heat Load Remaining	Heat Load Remaining (MMBtu/hr) = Heat Load left (MMBtu/hr) - Heat Load From Railcar Bleedoff from propylene (MMBtu/hr)

Emissions from Equipment Leaks

Equipment leak emissions assuming no monitoring Program. This case represents the **uncontrolled potential emissions**.

Process Piping - No monitoring				20% budget factor	
Equipment Type	**Emissions Factor[1] (kg/component-hr)**		**Emissions Factor (lb/component-day)**	**Permitted Components**	**VOC Emissions (TPY)**
Valves - gas	0.00597		0.316	98	5.65
Valves - liquid	0.00403		0.213	214	6.93
Pumps	0.0199		1.053	5	0.77
Flanges	0.00183		0.097	1723	25.38
Sampling Connections	0.015		0.794	152	18.40
Pressure Relief Devices	0.104		5.503	6	5.02
TOTAL VOCs					**62.14**

Equipment leak emissions assuming a full leak detection and repair program. This case represents the **controlled potential emissions**.

Process Piping - Correlation Equations		10000 ppm screening value		2% Leak Fraction	
Equipment Type	**Emissions Factor[1] Default Zero (kg/component-hr)**	**Emissions Factor[1] Leaking Component (kg/component-hr)**	**Emissions Factor (lb/component-day)**	**Permitted Components**	**VOC Emissions (TPY)**
Valves - gas	6.60E-07	5.81E-03	6.18E-03	98	0.11
Valves - liquid	6.60E-07	9.88E-03	1.05E-02	214	0.41
Pumps	7.50E-06	3.76E-02	4.01E-02	5	0.04
Flanges	6.10E-07	6.03E-03	6.41E-03	1723	2.02
Sampling Connections	6.10E-07	6.03E-03	6.41E-03	152	0.18
Pressure Relief Devices	7.50E-06	3.76E-02	4.01E-02	6	0.04
TOTAL VOCs					**2.80**

[1] Factors determined from EPA Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017), Table 2-9 and 2-11, Nov. 1995.

Methodology:

Emission Factor (lb /component - day) = Emission Factor (kg /component - hr) x 24 hr/day x 2.20462 lb/kg
VOC Emissions (lb/yr) = Permitted Components x Emission Factor (lb / component - day) x 365 day/yr
VOC Emissions (ton/yr) = VOC Emissions (lb/yr) / 2000 lb/ton

Propylene Disconnect Calculation

Number of Cars Per Day	24	
Loading Line Diameter	2	inches
Sphere Bleedoff Rate	0.123	lb/ft^3 / disconnect

Parameter	To Car	From Car	Total	*units*
Arm Length Between Final Valve and Car	4	10		*feet*
Line Pressure	2	-2		*psig*
Volume In Headers at Disconnect	0.0873	0.2182		*ft^3*
Amount of Propylene in Headers at Disconnect	0.0108	0.0269	**0.0377**	*lb/disconnect*
	0.2583	0.6458	**0.9041**	*lb/day*
	0.1292	0.3229	**0.4521**	*lb/session*
	94.28	235.71	**330.00**	*lb/yr*
	0.0471	0.1179	**0.1650**	*ton/yr*

Methodology:

Throughput, Loading Line Diameter, Arm lengths, and Line Pressure values were provided by the source.
Sphere Bleedoff Rate is calculated on the following pages.
Volume in Headers at Disconnect (ft^3) = Arm Length (ft) x PI x (Line Radius (ft))^2
Amount of propylene in Headers at Disconnect (lb/disconnect) = Sphere Bleedoff Rate (lb/ft^3 / disconnect) x Volume in Headers at Disconnect (ft^3)
Amount of propylene in Headers at Disconnect (lb/day) = Amount of propylene in Headers at Disconnect (lb/disconnect) x No. Cars per day
Amount of propylene in Headers at Disconnect (lb/session) = Amount of propylene in Headers at Disconnect (lb/session) / Total Loading Sessions (2 /day)
Amount of propylene in Headers at Disconnect (ton/yr) = Amount of propylene in Headers at Disconnect (lb/day) x 365 day/yr / 2000 lb/ton

Propylene Project Emissions Basis: Railcar

Propylene will be emitted from railcar operations when cars are vented down.

