



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

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**Michael R. Pence**  
*Governor*

**Thomas W. Easterly**  
*Commissioner*

TO: Interested Parties / Applicant

DATE: February 20, 2014

RE: Buckeye Terminals, LLC / 089-33112-00320

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, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) 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.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

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.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
401 M Street  
Washington, D.C. 20406

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.



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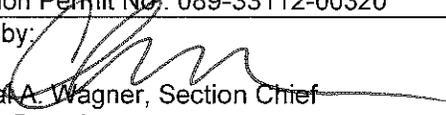
## PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Buckeye Terminals, LLC  
400 East Columbus Drive  
East Chicago, Indiana 46312**

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

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

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

Operation Permit No: 089-33112-00320	
Issued by:  Chrystala A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: February 20, 2014  Expiration Date: February 20, 2019



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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]**

**Attachment C: National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE) [40 CFR Part 63, Subpart ZZZZ]**

## 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(14)] [326 IAC 2-7-1(22)]

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The Permittee owns and operates a stationary pipeline breakout tank farm and bulk liquid fuel storage and transfer terminal.

Source Address:	400 East Columbus Drive, East Chicago, Indiana 46312
General Source Phone Number:	219-397-6666
SIC Code:	5171
County Location:	Lake
Source Location Status:	Nonattainment for 8-hour ozone standard Nonattainment for PM <sub>2.5</sub> standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, under Emission Offset Major 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(14)]

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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 rail 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, loading and maintenance 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) One (1) 2,000 gallon horizontal fixed roof gasoline additive storage tank, identified as T-1508 and one (1) 500 gallon horizontal fixed-roof jet fuel additive storage tank, identified T-1509, approved in 2014 to replace two (2) existing additive storage tanks (T-1501 and T-1502).
- (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(14)]

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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.

PROPYLENE STORAGE AND LOADING FACILITY

- (c) One (1) 550 gallon red-dye additive tank.

- (d) One (1) butane truck off load station. Butane comes in trucks and injected through piping under pressure to fill existing butane tanks. Before the off load station, butane comes from underground piping networks from other states.
- (e) One (1) rail fueling station
- (f) One trailer mounted flare for control of propylene maintenance activities that are below the ideal operating range of the existing portable vapor combustion units (PVCU).

#### EAST COLUMBUS DRIVE TERMINAL

- (g) Two (2) horizontal above ground storage tanks, identified as BD-1 and BD-2, with a maximum capacity of 20,000 gallon each, permitted in 2012.
- (h) One (1) 32 horsepower (Hp) emergency fire pump, ID IC-1, approved in 1998 for construction.

#### ENTIRE SITE

- (i) 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]

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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]

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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)]

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- (a) The Part 70 Operating Permit, T089-33112-00320, 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]

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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]

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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)]

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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)]

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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)]

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- (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)]

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- (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(35), 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(35).

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

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- (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(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)] [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(35).

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(35).

- (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]**

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- (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 or 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) 464-0233; fax: (219) 464-0553.

- (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(35).

- (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)(8) 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 T089-33112-00320 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(35).

- (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(42). 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(35).

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]**

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(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 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(35).

(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)]**

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(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]**

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(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) 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)(1) and (c)(1). 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) and (c)(1).

- (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(37)) 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(35).

- (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 modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

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(35).

- (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) 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.
- (d) 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.
- (e) 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.
- (f) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (g) 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 certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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]**

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- (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(35).
- (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(35).
- (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]**

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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)] [40 CFR 64][326 IAC 3-8]**

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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(35).

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.

- (b) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- (c) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

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

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- (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]

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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(11)] [40 CFR 68]

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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][40 CFR 64][326 IAC 3-8]

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- (l) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, 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.
- (II)
- (a) *CAM Response to excursions or exceedances.*
    - (1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.
    - (2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
  - (b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
  - (c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

- (d) Elements of a QIP:  
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).
- (e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
- (f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:
  - (1) Failed to address the cause of the control device performance problems;  
or
  - (2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.
- (h) CAM recordkeeping requirements.
  - (1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.
  - (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

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(35).

### **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(35).

#### **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.

Support information includes the following:

- (AA) All calibration and maintenance records.
- (BB) All original strip chart recordings for continuous monitoring instrumentation.
- (CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following:

- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
- (BB) The dates analyses were performed.
- (CC) The company or entity that performed the analyses.
- (DD) The analytical techniques or methods used.
- (EE) The results of such analyses.
- (FF) The operating conditions as existing at the time of sampling or measurement.

- (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 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:
- (1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(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 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), 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]

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- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. 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(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

- (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

- (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 (oo) and/or 326 IAC 2-3-1 (jj)) 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 (ww) and/or 326 IAC 2-3-1 (pp), 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**

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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(14)]: 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(12)] [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 the compliance status 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

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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]**

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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.
- (e) 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.

## **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)]**

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

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

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- (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 rail 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, loading and maintenance operations.

#### Insignificant Activities:

- (c) One (1) 550 gallon red-dye additive tank.
- (d) One (1) butane truck off load station. Butane comes in trucks and injected through piping under pressure to fill existing butane tanks. Before the off load station, butane comes from underground piping networks from other states.
- (e) One (1) rail fueling station
- (f) One trailer mounted flare for control of propylene maintenance activities that are below the ideal operating range of the existing portable vapor combustion units (PVCU).

(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 rail 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 4.32 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]**

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- (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]**

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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)]**

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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)]**

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- (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]**

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- (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 rail 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 rail 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 rail 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)

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- (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), the Permittee shall use the following methodology to calculate VOC emissions from the Propylene Storage Spheres (Sphere 1 and Sphere 2):

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

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:

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

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 2-7-5(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)] [40 CFR Part 64]

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- (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 rail 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 [40 CFR Part 64]

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- (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

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- (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 (3) below. Records maintained for (1) through (3) 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.
- (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

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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(35). 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) One (1) 2,000 gallon horizontal fixed roof gasoline additive storage tank, identified as T-1508 and one (1) 500 gallon horizontal fixed-roof jet fuel additive storage tank, identified T-1509, approved in 2014 to replace two (2) existing additive storage tanks (T-1501 and T-1502).
- (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.

Insignificant Activities:

- (g) Two (2) horizontal above ground storage tanks, identified as BD-1 and BD-2, with a maximum capacity of 20,000 gallon each, permitted in 2012.