Assumptions and notes:

C2 = ethane and ethylene
C3 = propylene

Max propylene in car at 50 psig	2,647	lb/car	Assumed as all C3; calculated on a previous page [m (lb) = n x MW = MW x P x V / (R x T)]
Frequency of having to vent down car	3%	annual average	
Max number of cars per day	24	car/day	= 12 cars /loading session x 2 loading sessions /day
Max number of cars vented per year	263		= No. cars loaded/day x Frequency of Vent Down (%)
Max C3 to be consumed	695,733	lb/yr	= No. cars vented/yr x Max propylene in car (lb/car)
Knock-out system efficiency	80%		Based on partial pressure calculations at 250 psig operating pressure, where 80% of return stream expected to be C3, & the 20% C2 fraction is expected to be combusted from overpressured cars.
Max C3 to VCU	556,586	lb/yr	= Max C3 consumed (lb/yr) x Knock-out system efficiency (%)
Max C2 to VCU	139,147	lb/yr	= Max C3 consumed (lb/yr) x (1 - Knock-out system efficiency (%))
Combustion Rate	7,000,000	lb/yr	
Rail Car Venting	30%	allocation	
	2,100,000	lb/yr	= Flaring Rate (lb/yr) x Rail Car Venting Allocation (%)
Size of Rail Car	987	bbl/car	= Railcar Capacity (ft^3) x 7.481 gal/ft^3 / barrel volume (gal/barrel)
	5,540	ft^3	= L (62') x [{(H (10') + W (8'))/12} / 2]^2 x pi
Number of railcars this represents	793	cars/yr	= Railcar Flaring Rate (lb/yr) / Max propylene in car @ 50psig (lb/car)
No. of day's worth of cars this represents	33	days	= No. Railcars represented (cars/yr)/ No. Railcars per day
Percent overpressure on annual basis	9.1%		= No. of days worth of cars / 365 days/yr

Methodology:

Propylene Project Emissions Basis: Sphere

Propylene will be emitted during transfer between the spheres and the railcars.

Max daily expected throughput	23,684	bbl/day	
Density of compressed propylene	0.613	bulk density	
Mass of propylene throughput	5,085,533	lb/day	= Maximum Throughput (bbl/day) x Barrel Volume (gal/bbl) x density H_20 x bulk density of propylene
	211,897	lb/hr	
Maximum Sphere Loading Rate	1	car/hr	
Max C2 concentration	0.7%		Design specification for maximum ethane concentration in propylene.
Vapor Density @ 250 psig	0.716	lb/ft^3	= 1 / m @ initial pressure
Max C2 Throughput	35,599	lb/day	= Propylene Throughtput (lb/day) x Max C2 Concentration of propylene (%)
	49,709	ft^3/day	= Max C2 Throughput (lb/day) / Vapor Density @ 250 psig (lb/ft^3)
	8,854	bbl/day	= Max C2 Throughput (ft^3/day) x 7.481 gal/ft^3 / Barrel Volume (gal/barrel)
Assume all C2 combusted			
High heating value (HHV) of ethane	22,400	Btu/lb	
Max Btus to remove from system	797.41	MMBtu/day	= Max C2 Throughput (lb/day) x HHV of ethane (Btu/lb) / 1000000 Btu/MMBtu
	33.2	MMBtu/hr	
Expected vessel void space			
Vessel Total Capacity	20,143	bbl	60 ft diameter spheres
Vessel Working Capacity	17,121	bbl	15% void space
Minimum void space per vessel	3,021	bbl	= Total Volume (bbl) - Working Volume (bbl)
	16,963	ft^3	= Minimum Void Space (bbl) x Barrel Volume (gal/barrel) / 7.481 gal/ft^3
Total available void space	33,926	ft^3	= Minumum Void Space x 2 Spheres
Number of day's C2 this represents	0.68	days	= Total Available Void Space (ft^3) / Max C2 Throughput (ft^3/day)
Sphere Ventdown	70%	allocation	
	4,900,000	lb/yr	= Flaring Rate (lb/yr) x Sphere Ventdown Allocation (%)
Days of venting at this rate @ max	138	days	= Sphere Ventdown Rate (lb/yr) / Max C2 Throughput (lb/day)
Fraction of max C2 this represents	37.7%		= No. of days venting / 365 days/yr

Sphere Bleedoff	**Units**	**Ethane**	**Gasoline**	**Air**	**Propylene**	
Design molecule		C_2H_6	C_3H_{26}	*	C_3H_6	
			C_4H_{14}		inlet side	outlet side
Capacity:	bbl	0.178	Cubic Foot Capacity (bbl) = 7.481 gal/ft3 x 1 ft3 / Volume (gal/barrel)			
per cubic foot calculation	gal/ft^3	7.48				
	ft^3	1.0				
P Initial	psig	250	0	0	2	-2
	psia	*264.7*	14.7	14.7	16.7	12.7
P Final	psig	200				
	psia	*214.7*	Pressure (psia) = Pressure (psig) + 14.7			
R	psia-ft^3/ (R-lb-mol)	10.73				
T	F *(ambient)*	70				
	R	530				
MW	lb/lb-mol	30	62	29	42	42
m**	lb @ initial P	1.396	0.160	0.075	0.123	0.094
m	**Rack Header**	**0.11**	**lb @ initial pressure**		**Ethane**	**lb/ft^3**	**ft^3/lb**
					@ initial P	1.396	0.716
					@ final P	1.133	0.883

PV = nRT
**m (lb) = n x MW = MW x P x V / (R x T)
m (lb), Rack Header (@ initial pressure) = m (gas) x Gas Volume (40%) + m (air) x Air Volume (60%)