(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]**

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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 (1) and (4) 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 ( $\frac{1}{8}$ ) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the vessel and measure the circumferential distance of each such location.
  - (C) The total surface area of each gap described in 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]**

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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) 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 biodiesel tanks BD-1 and BD-2:
  - (1) The vessel identification number.
  - (2) The vessel dimensions.
  - (3) The vessel capacity.
- (d) 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)]**

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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]**

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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 Part 64]**

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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 Part 64]**

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- (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**

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- (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.

(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]

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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]

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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, 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.2 NATIONAL 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) One (1) 2,000 gallon horizontal fixed roof gasoline additive storage tank, identified as T-1508 and one (1) 500 gallon horizontal fixed-roof jet fuel additive storage tank, identified T-1509, approved in 2014 to replace two (2) existing additive storage tanks (T-1501 and T-1502).
- (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 BBBB 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 BBBB]**

Pursuant to 40 CFR 63.11083, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart BBBB (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 BBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Storage Tanks
- Table 2 to Subpart BBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Loading Racks
- Table 3 to Subpart BBBB of Part 63—Applicability of General Provisions

## SECTION E.3 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(14)]

EAST COLUMBUS DRIVE TERMINAL - Insignificant Activity:

(h) One (1) 32 horsepower (Hp) emergency fire pump, ID IC-1, approved in 1998 for construction.

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

#### E.3.1 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]

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 emergency fire pump except when otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

#### E.3.2 National Emission Standards for Hazardous Air Pollutants for Area Sources: Reciprocating Internal Combustion Engines (RICE [40 CFR Part 63, Subpart ZZZZ])

Pursuant to 40 CFR Part 63, Subpart ZZZZ, the emergency fire pump with < 500 HP capacity constructed before June 12, 2006 shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ no later than May 3, 2013:

- (1) 40 CFR § 63.6580
- (2) 40 CFR § 63.6585(a), (c)
- (3) 40 CFR § 63.6590(a)(1)(iii)
- (4) 40 CFR 63.6595(a)(1)
- (5) 40 CFR 63.6603(a)
- (6) 40 CFR 63.6605
- (7) 40 CFR 63.6625(e)(3), (f), (i)
- (8) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2), (f)(4)
- (9) 40 CFR 63.6645(a)(5)
- (10) 40 CFR 63.6655(d), (e)(2), (f)(2)
- (11) 40 CFR 63.6660
- (12) 40 CFR 63.6665
- (13) 40 CFR 63.6670
- (14) 40 CFR 63.6675
- (15) Table 2d to Subpart ZZZZ of Part 63 (item 4)
- (16) Table 6 to Subpart ZZZZ of Part 63 (item 9)
- (17) Table 8 to Subpart ZZZZ of Part 63

**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.: T089-33112-00320

**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.: T089-33112-00320

**This form consists of 2 pages**

**Page 1 of 2**

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none"><li>• 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</li><li>• 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.</li></ul>
---

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? <input type="checkbox"/> Y <input type="checkbox"/> N Describe:
Type of Pollutants Emitted: <input type="checkbox"/> TSP <input type="checkbox"/> PM-10 <input type="checkbox"/> SO <sub>2</sub> <input type="checkbox"/> VOC <input type="checkbox"/> NO <sub>x</sub> <input type="checkbox"/> CO <input type="checkbox"/> Pb <input type="checkbox"/> 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.: T089-33112-00320  
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)
1			
2			
3			

- 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.: T089-33112-00320  
 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.

$$E_s = (M_s \times EV_s) \times (1.0 - VCU\ DRE) / 2000\ lb/ton$$

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	depressurization	full ventdown	depressurization	full ventdown	depressurization
1						
2						
3						

- 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.: T089-33112-00320  
 Facility: Propylene Rail 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

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	VOC Emissions for This Month (tons)	VOC Emissions for Previous 11 Months (tons)	VOC Emissions for 12-Month Period (tons)
1			
2			
3			

- 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.: T089-33112-00320  
 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.

$$E_p = (M_p \times EV_p) \times (1.0 - \text{VCU DRE}) / 2000 \text{ lb/ton}$$

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 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)
1			
2			
3			

- 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.: T089-33112-00320

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C- General Reporting. 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”.</p>	
<p><input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.</p>	
<p><input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD</p>	
<p><b>Permit Requirement</b> (specify permit condition #)</p>	
<p><b>Date of Deviation:</b></p>	<p><b>Duration of Deviation:</b></p>
<p><b>Number of Deviations:</b></p>	
<p><b>Probable Cause of Deviation:</b></p>	
<p><b>Response Steps Taken:</b></p>	
<p><b>Permit Requirement</b> (specify permit condition #)</p>	
<p><b>Date of Deviation:</b></p>	<p><b>Duration of Deviation:</b></p>
<p><b>Number of Deviations:</b></p>	
<p><b>Probable Cause of Deviation:</b></p>	
<p><b>Response Steps Taken:</b></p>	

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

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

## Attachment A

### Title 40: Protection of Environment

#### 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

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<sup>3</sup>) 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<sup>3</sup> 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<sup>3</sup> but less than 151 m<sup>3</sup> 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<sup>3</sup> 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<sup>3</sup> 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<sup>3</sup> but less than 151 m<sup>3</sup> 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<sup>3</sup> 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<sup>3</sup> but less than 151 m<sup>3</sup> 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<sup>3</sup> 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<sup>2</sup> 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<sup>2</sup> 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<sup>3</sup> 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<sup>3</sup> but less than 151 m<sup>3</sup> 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<sup>3</sup> 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<sup>3</sup> but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

(e) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.

(1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

(2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517

(incorporated by reference—see §60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

(3) For other liquids, the vapor pressure:

(i) May be obtained from standard reference texts, or

(ii) Determined by ASTM D2879-83, 96, or 97 (incorporated by reference—see §60.17); or

(iii) Measured by an appropriate method approved by the Administrator; or

(iv) Calculated by an appropriate method approved by the Administrator.

(f) The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

(1) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of this section.

(2) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in §60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

(i) ASTM D2879-83, 96, or 97 (incorporated by reference—see §60.17); or

(ii) ASTM D323-82 or 94 (incorporated by reference—see §60.17); or

(iii) As measured by an appropriate method as approved by the Administrator.

(g) The owner or operator of each vessel equipped with a closed vent system and control device meeting the specification of §60.112b or with emissions reductions equipment as specified in 40 CFR 65.42(b)(4), (b)(5), (b)(6), or (c) is exempt from the requirements of paragraphs (c) and (d) of this section.

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

**§60.117b Delegation of authority.**

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: §§60.111b(f)(4), 60.114b, 60.116b(e)(3)(iii), 60.116b(e)(3)(iv), and 60.116b(f)(2)(iii).

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

**Title 40: Protection of Environment**

**PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES**

**40 CFR 63, 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).

(c) Gasoline storage tanks that are located at affected sources identified in paragraphs (a)(1) through (a)(4) of this section, and that are used only for dispensing gasoline in a manner consistent with tanks located at a gasoline dispensing facility as defined in §63.11132, are not subject to any of the requirements in this subpart. These tanks must comply with subpart CCCCCC of this part.

(d) The loading of aviation gasoline into storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to this subpart.

(e) The loading of gasoline into marine tank vessels at bulk facilities is not subject to this subpart.

(f) If your affected source's throughput ever exceeds an applicable throughput threshold in the definition of "bulk gasoline terminal" or in item 1 in Table 2 to this subpart, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold.

(g) For the purpose of determining gasoline throughput, as used in the definition of bulk gasoline plant and bulk gasoline terminal, the 20,000 gallons per day threshold throughput is the maximum calculated design throughput for any day, and is not an average. An enforceable State, local, or Tribal permit limitation on throughput, established prior to the applicable compliance date, may be used in lieu of the 20,000 gallons per day design capacity throughput threshold to determine whether the facility is a bulk gasoline plant or a bulk gasoline terminal.

(h) Storage tanks that are used to load gasoline into a cargo tank for the on-site redistribution of gasoline to another storage tank are subject to this subpart.

(i) For any affected source subject to the provisions of this subpart and another Federal rule, you may elect to comply only with the more stringent provisions of the applicable subparts. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the affected source and provisions with which you will comply in your Notification of Compliance Status required under

§63.11093. You also must demonstrate in your Notification of Compliance Status that each provision with which you will comply is at least as stringent as the otherwise applicable requirements in this subpart. You are responsible for making accurate determinations concerning the more stringent provisions; noncompliance with this rule is not excused if it is later determined that your determination was in error, and, as a result, you are violating this subpart. Compliance with this rule is your responsibility, and the Notification of Compliance Status does not alter or affect that responsibility.

(j) For new or reconstructed affected sources, as specified in §63.11082(b) and (c), recordkeeping to document applicable throughput must begin upon startup of the affected source. For existing sources, as specified in §63.11082(d), recordkeeping to document applicable throughput must begin on January 10, 2008. Records required under this paragraph shall be kept for a period of 5 years.

[73 FR 1933, Jan. 10, 2008, as amended at 76 FR 4176, Jan. 24, 2011]

**§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 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.

[73 FR 1933, Jan. 10, 2008, as amended at 76 FR 4177, Jan. 24, 2011]

**Emission Limitations and Management Practices**

**§63.11085 What are my general duties to minimize emissions?**

Each owner or operator of an affected source under this subpart must comply with the requirements of paragraphs (a) and (b) of this section.

(a) You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

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

[76 FR 4177, Jan. 24, 2011]

**§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) of this section, 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

paragraphs (a)(1), (a)(2), or (a)(3) of this section. The applicable distances in paragraphs (a)(1) and (2) of this section shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.

(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.

(3) Submerged fill pipes not meeting the specifications of paragraphs (a)(1) or (a)(2) of this section are allowed if the owner or operator can demonstrate that the liquid level in the gasoline storage tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit.

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

(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).

[73 FR 1933, Jan. 10, 2008, as amended at 76 FR 4177, Jan. 24, 2011]

**§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 of a bulk gasoline terminal subject to the emission standard in item 1(b) of Table 2 to this subpart 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) 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, as specified in paragraphs (b)(1) through (5) of this section. For each facility conducting a performance test under paragraph (a)(1) of this section, and for each facility utilizing the provisions of paragraphs (a)(2) or (a)(3) of this section, the CMS must be installed by January 10, 2011.

(1) 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)(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, or a permanently mounted 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 system operation. A manual or electronic record of the start and end of a shutdown event may be used.

(iii) The owner or operator shall perform semi-annual preventive maintenance inspections of the carbon adsorption system, including the automated alarm or shutdown system for those units so equipped, 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 of the pilot light, to indicate the presence of a flame. The heat-sensing device shall send a positive parameter value to indicate that the pilot flame is on, or a negative parameter value to indicate that the pilot flame is off.

(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 and the vapor line valve. Verification shall be through visual observation, or through an automated alarm or shutdown system that monitors system operation. A manual or electronic record of the start and end of a shutdown event may be used.

(iii) The owner or operator shall perform semi-annual preventive maintenance inspections of the thermal oxidation system, including the automated alarm or shutdown system for those units so equipped, 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. Affected facilities that are subject to subpart XX of 40 CFR part 60 may elect, after notification to the subpart XX delegated authority, to comply with paragraphs (f)(1) and (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<sub>i</sub>) for the pressure test shall be 460 millimeters (mm) of water (18 inches of water), gauge. The initial vacuum (V<sub>i</sub>) for the vacuum test shall be 150 mm of water (6 inches of water), gauge. The maximum allowable pressure and vacuum changes ( $\Delta p$ ,  $\Delta v$ ) 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.

(g) *Conduct of performance tests.* Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator, based on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

[73 FR 1933, Jan. 10, 2008 as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4177, Jan. 24, 2011]

## 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.
    - (g) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (g)(1) and (2) of this section.
      - (1) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
      - (2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- [73 FR 1933, Jan. 10, 2008, as amended at 76 FR 4178, Jan. 24, 2011]

### **§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.
  - (4) For storage vessels complying with §63.11087(b) after January 10, 2011, the storage vessel's Notice of Compliance Status information can be included in the next semi-annual compliance report in lieu of filing a separate Notification of Compliance Status report under §63.11093.
- (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.

(d) Each owner or operator of an affected source under this subpart shall submit a semiannual report including the number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.11085(a), including actions taken to correct a malfunction. The report may be submitted as a part of the semiannual compliance report, if one is required. Owners or operators of affected bulk plants and pipeline pumping stations are not required to submit reports for periods during which no malfunctions occurred.

[73 FR 1933, Jan. 10, 2008 as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4178, Jan. 24, 2011]

## **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 subsequently loads the gasoline into gasoline cargo tanks for transport to gasoline dispensing facilities, 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* means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines.

*Gasoline cargo tank* means a delivery tank truck or railcar which is loading gasoline or which has loaded gasoline on the immediately previous load.