Components in Dry Air*	**Volume Ratio compared to Dry Air**	**Molecular Mass - *M*** *(kg/kmol)*	**Molecular Mass in Air**
Oxygen	0.2095	32	6.70
Nitrogen	0.7809	28.02	21.88
Carbon Dioxide	3.0E-04	44.01	1.3E-02
Hydrogen	5.0E-07	2.02	1.0E-06
Argon	9.3E-03	39.94	3.7E-01
Neon	1.8E-05	20.18	3.6E-04
Helium	5.0E-06	4	2.0E-05
Krypton	1.0E-06	83.8	8.4E-05
Xenon	9.0E-08	131.29	1.2E-05
Total Molecular Mass of Air			**28.97**

Process Information

Railcars:

Maximum Railcar Feed to Buckeye	23,684	barrels (bbl) /day
	11,842	barrels (bbl) /loading session
# cars filled at one session	12	railcars/loading session
Expected time to fill cars	12	hr/loading session
	2	loading sessions /day
Loading Capacity	24	cars/day
Car capacity	987	barrels (bbl) /car
Barrel Storage Volume	42	gal/barrel

Spheres:

Sphere Loading Rate	2,100	barrels (bbl) /hour	
	88,200	gal/hr	
Sphere Diameter	60	feet	
Sphere Radius	30	feet	
Sphere Volume	113,097	ft^3	
conversion factor	*0.1781*	*bbl/ft^3*	
Total Volume	20,143	bbl	
	845,991	gal	
Working Volume Capacity:	85%		*15% void space*
Sphere Working Volume	17,121	bbl/sphere	
	719,092	gal/sphere	
Total Working Volume	34,242	bbl (total)	
	1,438,184	gal (total)	
Maximum Turnovers:	1.45	per day	
	527.71	per year	
Maximum Throughput	758,947,893	gal/yr	
	379,473,946	gal/sphere	
Working Loss	126.92	lb/yr	
Breathing Loss	0.20	lb/yr	
Total Emissions	127.12	lb/yr	
	6.36E-02	ton/yr	

Methodology:

Maximum Feed Rate to Buckeye (bbl/day) = Railcar Capacity (bbl/car) x Loading Capacity (cars/day)
Sphere Loading Rate (gal/hr) = Sphere Loading Rate (bbl/hr) x Barrel Storage Volume (gal/barrel)
Sphere Volume (ft^3) = 4/3 x pi x (sphere radius (ft))^3
Sphere Total Volume (bbl) = Sphere Volume (ft^3) x 0.1781 bbl/ft^3
Sphere Working Volume (bbl) = Sphere Total Volume (bbl) x Working Volume Capacity (%)

Total Emissions from working and breathing losses were estimated using Tanks 4.0.9d. Since Tanks does not have an option for a sperical tank, a horizontal tank design was used.

Indiana Department of Environmental Management
Office of Air Quality

Appendix B – BACT Analyses
Technical Support Document (TSD)
Significant Source Modification (SSM) of a Part 70 Source
Significant Permit Modification (SPM) of Part 70 Operating Permit

Source Background and Description

Source Name:	Buckeye Terminals, LLC
Source Location:	400 East Columbus Drive, East Chicago, Indiana 46312
County:	Lake
SIC Code:	5171
Part 70 Operating Permit Renewal No.:	T089-26500-00320
Permit Renewal Issuance Date:	January 22, 2009
Significant Source Modification No.:	089-30669-00320
Significant Permit Modification No.:	089-30673-00320
Permit Reviewer:	Kimberly Cottrell

Proposed Expansion

On January 22, 2009, the Office of Air Quality (OAQ) received an application from Buckeye Terminals, LLC (Buckeye) to install a propylene storage and loading facility, and to consolidate the operating permits for the Buckeye Terminals, LLC, located at 400 East Columbus Drive, in East Chicago, Indiana, and the Buckeye Terminals, LLC, located at 3823 Indianapolis Blvd, in East Chicago, Indiana in Lake County.

The current operations at the petroleum terminal include storage of petroleum in several large storage tanks and a truck loading rack equipped with a vapor combustor. The co-located pipe line station receives a variety of bulk petroleum products, many of which are transferred to other Buckeye and competitor facilities around the country. Buckeye is proposing to add two large spherical tanks to the tank farm on the west side of the facility to store propylene received by pipeline. The propylene will be routed to a new railcar loading area located on the east side of the facility, just east of the current truck loading rack.

Propylene has a high vapor pressure (above 11.1 psia) and must be stored in pressurized storage tanks which by their nature do not have air emissions. On an intermittent basis, ethane that builds up in the storage tanks will need to be removed from the tank. Also, prior to any maintenance or inspection activity on the tank interior, complete evacuation of vapors, both from the spheres and the associated piping, must be conducted. During these depressuring events, a portable vapor combustor owned by Buckeye (or equivalent) will be brought on site to combust evacuated vapors.