*Gasoline storage tank or vessel* means each tank, vessel, reservoir, or container used for the storage of gasoline, but does not include:

- (1) Frames, housing, auxiliary supports, or other components that are not directly involved in the containment of gasoline or gasoline vapors;
- (2) Subsurface caverns or porous rock reservoirs;
- (3) Oil/water separators and sumps, including butane blending sample recovery tanks, used to collect drained material such that it can be pumped to storage or back into a process; or
- (4) Tanks or vessels permanently attached to mobile sources such as trucks, railcars, barges, or ships.

*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 gasoline storage tanks other than surge control tanks.

*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.

*Surge control tank or vessel* means, for the purposes of this subpart, those tanks or vessels used only for controlling pressure in a pipeline system during surges or other variations from normal operations.

*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 a gasoline cargo tank which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in §63.11092(f). [73 FR 1933, Jan. 10, 2008, as amended at 76 FR 4178, Jan. 24, 2011]

**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 meeting either of the following conditions: (i) a capacity of less than 75 cubic meters (m <sup>3</sup> ); or (ii) a capacity of less than 151 m <sup>3</sup> and a gasoline throughput of 480 gallons per day or less. Gallons per day is calculated by summing the current day's throughput, plus the throughput for the previous 364 days, and then dividing that sum by 365	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 <sup>3</sup> and not meeting any of the criteria specified in item 1 of this Table	Do the following: (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
	(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), except for the secondary seal requirements under §63.1063(a)(1)(i)(C) and (D), 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).

3. A surge control tank	Equip each tank with a fixed roof that is mounted to the tank in a stationary manner and with a pressure/vacuum vent with a positive cracking pressure of no less than 0.50 inches of water. Maintain all openings in a closed position at all times when not in use.
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[76 FR 4179, Jan. 24, 2011]

**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 bulk gasoline terminal loading rack(s) with a gasoline throughput (total of all racks) of 250,000 gallons per day, or greater. Gallons per day is calculated by summing the current day's throughput, plus the throughput for the previous 364 days, and then dividing that sum by 365	(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 or lane from passing through another loading rack or lane to the atmosphere; 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 bulk gasoline terminal loading rack(s) with a gasoline throughput (total of all racks) of less than 250,000 gallons per day. Gallons per day is calculated by summing the current day's throughput, plus the throughput for the previous 364 days, and then dividing that sum by 365	(a) Use submerged filling with a submerged fill pipe that is no more than 6 inches from the bottom of the cargo tank; and (b) Make records available within 24 hours of a request by the Administrator to document your gasoline throughput.

[76 FR 4179, Jan. 24, 2011]

**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.
§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)(i)	General duty to minimize emissions	Operate to minimize emissions at all times; information Administrator will use to determine if operation and maintenance requirements were met	No. See §63.11085 for general duty requirement.
63.6(e)(1)(ii)	Requirement to correct malfunctions as soon as possible	Owner or operator must correct malfunctions as soon as possible	No.

§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]		
§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	To determine compliance, must	No.

	During Performance Test	reduce COMS data to 6-minute averages	
§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.
§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	Yes.

		on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
63.7(e)(1)	Conditions for Conducting Performance Tests	Performance test must be conducted under representative conditions	No, §63.11092(g) specifies conditions for conducting performance tests.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
§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, except for testing conducted under §63.11092(a).
§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	Yes.

		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	
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	Yes.
§63.8(c)(1)(i)	Operation and Maintenance of CMS	Must maintain and operate each CMS as specified in §63.6(e)(1)	No.
§63.8(c)(1)(ii)	Operation and Maintenance of CMS	Must keep parts for routine repairs readily available	Yes.
§63.8(c)(1)(iii)	Operation and Maintenance of CMS	Requirement to develop SSM Plan for CMS	No.
§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	Can request if cannot comply by date	Yes.

	Extension	or if installed best available control technology or lowest achievable emission rate	
§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.
§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, except as specified in §63.11095(a)(4); also, 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)	Records related to SSM	Recordkeeping of occurrence and duration of startups and shutdowns	No.
§63.10(b)(2)(ii)	Records related to SSM	Recordkeeping of malfunctions	No. See §63.11094(g) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction.
§63.10(b)(2)(iii)	Maintenance records	Recordkeeping of maintenance on air pollution control and monitoring equipment	Yes.
§63.10(b)(2)(iv)	Records Related to SSM	Actions taken to minimize emissions	No.

		during SSM	
§63.10(b)(2)(v)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§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.
§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	No. See §63.11095(d) for malfunction reporting requirements.
§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	Yes, §63.11095 specifies excess emission events for this subpart.

		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)	
§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.
§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.

[73 FR 1933, Jan. 10, 2008, as amended at 76 FR 4180, Jan. 24, 2011]

## Attachment C

### Title 40: Protection of Environment

### PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

#### Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

#### What This Subpart Covers

##### § 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

##### § 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in § 63.6675, which includes operating according to the provisions specified in § 63.6640(f).

(1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]

**§ 63.6590 What parts of my plant does this subpart cover?**

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of § 63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of § 63.6645(f) and the requirements of §§ 63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major

source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

#### **§ 63.6595 When do I have to comply with this subpart?**

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to

500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in § 63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 78 FR 6701, Jan. 30, 2013]

## Emission and Operating Limitations

### **§ 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?**

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

**§ 63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?**

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you. [73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

**§ 63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?**

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations and other requirements in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart. [78 FR 6701, Jan. 30, 2013]

**§ 63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

(1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

(2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

(i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

(1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the

option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement.

(2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in § 63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in § 63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

(f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in § 63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in § 63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in § 63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6701, Jan. 30, 2013]

#### **§ 63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?**

(a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

(b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in § 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to

January 1, 2015, may be used until depleted.

(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either § 63.6603(b)(1) or § 63.6603(b)(2), or are on offshore vessels that meet § 63.6603(c) are exempt from the requirements of this section.

[78 FR 6702, Jan. 30, 2013]

## General Compliance Requirements

### § 63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

## Testing and Initial Compliance Requirements

### § 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

- (2) The test must not be older than 2 years.
- (3) The test must be reviewed and accepted by the Administrator.
- (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.
- (5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

**§ 63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?**

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 51589, Aug. 20, 2010]

**§ 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?**

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

**§ 63.6615 When must I conduct subsequent performance tests?**

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

**§ 63.6620 What performance tests and other procedures must I use?**

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.

- (1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.
- (2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.
- (3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.
- (4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in § 63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 1})$$

<http://www.ecfr.gov/graphics/pdfs/er30ja13.007.pdf>

Where:

$C_i$  = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

$C_o$  = concentration of CO, THC, or formaldehyde at the control device outlet, and

$R$  = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide ( $\text{CO}_2$ ). If pollutant concentrations are to be corrected to 15 percent oxygen and  $\text{CO}_2$  concentration is measured in lieu of oxygen concentration measurement, a  $\text{CO}_2$  correction factor is needed. Calculate the  $\text{CO}_2$  correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific  $F_o$  value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 2})$$

Where:

$F_o$  = Fuel factor based on the ratio of oxygen volume to the ultimate  $\text{CO}_2$  volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

$F_d$  = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19,  $\text{dscm}^3/\text{J}$  ( $\text{dscf}/10^6 \text{ Btu}$ ).

$F_c$  = Ratio of the volume of  $\text{CO}_2$  produced to the gross calorific value of the fuel from Method 19,  $\text{dscm}^3/\text{J}$  ( $\text{dscf}/10^6 \text{ Btu}$ )

(ii) Calculate the  $\text{CO}_2$  correction factor for correcting measurement data to 15 percent  $\text{O}_2$ , as follows:

$$X_{\text{CO}_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

<http://www.ecfr.gov/graphics/pdfs/er30ja13.009.pdf>

Where:

$X_{\text{CO}_2}$  =  $\text{CO}_2$  correction factor, percent.

5.9 = 20.9 percent  $\text{O}_2$  — 15 percent  $\text{O}_2$ , the defined  $\text{O}_2$  correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent  $\text{O}_2$  using  $\text{CO}_2$  as follows:

$$C_{\text{adj}} = C_d \frac{X_{\text{CO}_2}}{\% \text{CO}_2} \quad (\text{Eq. 4})$$

Where:

$C_{\text{adj}}$  = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent  $\text{O}_2$ .

$C_d$  = Measured concentration of CO, THC, or formaldehyde, uncorrected.

$X_{CO_2}$  = CO<sub>2</sub> correction factor, percent.

%CO<sub>2</sub> = Measured CO<sub>2</sub> concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally ( e.g., operator adjustment, automatic controller adjustment, etc.) or unintentionally ( e.g., wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010; 78 FR 6702, Jan. 30, 2013]

## § 63.6625 What are my monitoring, installation, collection, operation, and maintenance

### requirements?

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O<sub>2</sub> or CO<sub>2</sub> according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in § 63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in § 63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in § 63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO<sub>2</sub> concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in § 63.8(d). As specified in § 63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface ( e.g., thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in § 63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in § 63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also § 63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP

emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either § 63.6603(b)(1) or § 63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet § 63.6603(c) do not have to meet the requirements of this paragraph (g).

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30

percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013]

### **§ 63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?**

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6645.

(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least three test runs.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure

THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O<sub>2</sub> using one of the O<sub>2</sub> measurement methods specified in Table 4 of this subpart. Measurements to determine O<sub>2</sub> concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O<sub>2</sub> emissions simultaneously at the inlet and outlet of the control device.

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

## **Continuous Compliance Requirements**

### **§ 63.6635 How do I monitor and collect data to demonstrate continuous compliance?**

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

### **§ 63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in § 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O<sub>2</sub> using one of the O<sub>2</sub> measurement methods specified in Table 4 of this subpart. Measurements to determine O<sub>2</sub> concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must

measure CO or THC emissions and O<sub>2</sub> emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or

other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013]

## Notifications, Reports, and Records

### § 63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP,

an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with § 63.6590(b), your notification should include the information in § 63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to § 63.10(d)(2).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in § 63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in § 63.6603(d) and identifying the state or local regulation that the engine is subject to.

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6705, Jan. 30, 2013]

#### **§ 63.6650 What reports must I submit and when?**

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in § 63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no

later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in § 63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in § 63.8(c)(8).

- (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
  - (5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
  - (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
  - (7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
  - (8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.
  - (9) A brief description of the stationary RICE.
  - (10) A brief description of the CMS.
  - (11) The date of the latest CMS certification or audit.
  - (12) A description of any changes in CMS, processes, or controls since the last reporting period.
- (f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.
- (g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.
- (1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.
  - (2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.
  - (3) Any problems or errors suspected with the meters.
- (h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in § 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.
- (1) The report must contain the following information:
    - (i) Company name and address where the engine is located.
    - (ii) Date of the report and beginning and ending dates of the reporting period.
    - (iii) Engine site rating and model year.
    - (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
    - (v) Hours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii).
    - (vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 63.6640(f)(2)(ii) and (iii).
    - (vii) Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ( [www.epa.gov/cdx](http://www.epa.gov/cdx) ). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 63.13.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013]

### § 63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in § 63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation ( *i.e.*, process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in § 63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in § 63.10(b)(2)(vi) through (xi).

(2) Previous ( *i.e.*, superseded) versions of the performance evaluation plan as required in § 63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in § 63.6640(f)(2)(ii) or (iii) or § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP

located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013]

**§ 63.6660 In what form and how long must I keep my records?**

(a) Your records must be in a form suitable and readily available for expeditious review according to § 63.10(b)(1).

(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

**Other Requirements and Information**

**§ 63.6665 What parts of the General Provisions apply to me?**

Table 8 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

**§ 63.6670 Who implements and enforces this subpart?**

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in § 63.6600 under § 63.6(g).

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as

specified in § 63.6610(b).

**§ 63.6675 What definitions apply to this subpart?**

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

*Alaska Railbelt Grid* means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

*Area source* means any stationary source of HAP that is not a major source as defined in part 63.

*Associated equipment* as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

*Backup power for renewable energy* means an engine that provides backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(l)(5) (incorporated by reference, see § 63.14).

*Black start engine* means an engine whose only purpose is to start up a combustion turbine.

*CAA* means the Clean Air Act (42 U.S.C. 7401 *et seq.*, as amended by Public Law 101-549, 104 Stat. 2399).

*Commercial emergency stationary RICE* means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

*Compression ignition* means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

*Custody transfer* means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

*Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless of whether or not such failure is permitted by this subpart.
- (4) Fails to satisfy the general duty to minimize emissions established by § 63.6(e)(1)(i).

*Diesel engine* means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

*Diesel fuel* means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties ( e.g. biodiesel) that is suitable for use in compression ignition engines.

*Digester gas* means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO<sub>2</sub>.

*Dual-fuel engine* means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

*Emergency stationary RICE* means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in § 63.6640(f) in order to be considered emergency stationary

RICE. If the engine does not comply with the requirements specified in § 63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

(2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 63.6640(f).

(3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 63.6640(f)(2)(ii) or (iii) and § 63.6640(f)(4)(i) or (ii).