Similarly, propylene is transported in pressurized railcars. If the railcars come into the facility with no residual vapors in them from a previous load, there will be no emissions upon loading the railcars with propylene. Buckeye would directly load propylene product onto the railcars without any venting event. If the railcars contain significant quantities of vapors from a previous load, these vapors may be displaced or vented down before or during pressurized loading and will be routed to the existing loading rack vapor combustor for safe combustion. The existing truck loading rack vapor combustor is adequately sized to control both the gasoline vapors from existing bulk petroleum truck loading operations and the proposed railcar loading operation.

The proposed expansion will consist of adding the following emission units:

(a) Two (2) 21,000 barrel storage pressure spheres, using a portable vapor control unit (VCU), or equivalent, to control point source VOC emissions.

Requirement for Best Available Control Technology (BACT)

326 IAC 8-1-6 requires a Best Available Control Technology (BACT) review to be performed on the proposed modification because the emission units associated with the proposed expansion will each have the potential to emit Volatile Organic Compound (VOC) emissions greater than twenty-five (25) tons per year.

Emission Calculations

See Appendix A – Emission Calculations – of this TSD for detailed Potential to Emit (PTE) calculations.

Requirement for VOC BACT

The following new and modified emission units have the potential to emit volatile organic compounds; therefore, a Best Available Control Technology analysis for VOCs was performed for these units:

(a) Two (2) 21,000 barrel storage pressure spheres, using a portable vapor control unit (VCU), or equivalent, to control point source VOC emissions.

Summary of the Best Available Control Technology (BACT) Process

BACT is a mass emission limitation based on the maximum degree of pollution reduction of emissions, which is achievable on a case-by-case basis. A BACT analysis takes into account the energy, environmental, and economic impacts on the source. These reductions may be determined through the application of available control techniques, process design, work practices, and operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute to significant degradation of air quality, thereby protecting public health and the environment.

Federal guidance on BACT requires an evaluation that follows a “top down” process. In this approach, the applicant identifies the best-controlled similar source on the basis of controls required by regulation or controls achieved in practice. The highest level of control is then evaluated for technical feasibility.

The five (5) basic steps of a top-down BACT analysis are listed below:

Step 1: Identify Potential Control Technologies

The first step is to identify potentially “available” control options for each emission unit and for each pollutant under review. Available options should consist of a comprehensive list of those technologies with a potentially practical application to the emissions unit in question. The list should include lowest achievable emission rate (LAER) technologies, innovative technologies, and controls applied to similar source categories.

Step 2: Eliminate Technically Infeasible Options

The second step is to eliminate technically infeasible options from further consideration. To be considered feasible, a technology must be both available and applicable. It is important in this step that any presentation of a technical argument for eliminating a technology from further consideration be clearly documented based on physical, chemical, engineering, and source-specific factors related to safe and successful use of the controls. Only available and proven control technologies are evaluated. A control technology is considered available when there are sufficient data indicating that the technology results in a reduction in emissions of regulated pollutants.

Step 3: Rank the Remaining Control Technologies by Control Effectiveness

The third step is to rank the technologies not eliminated in Step 2 in order of descending control effectiveness for each pollutant of concern. If the top option is selected as BACT and there are no significant environmental impacts, then the BACT Review ends with selection of the top option as BACT. The ranked alternatives are reviewed in terms of environmental, energy, and economic impacts specific to the proposed modification. If the analysis determines that the evaluated alternative is not appropriate as BACT due to any of the impacts, then the next most effective is evaluated. This process is repeated until a control alternative is chosen as BACT. If the highest ranked technology is proposed as BACT, it is not necessary to perform any further technical or economic evaluation, except for the environmental analyses.

Step 4: Evaluate the Most Effective Controls and Document the Results

The fourth step entails an evaluation of energy, environmental, and economic impacts for determining a final level of control. If the top option is selected as BACT and there are no significant environmental impacts, then the BACT Review ends with selection of the top option as BACT. The evaluation begins with the most stringent control option and continues until a technology under consideration cannot be eliminated based on adverse energy, environmental, or economic impacts.

For the technologies determined to be feasible, there may be several different limits that have been set as BACT for the same control technology. The permitting agency has to choose the most stringent limit as BACT unless the applicant demonstrates in a convincing manner why that limit is not feasible. The final BACT determination would be the technology with the most stringent corresponding limit that is economically feasible. BACT must, at a minimum, be no less stringent than the level of control required by any applicable New Source Performance Standard (NSPS) and National Emissions Standard for Hazardous Air Pollutants (NESHAP) or state regulatory standards applicable to the emission units included in the permits.

Step 5: Select BACT

The fifth and final step is to select as BACT the most effective of the remaining technologies under consideration for each pollutant of concern.

The Office of Air Quality (OAQ) makes BACT determinations by following the five steps identified above.

Summary of Similar Sources

The table below summarizes existing sources with similar operations that are listed in the U.S. EPA RACT/BACT/LAER (RBLC) Clearinghouse database.

Table 1: Summary of Similar Sources			
Company Name and Location	**Affected Facility**	**BACT Determination**	**RBLC Reference**
Quad Graphics, OK	VOC storage tanks	tanks are ducted to carbon adsorber	OK-0054
LBC Houston Bayport Terminal, TX	VOC storage tanks	internal floating roof (IFR) configuration; Flare/Ice for refill and degas	TX-0537
UWGP - Fuel Grade Ethanol Plant, WI	VOC storage tanks	internal floating roof (IFR) configuration; good operating practices (NSPS compliant)	WI-0204
Baytown Olefins Plant, TX	VOC storage tanks	floating roof or equivalent configuration	TX-0339
Exxon Mobil Baytown Refinery, TX	VOC storage tanks	internal floating roof (IFR) configuration	TX-0340

There were no propylene storage tanks included in the RBLC database so the requirements for the above VOC storage tanks were considered.

VOC BACT - Pressure Spheres

Step 1: Identify Potential Control Technologies

There are two categories of controls for volatile organic compounds (VOCs); destruction control measures and reclamation control measures. Destruction technologies reduce the VOC concentration by high temperature oxidation into carbon dioxide and water vapor. Reclamation is the capture of VOCs for reuse or disposal. IDEM also considered commercially available combinations of reclamation and destruction technologies.

Propylene is a gas at room temperature, boiling at -54 ºF at atmospheric pressure. Buckeye proposes to handle propylene at high pressure to maintain the product stream as a liquid. Propylene combusts at 497ºC,or 926ºF. Propylene also is subject to catalytic polymerization, where improperly managed propylene is subject to becoming the polypropylene polymer often used in commercial and residential plastics applications.

<u>Destruction Control Methods</u>

The destruction of organic compounds usually requires temperatures exceeding the autoignition temperature of the stream. Typical combustion controls utilize temperatures ranging from 1,200°F to 2,200°F for direct thermal incinerators or 600 °F to 1,200 °F for catalytic systems. In this case, as long as the combustion reaches the autoignition temperature, adequate combustion is assured.

Carbon dioxide and water vapor are the typical products of complete combustion. Turbulent mixing and combustion chamber retention times of 0.5 to 1.0 seconds are needed to obtain high destruction efficiencies.

Fume incinerators typically need supplemental fuel to initiate and/or maintain combustion. Concentrated VOC streams with high heat contents obviously require less supplementary fuel than more dilute streams. VOC streams sometimes have a heat content high enough to be self-sustaining, but a supplemental fuel firing rate equal to about 5% of the total incinerator heat input is usually needed to stabilize the burner flame and/or initiate the combustion for intermittent combustion events. Natural gas is the most common fuel for VOC incinerators, but fuel oil is an option in some circumstances.

Combustion control technologies include recuperative thermal incineration, regenerative thermal incineration, recuperative catalytic incineration, regenerative catalytic incineration, vapor combustion, and flares. These technologies are all considered to be commercially available.

Other technologies may destroy and/or control VOC pollutants. Biofilters, either outdoor piles similar to compost piles or sophisticated installations involving fixed film on granular activated carbon substrates, appear to work, although such systems are large and require considerable space and are subject to plugging due to autocatalytic polymerization. Systems applying ultraviolet radiation, either with a titanium dioxide catalyst or in combination with hydrogen peroxide, also show promise, but also suffer from autocatalytic polymerization interference. None of these innovative applications are well documented, with little information on process costs. IDEM does not consider any of these technologies to be commercially available for autocatalytic polymerizing service for propylene emissions control.

Reclamation Control Methods

Organic compounds may be reclaimed by one of three possible methods; adsorption, absorption (scrubbing) or condensation. In general, the organic compounds are separated from the emission stream and reclaimed for reuse or disposal. Depending on the nature of the contaminant and the inlet concentration of the emission stream, recovery technologies can reach efficiencies of 98%.

Adsorption is a surface phenomenon where attraction between the carbon and the VOC molecules binds the pollutants to the carbon surface. Both carbon and VOC are chemically intact after adsorption. The VOCs may be removed, or desorbed, from the carbon and reclaimed or destroyed

Absorption is a unit operation where components of a gas phase mixture (pollutants) are selectively transferred to a relatively nonvolatile liquid, usually water. Sometimes, organic liquids, such as mineral oil or non-volatile hydrocarbons, are suitable absorption solvents. The choice of solvent depends on cost and the solubility of the pollutant in the solvent.

Condensation is the separation of VOCs from an emission stream through a phase change, by either increasing the system pressure or, more commonly, lowering the system temperature below the dew point of the VOC vapor. When condensers are used for air pollution control, they usually operate at the pressure of the emission stream, and typically require a refrigeration unit to obtain the temperature necessary to condense the VOCs from the emission stream.

Absorption and condensation are considered to be technically available technologies.

Combination Control Methods

In some cases, a combination of control technologies offers the most efficient and cost effective VOC control.