*Engine startup* means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

*Four-stroke engine* means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

*Gaseous fuel* means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

*Gasoline* means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

*Glycol dehydration unit* means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes "rich" glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The "lean" glycol is then recycled.

*Hazardous air pollutants (HAP)* means any air pollutants listed in or pursuant to section 112(b) of the CAA.

*Institutional emergency stationary RICE* means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

*ISO standard day conditions* means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

*Landfill gas* means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO<sub>2</sub>.

*Lean burn engine* means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

*Limited use stationary RICE* means any stationary RICE that operates less than 100 hours per year.

*Liquefied petroleum gas* means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

*Liquid fuel* means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

*Major Source*, as used in this subpart, shall have the same meaning as in § 63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated.

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

*Natural gas* means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

*Non-selective catalytic reduction (NSCR)* means an add-on catalytic nitrogen oxides (NO<sub>x</sub>) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO<sub>x</sub>, CO, and volatile organic compounds (VOC) into CO<sub>2</sub>, nitrogen, and water.

*Oil and gas production facility* as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (i.e., remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

*Oxidation catalyst* means an add-on catalytic control device that controls CO and VOC by oxidation.

*Peaking unit or engine* means any standby engine intended for use during periods of high demand that are not emergencies.

*Percent load* means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

*Potential to emit* means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in § 63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to § 63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to § 63.1270(a)(2).

*Production field facility* means those oil and gas production facilities located prior to the point of custody transfer.

*Production well* means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

*Propane* means a colorless gas derived from petroleum and natural gas, with the molecular structure C<sub>3</sub>H<sub>8</sub>.

*Remote stationary RICE* means stationary RICE meeting any of the following criteria:

(1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that

portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

(2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

(i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

(iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

(3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

*Residential emergency stationary RICE* means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

*Responsible official* means responsible official as defined in 40 CFR 70.2.

*Rich burn engine* means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO<sub>x</sub> (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

*Site-rated HP* means the maximum manufacturer's design capacity at engine site conditions.

*Spark ignition* means relating to either: A gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

*Stationary reciprocating internal combustion engine (RICE)* means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

*Stationary RICE test cell/stand* means an engine test cell/stand, as defined in subpart P of this part, that tests stationary RICE.

*Stoichiometric* means the theoretical air-to-fuel ratio required for complete combustion.

*Storage vessel with the potential for flash emissions* means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual

average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

*Subpart* means 40 CFR part 63, subpart ZZZZ.

*Surface site* means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

*Two-stroke engine* means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011; 78 FR 6706, Jan. 30, 2013]

**Table 1 a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE > 500 HP Located at a Major Source of HAP Emissions**

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup>
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub>	

<sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010, as amended at 75 FR 51592, Aug. 20, 2010]

**Table 1 b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions**

As stated in §§ 63.6600, 63.6603, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and

concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub> and using NSCR;	less than or equal to 1250 °F. <sup>1</sup>
2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub> and not using NSCR.	

<sup>1</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6706, Jan. 30, 2013]

**Table 2 a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions**

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O <sub>2</sub> . If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O <sub>2</sub> until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup>
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O <sub>2</sub>	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O <sub>2</sub>	

<sup>1</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative

work practices.  
 [75 FR 9680, Mar. 3, 2010]

**Table 2 b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP**

As stated in §§ 63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; and existing CI stationary RICE >500 HP:

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. <sup>1</sup>
2. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. <sup>1</sup>
3. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and	Comply with any operating limitations approved by the Administrator.
New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not	

using an oxidation catalyst; and	
existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst.	

<sup>1</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.  
 [78 FR 6707, Jan. 30, 2013]

**Table 2 c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions**

As stated in §§ 63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

<b>For each . . .</b>	<b>You must meet the following requirement, except during periods of startup . . .</b>	<b>During periods of startup you must . . .</b>
1. Emergency stationary CI RICE and black start stationary CI RICE <sup>1</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first. <sup>2</sup> b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>3</sup>
2. Non-Emergency, non-black start stationary CI RICE <100 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first. <sup>2</sup> b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or	

	less at 15 percent O <sub>2</sub> .	
4. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O <sub>2</sub> ; or b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start stationary CI RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O <sub>2</sub> ; or b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE. <sup>1</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>2</sup> b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>2</sup> b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; <sup>2</sup> b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary;	

	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O <sub>2</sub> .	
10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O <sub>2</sub> .	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O <sub>2</sub> .	
12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O <sub>2</sub> .	

<sup>1</sup> If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

<sup>2</sup> Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

<sup>3</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[78 FR 6708, Jan. 30, 2013, as amended at 78 FR 14457, Mar. 6, 2013]

**Table 2 d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions**

As stated in §§ 63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; <sup>1</sup> b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE. <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and	

	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year. <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup> b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and	

	belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
9. Non-emergency, non-black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.	
10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
11. Non-emergency, non-black start 4SRB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 2,160 hours of operation or annually,	

	whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
12. Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install NSCR to reduce HAP emissions from the stationary RICE.	
13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup> b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

<sup>1</sup> Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

<sup>2</sup> If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[78 FR 6709, Jan. 30, 2013]

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**Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests**

As stated in §§ 63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

<b>For each . . .</b>	<b>Complying with the requirement to . . .</b>	<b>You must . . .</b>
1. New or reconstructed 2SLB stationary RICE >500 HP located at major sources; new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually. <sup>1</sup>
2. 4SRB stationary RICE ≥5,000 HP located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually. <sup>1</sup>
3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually. <sup>1</sup>
4. Existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.

<sup>1</sup> After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests. [78 FR 6711, Jan. 30, 2013]

**Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests**

As stated in §§ 63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

<b>For each . . .</b>	<b>Complying with the requirement to . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
1. 2SLB, 4SLB, and CI stationary RICE	a. reduce CO emissions	i. Measure the O <sub>2</sub> at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (Reapproved 2005). <sup>a c</sup>	(a) Measurements to determine O <sub>2</sub> must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device	(1) ASTM D6522-00 (Reapproved 2005) <sup>a b c</sup> or Method 10 of 40 CFR part 60, appendix A	(a) The CO concentration must be at 15 percent O <sub>2</sub> , dry basis.