The combination of carbon adsorption with recuperative thermal incineration is available from several vendors. This system concentrates the VOC stream by using carbon adsorption to remove low concentration VOCs in an emission stream and then uses a lower volume of hot air, commonly one-tenth the original flow, to desorb the pollutants. A recuperative incinerator for destroying pollutants in the concentrated stream is much smaller and has lower supplemental fuel requirements than an incinerator sized for the full emission stream volume. Because adsorption is not technically feasible, as described above, the combination of carbon adsorption with recuperative thermal incineration is not technically feasible.

Absorption systems can also be used to concentrate emission streams to reduce the size of destruction equipment. The concentration effect is not as extreme as with carbon adsorption, a concentrated exhaust stream one quarter the volume of the inlet stream seems to be the practical limit. Absorption concentrators are typically suited for batch processes or to equalize pollutant concentrations in a variable stream. The physical characteristics that drive the absorption of pollutants into a liquid also limit the opportunity to remove those pollutants from the liquid stream. The proposed propylene process is not expected to utilize emission controls consistently enough to justify the use of a concentration system.

Step 2: Eliminate Technically Infeasible Options

IDEM has reviewed available control options to determine which, if any, might be technically feasible to further control VOC emissions from the propylene storage tanks.

<u>Flares/ Vapor Combustion - Technically Feasible</u>
Flares and vapor combustion are the typical destruction method utilized for combustion of petroleum vapors at refineries and terminals, including East Chicago, where vapor combustors are already in service. This technology can achieve a control efficiency of 98%, and is well suited to the intermittent nature of the vapor stream flow.

<u>Incineration - Not Technically Feasible</u>
Incineration requires adequate supplemental fuel to maintain a consistent combustor temperature, much of which would be wasted during intermittent operations. Incineration was not found to be a technology utilized in this industry and is not well suited for varying vapor stream flow operations. Because vapor combustion technology is already available at East Chicago, incineration may not substantially increase control efficiency, but incineration would dramatically increase supplemental fuel usage requirements; therefore, IDEM considers incineration technically infeasible for further control VOC emissions from the propylene storage tanks.

<u>Adsorption - Not Technically Feasible</u>
Adsorption is not technically feasible for autocatalytic polymerizing streams, such as propylene. due to polymerization problems. Adsorption is not used in this industry as the sieves are likely to be plugged up; therefore, IDEM considers carbon absorbers technically infeasible for further control VOC emissions from the propylene storage tanks.

<u>Carbon Absorbers - Not Technically Feasible</u>
Carbon absorbers have been used as VOC controls in similar operations and can be operated in situations where the vapor stream is intermittent and variable, since the equipment typically operates on a cycle of adsorption, desorption and condensation cycle. The control efficiency listed for a currently documented installation is 98%. However, carbon adsorbers are not technically feasible for autocatalytic polymerizing compounds like propylene; therefore, IDEM considers carbon absorbers technically infeasible for further control VOC emissions from the propylene storage tanks.

Condensation - Not Technically Feasible
Condensation is not technically feasible for autocatalytic polymerizing compounds like propylene; therefore, IDEM considers carbon absorbers technically infeasible for further control VOC emissions from the propylene storage tanks.

Combination Control Methods - Not Technically Feasible
Combination control technologies rely on the use of carbon adsorption in combination with combustion control systems. Since carbon adsorption was considered to be technically infeasible for control of VOC emissions from propylene storage tanks, any combination of controls that would include carbon absorption is also technically infeasible.

Step 3: Rank the Remaining Control Technologies by Control Effectiveness

The only technically feasible control option for controlling VOC emissions from the propylene storage tanks is flares/vapor combustion units. As discussed above, this technology can achieve 98% control of VOC emissions.

Step 4: Evaluate the Most Effective Controls and Document the Results

The table below summarizes existing sources with similar operations that are listed in the U.S. EPA RACT/BACT/LAER (RBLC) Clearinghouse database. The search of this clearinghouse was limited to sources with Source Codes 42.009 (Volatile Organic Liquid Storage), 42.010 (Volatile Organic Liquid Marketing), and 42.999 (Other Liquid Marketing Sources) for propylene storage tanks. There were no propylene storage tanks included in the RBLC database so other VOC storage tanks were considered. The following table represents the BACT/LAER emission limitations established for VOC storage tanks.

Table 1: Summary of Similar Sources

Source Name	VOC BACT Limit	Compliance Method	Control Efficiency	Compliance Information
Buckeye Terminals, Inc., IN *Proposed (SSM No. 089-30669-00320)*	3.76 ton/yr (per sphere)	use of existing vapor combustion unit (or equivalent) during depressurization	98%	NA
Quad Graphics, OK 8/21/2001 [OK-0054]	1.94 ton/yr	carbon adsorber	98%	not available
LBC Houston Bayport Terminal, TX 10/26/2009 [TX-0537]	1.83 ton/yr; 6.62 ton/yr	internal floating roof (IFR) configuration; Flare/Ice for refill and degas	98%	not available
UWGP - Fuel Grade Ethanol Plant, WI 08/14/2003 [WI-0204]	none	internal floating roof (IFR) configuration; good operating practices (NSPS compliant)	not available	not available
Baytown Olefins Plant, TX 4/05/2001 [TX-0339]	several tanks (ranges shown): 0.32 to 22 lb/hr; 0.04 to 2.82 ton/yr	floating roof or equivalent configuration	not available	not available
Exxon Mobil Baytown Refinery, TX [TX-0340]	0.16 ton/yr; 0.68 ton/yr	internal floating roof (IFR) configuration	not available	not available

Quad Graphics OKC Facility
Quad Graphics OKC Facility uses a carbon adsorption system while most sources are just using internal floating roof tanks to meet the requirements of Subpart Kb. The carbon absorption system was listed at an efficiency of 98%. The VOC removal efficiency of the proposed vapor combustion units is equivalent to the destruction efficiency achieved by the carbon adsorption system at the Quad Graphics OKC Facility.

LBC Houston Bayport Terminal, TX
LBC Houston Bayport Terminal, TX utilized a combination of an internal floating roof and a flare or internal combustion engine when degassing. This combination was also listed at an efficiency of 98%. Propylene is stored as a refrigerated liquid; therefore, propylene should be stored in pressurized tanks (e.g., low temperature tanks, cryogenic tanks, and spherical tanks). Internal floating roofs are not technically feasible for propylene storage, and internal floating roofs are not an NSPS allowable control for this type of volatile organic storage. The VOC removal efficiency of the proposed vapor combustion units is equivalent to the destruction efficiency achieved by the technology used at the LBC Houston Bayport Terminal.

UWGP - Fuel Grade Ethanol Plant, WI
UWGP - Fuel Grade Ethanol Plant, WI utilizes an internal floating roof configuration for VOC storage tanks. No control efficiency was provided for this approach. Propylene is stored as a refrigerated liquid; therefore, propylene should be stored in pressurized tanks (e.g., low temperature tanks, cryogenic tanks, and spherical tanks). Internal floating roofs are not technically feasible for propylene storage, and internal floating roofs are not an NSPS allowable control for this type of volatile organic storage. The VOC removal efficiency of the proposed vapor combustion units is equivalent to the VOC reductions achieved by the technology used at the UWGP - Fuel Grade Ethanol Plant.

Baytown Olefins Plant, TX
Baytown Olefins Plant, TX utilizes an internal floating roof configuration for VOC storage tanks. No control efficiency was provided for this approach. Propylene is stored as a refrigerated liquid; therefore, propylene should be stored in pressurized tanks (e.g., low temperature tanks, cryogenic tanks, and spherical tanks). Internal floating roofs are not technically feasible for propylene storage, and internal floating roofs are not an NSPS allowable control for this type of volatile organic storage. The VOC removal efficiency of the proposed vapor combustion units is equivalent to the VOC reductions achieved by the technology used at the Baytown Olefins Plant, TX.

Exxon Mobil Baytown Refinery, TX
Exxon Mobil Baytown Refinery, TX utilizes an internal floating roof configuration for VOC storage tanks. No control efficiency was provided for this approach. Propylene is stored as a refrigerated liquid; therefore, propylene should be stored in pressurized tanks (e.g., low temperature tanks, cryogenic tanks, and spherical tanks). Internal floating roofs are not technically feasible for propylene storage, and internal floating roofs are not an NSPS allowable control for this type of volatile organic storage. The VOC removal efficiency of the proposed vapor combustion units is equivalent to the VOC reductions achieved by the technology used at the Exxon Mobil Baytown Refinery, TX.

Review of Federal and State Regulations

One of the requirements of a BACT analysis is the review of all State and Federal regulations for potentially applicable limitations. By definition, BACT must be at least as stringent as other applicable limits. Federal and State rules were reviewed to identify emission limitations that will be applicable to the emission units proposed at the Buckeye facility. This analysis also identifies emission limitations that would be applicable to similar operations, but might not be applicable to the specific operations proposed for Buckeye.

The New Source Performance Standard (NSPS) for storage tanks (40 CFR 60 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 is applicable to the propylene storage tanks when there are emissions (the intermittent depressuring events). Subpart Kb requires storage tanks that have a capacity greater than or equal to 75 cubic meters with a volatile organic liquid that has a true vapor pressure greater than 76.6 kiloPascals to be equipped with a closed vent system and control device that reduces inlet VOC emissions by 95% or greater.

The State of Indiana VOC reduction rule for volatile organic storage, 326 IAC 8-9 Volatile Organic Liquid Storage Vessels is applicable to stationary vessels used to store volatile organic liquid (VOL) that are located in Clark, Floyd, Lake, or Porter County. The rule exempts several types of vessels including, stationary vessels that are subject to any provision of 40 CFR 60, Subpart Kb, New Source Performance Standard for Volatile Organic Liquid Storage (326 IAC 8-9-2(8)).

Summary

While an identical storage operation was not found in the RBLC, two types of similar storage controls were noted. Both of these control options, venting degassing emissions to a flare and carbon adsorption, listed a control efficiency of 98%. Since the proposed control technology of the existing vapor combustor control equipment used to meet the requirements of NSPS Subpart Kb also has a control efficiency of 98%, the proposed control option is the most effective. A review of the relative capital and operating costs was not necessary since the proposed option is the most effective.