2. 4SRB stationary RICE	a. reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i)	(a) sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O <sub>2</sub> at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (Reapproved 2005). <sup>a</sup>	(a) measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for formaldehyde or THC concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. <sup>a</sup>	(a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.
		iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, <sup>a</sup> provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device	(1) Method 25A, reported as propane, of 40 CFR part 60, appendix A	(a) THC concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i)	(a) if using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O <sub>2</sub> concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (Reapproved 2005). <sup>a</sup>	(a) measurements to determine O <sub>2</sub> concentration must be made at the same time and location as the measurements for formaldehyde or CO

				concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. <sup>a</sup>	(a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, <sup>a</sup> provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. measure CO at the exhaust of the stationary RICE.	(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005), <sup>a</sup> <sup>c</sup> Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03. <sup>a</sup>	(a) CO concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

<sup>a</sup> Incorporated by reference, see 40 CFR 63.14. You may also obtain copies from University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

<sup>b</sup> You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

<sup>c</sup> ASTM-D6522-00 (2005) may be used to test both CI and SI stationary RICE.

[78 FR 6711, Jan. 30, 2013]

**Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements**

As stated in §§ 63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

<b>For each . . .</b>	<b>Complying with the requirement to . . .</b>	<b>You have demonstrated initial compliance if . . .</b>
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

<p>2. Non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP</p>	<p>a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS</p>	<p>i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and</p>
		<p>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and</p>
		<p>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p>
<p>3. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP</p>	<p>a. Reduce CO emissions and not using oxidation catalyst</p>	<p>i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and                  ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and                  iii. You have recorded the approved operating parameters (if any) during the initial performance test.</p>
<p>4. Non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP</p>	<p>a. Limit the concentration of CO, and not using oxidation catalyst</p>	<p>i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and                  ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and</p>
		<p>iii. You have recorded the approved operating parameters (if any) during the initial performance test.</p>
<p>5. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP</p>	<p>a. Reduce CO emissions, and using a CEMS</p>	<p>i. You have installed a CEMS to continuously monitor CO and either O<sub>2</sub> or CO<sub>2</sub> at both the inlet and outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and                  ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and</p>
		<p>iii. The average reduction of CO calculated using § 63.6620 equals or</p>

		exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at the outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average concentration of CO calculated using § 63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30

		percent; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
9. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
11. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Reduce CO emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.
13. Existing non-emergency 4SLB	a. Install an oxidation	i. You have conducted an initial

stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	catalyst	compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O <sub>2</sub> ;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.
14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O <sub>2</sub> , or the average reduction of emissions of THC is 30 percent or more;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F.

[78 FR 6712, Jan. 30, 2013]

**Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements**

As stated in § 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

<b>For each . . .</b>	<b>Complying with the requirement to . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved <sup>a</sup> ; and ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating

		limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved <sup>a</sup> ; and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS	i. Collecting the monitoring data according to § 63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration of CO emissions according to § 63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and
		iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating

		limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of HAP	a. Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent. <sup>a</sup>
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit <sup>a</sup> ; and
		ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

<p>8. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP</p>	<p>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR</p>	<p>i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit <sup>a</sup>; and                  ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and</p>
		<p>iii. Reducing these data to 4-hour rolling averages; and</p>
		<p>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</p>
<p>9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE &lt;100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE &gt;500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE &gt;500 HP located at an area source of HAP that are remote stationary RICE</p>	<p>a. Work or Management practices</p>	<p>i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or                  ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.</p>
<p>10. Existing stationary CI RICE &gt;500 HP that are not limited use stationary RICE</p>	<p>a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst</p>	<p>i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and</p>

		ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
12. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour

		rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
13. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O <sub>2</sub> ; and either ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.

<p>15. Existing non-emergency 4SRB stationary RICE &gt;500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year</p>	<p>a. Install NSCR</p>	<p>i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O<sub>2</sub> or the average reduction of emissions of THC is 30 percent or more; and either                  ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or                  iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.</p>
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<sup>a</sup> After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests. [78 FR 6715, Jan. 30, 2013]

**Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports**

As stated in § 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
<p>1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE &gt;500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE &gt;300 HP located at an area source of HAP; new or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP</p>	<p>Compliance report</p>	<p>a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or</p>	<p>i. Semiannually according to the requirements in § 63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and                  ii. Annually according to the requirements in § 63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.</p>

		b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in § 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), the information in § 63.6650(e); or	i. Semiannually according to the requirements in § 63.6650(b).
		c. If you had a malfunction during the reporting period, the information in § 63.6650(c)(4).	i. Semiannually according to the requirements in § 63.6650(b).
2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in § 63.6650.
		b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 2.a.i.
		c. Any problems or errors suspected with the meters.	i. See item 2.a.i.
3. Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Compliance report	a. The results of the annual compliance demonstration, if conducted during the reporting period.	i. Semiannually according to the requirements in § 63.6650(b)(1)-(5).
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in § 63.6640(f)(4)( ii)	Report	a. The information in § 63.6650(h)(1)	i. annually according to the requirements in § 63.6650(h)(2)-(3).

[78 FR 6719, Jan. 30, 2013]

**Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.**

As stated in § 63.6665, you must comply with the following applicable general provisions.

<b>General provisions citation</b>	<b>Subject of citation</b>	<b>Applies to subpart</b>	<b>Explanation</b>
§ 63.1	General applicability of the General Provisions	Yes.	
§ 63.2	Definitions	Yes	Additional terms defined in § 63.6675.
§ 63.3	Units and abbreviations	Yes.	
§ 63.4	Prohibited activities and circumvention	Yes.	
§ 63.5	Construction and reconstruction	Yes.	
§ 63.6(a)	Applicability	Yes.	
§ 63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§ 63.6(b)(5)	Notification	Yes.	
§ 63.6(b)(6)	[Reserved]		
§ 63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§ 63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§ 63.6(c)(3)-(4)	[Reserved]		
§ 63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§ 63.6(d)	[Reserved]		
§ 63.6(e)	Operation and maintenance	No.	
§ 63.6(f)(1)	Applicability of standards	No.	
§ 63.6(f)(2)	Methods for determining compliance	Yes.	
§ 63.6(f)(3)	Finding of compliance	Yes.	
§ 63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§ 63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§ 63.6(i)	Compliance extension procedures and criteria	Yes.	