Because the proposed limit is equal to the most stringent limit required for any other similar operation that has been demonstrated in practice, this limit is presumed to be the “top” BACT, and no further analysis is required. See Appendix A for VOC emissions after 98% control.

Step 5: Select BACT

This analysis concludes that best available control technology (BACT) consists of the following for VOC emissions from each propylene storage sphere at the East Chicago plant:

(a) The Permittee shall use a vapor combustion unit (or equivalent) to control the VOC emissions from the propylene storage spheres

(b) The VOC emissions from full ventdown events (for each sphere) shall not exceed 1.38 tons per twelve month period with compliance determined at the end of each month.

(c) The VOC emissions from depressurization events (for each sphere) shall not exceed 2.39 tons per twelve month period with compliance determined at the end of each month.

(d) Tank Breathing losses are very small; therefore, no control is feasible to control VOC emissions from breathing losses (for each sphere). The VOC emissions from Tank Breathing losses (for each sphere) shall not exceed 1.0 tons per twelve month period with compliance determined at the end of each month.

IDEM Contact

Questions regarding this proposed permit can be directed to:

Kimberly Cottrell
Indiana Department Environmental Management
Office of Air Quality
100 North Senate Avenue
MC 61-53, Room 1003
Indianapolis, Indiana 46204-2251
Toll free (within Indiana): 1-800-451-6027 extension 3-0870
Or dial directly: (317) 233-0870
Fax: (317)-232-6749 attn: Kimberly Cottrell
E-mail: kcottrel@idem.in.gov

Please refer to Significant Source Modification No. 089-30669-00320 and Significant Permit Modification No. 089-30673-00320 in all correspondence.

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Jason Mengel
Buckeye Terminals, LLC
5 Tek Park 9999 Hamilton Blvd
Breinigsville, PA 18031

DATE: December 22, 2011

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

SUBJECT: Final Decision
Significant Source Modification
089-30669-00320

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
District Manager – Senior Director, Health Safety & Environmental
Patricia Sorensen – Environmental Resource Management (ERM)
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

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Governor

Thomas W. Easterly
Commissioner

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December 22, 2011

TO: East Chicago Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Buckeye Terminals, LLC
Permit Number: 089-30669-00320

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

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2		District Manager Sr Dir - Health, Safety & Environmental Buckeye Terminals, LLC 5 TEK Park, 9999 Hamilton Ave Breinigsville PA 18031 *(RO CAATS)*									
3		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 *(Affected Party)*									
4		East Chicago City Council 4525 Indianapolis Blvd East Chicago IN 46312 *(Local Official)*									
5		East Chicago Public Library 2401 E Columbus Dr East Chicago IN 46312-2998 *(Library)*									
6		Gary - Hobart Water Corp 650 Madison St, P.O. Box M486 Gary IN 46401-0486 *(Affected Party)*									
7		Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795 *(Health Department)*									
8		Ms. Patricia Sorensen Environmental Resources Management (ERM) 11350 North Meridian Street, Ste 320 Carmel IN 46032 *(Consultant)*									
9		WJOB / WZVN Radio 6405 Olcott Ave Hammond IN 46320 *(Affected Party)*									
10		Laurence A. McHugh Barnes & Thornburg 100 North Michigan South Bend IN 46601-1632 *(Affected Party)*									
11		Shawn Sobocinski 3229 E. Atlanta Court Portage IN 46368 *(Affected Party)*									
12		Ms. Carolyn Marsh Lake Michigan Calumet Advisory Council 1804 Oliver St Whiting IN 46394-1725 *(Affected Party)*									
13		Mark Coleman 9 Locust Place Ogden Dunes IN 46368 (Affected Party)									
14		Mr. Chris Hernandez Pipefitters Association, Local Union 597 8762 Louisiana St., Suite G Merrillville IN 46410 *(Affected Party)*									
15		Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 *(Affected Party)*									

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1		Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 (Local Official)									
2		Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 *(Affected Party)*									
3		Barbara G. Perez 506 Lilac Street East Chicago IN 46312 *(Affected Party)*									
4		Mr. Robert Garcia 3733 Parrish Avenue East Chicago IN 46312 *(Affected Party)*									
5		Ms. Karen Kroczek 8212 Madison Ave Munster IN 46321-1627 *(Affected Party)*									
6		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 *(Affected Party)*									
7		Gary City Council 401 Broadway # 209 Gary IN 46402 *(Local Official)*									
8		Mr. Larry Davis 268 South, 600 West Hebron IN 46341 *(Affected Party)*									
9		Gitte Laasby Post Tribune 1433 E. 83rd Ave Merrillville IN 46410 *(Affected Party)*									
10		Susan Severtson City of Gary Law Dept. 401 Broadway 4th Floor Gary IN 46402 *(Local Official)*									
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