§ 63.6(j)	Presidential compliance exemption	Yes.	
§ 63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§ 63.6610, 63.6611, and 63.6612.
§ 63.7(a)(3)	CAA section 114 authority	Yes.	
§ 63.7(b)(1)	Notification of performance test	Yes	Except that § 63.7(b)(1) only applies as specified in § 63.6645.
§ 63.7(b)(2)	Notification of rescheduling	Yes	Except that § 63.7(b)(2) only applies as specified in § 63.6645.
§ 63.7(c)	Quality assurance/test plan	Yes	Except that § 63.7(c) only applies as specified in § 63.6645.
§ 63.7(d)	Testing facilities	Yes.	
§ 63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at § 63.6620.
§ 63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at § 63.6620.
§ 63.7(e)(3)	Test run duration	Yes.	
§ 63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§ 63.7(f)	Alternative test method provisions	Yes.	
§ 63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§ 63.7(h)	Waiver of tests	Yes.	
§ 63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at § 63.6625.
§ 63.8(a)(2)	Performance specifications	Yes.	
§ 63.8(a)(3)	[Reserved]		
§ 63.8(a)(4)	Monitoring for control devices	No.	
§ 63.8(b)(1)	Monitoring	Yes.	
§ 63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§ 63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§ 63.8(c)(1)(i)	Routine and predictable SSM	No	

§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§ 63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§ 63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§ 63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§ 63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§ 63.8(d)	CMS quality control	Yes.	
§ 63.8(e)	CMS performance evaluation	Yes	Except for § 63.8(e)(5)(ii), which applies to COMS.
		Except that § 63.8(e) only applies as specified in § 63.6645.	
§ 63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that § 63.8(f)(4) only applies as specified in § 63.6645.
§ 63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that § 63.8(f)(6) only applies as specified in § 63.6645.
§ 63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§ 63.6635 and 63.6640.
§ 63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§ 63.9(b)(1)-(5)	Initial notifications	Yes	Except that § 63.9(b)(3) is reserved.
		Except that § 63.9(b) only applies as specified in § 63.6645.	
§ 63.9(c)	Request for compliance extension	Yes	Except that § 63.9(c) only applies as specified in § 63.6645.
§ 63.9(d)	Notification of special compliance requirements for	Yes	Except that § 63.9(d) only applies as specified in § 63.6645.

	new sources		
§ 63.9(e)	Notification of performance test	Yes	Except that § 63.9(e) only applies as specified in § 63.6645.
§ 63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(1)	Notification of performance evaluation	Yes	Except that § 63.9(g) only applies as specified in § 63.6645.
§ 63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that § 63.9(g) only applies as specified in § 63.6645.	
§ 63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. § 63.9(h)(4) is reserved.
			Except that § 63.9(h) only applies as specified in § 63.6645.
§ 63.9(i)	Adjustment of submittal deadlines	Yes.	
§ 63.9(j)	Change in previous information	Yes.	
§ 63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§ 63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§ 63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§ 63.10(b)(2)(vi)-(xi)	Records	Yes.	
§ 63.10(b)(2)(xii)	Record when under waiver	Yes.	
§ 63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§ 63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§ 63.10(b)(3)	Records of applicability determination	Yes.	

§ 63.10(c)	Additional records for sources using CEMS	Yes	Except that § 63.10(c)(2)-(4) and (9) are reserved.
§ 63.10(d)(1)	General reporting requirements	Yes.	
§ 63.10(d)(2)	Report of performance test results	Yes.	
§ 63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.10(d)(4)	Progress reports	Yes.	
§ 63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§ 63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§ 63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§ 63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that § 63.10(e)(3)(i) (C) is reserved.
§ 63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§ 63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§ 63.11	Flares	No.	
§ 63.12	State authority and delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by reference	Yes.	
§ 63.15	Availability of information	Yes.	

[75 FR 9688, Mar. 3, 2010, as amended at 78 FR 6720, Jan. 30, 2013]

**Appendix A—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines**

**1.0 Scope and Application. What is this Protocol?**

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O<sub>2</sub>) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

**1.1 Analytes. What does this protocol determine?**

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O<sub>2</sub>).

Analyte	CAS No.	Sensitivity
Carbon monoxide (CO)	630-08-0	Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.
Oxygen (O <sub>2</sub> )	7782-	

	44-7	
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**1.2 Applicability. When is this protocol acceptable?**

This protocol is applicable to 40 CFR part 63, subpart ZZZZ. Because of inherent cross sensitivities of EC cells, you must not apply this protocol to other emissions sources without specific instruction to that effect.

**1.3 Data Quality Objectives. How good must my collected data be?**

Refer to Section 13 to verify and document acceptable analyzer performance.

**1.4 Range. What is the targeted analytical range for this protocol?**

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O<sub>2</sub>, or no more than twice the permitted CO level.

**1.5 Sensitivity. What minimum detectable limit will this protocol yield for a particular gas component?**

The minimum detectable limit depends on the nominal range and resolution of the specific EC cell used, and the signal to noise ratio of the measurement system. The minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.

**2.0 Summary of Protocol**

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and O<sub>2</sub> gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You may use additions to, or modifications of vendor supplied measurement systems (e.g., heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

**3.0 Definitions**

**3.1 Measurement System.** The total equipment required for the measurement of CO and O<sub>2</sub> concentrations. The measurement system consists of the following major subsystems:

**3.1.1 Data Recorder.** A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.

**3.1.2 Electrochemical (EC) Cell.** A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.

**3.1.3 Interference Gas Scrubber.** A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.

**3.1.4 Moisture Removal System.** Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.

**3.1.5 Sample Interface.** The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.

**3.2 Nominal Range.** The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several nominal ranges can be used for any given cell so long as the calibration and repeatability checks for that range remain within specifications.

**3.3 Calibration Gas.** A vendor certified concentration of a specific analyte in an appropriate balance gas.

**3.4 Zero Calibration Error.** The analyte concentration output exhibited by the EC cell in response to zero-level calibration gas.

**3.5 Up-Scale Calibration Error.** The mean of the difference between the analyte concentration exhibited by the EC cell and the certified concentration of the up-scale calibration gas.

**3.6 Interference Check.** A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.

**3.7 Repeatability Check.** A protocol for demonstrating that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated exposure to that gas.

**3.8 Sample Flow Rate.** The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.

**3.9 Sampling Run.** A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O<sub>2</sub> and moisture in the electrolyte reserve and provides a mechanism to de-gas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre- sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.

**3.10 Sampling Day.** A time not to exceed twelve hours from the time of the pre-sampling calibration to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.

**3.11 Pre-Sampling Calibration/Post-Sampling Calibration Check.** The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.

**3.12 Performance-Established Configuration.** The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.

#### 4.0 Interferences.

When present in sufficient concentrations, NO and NO<sub>2</sub> are two gas species that have been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

#### 5.0 Safety. [Reserved]

#### 6.0 Equipment and Supplies.

##### 6.1 What equipment do I need for the measurement system?

The system must maintain the gas sample at conditions that will prevent moisture condensation in the sample transport lines, both before and as the sample gas contacts the EC cells. The essential components of the measurement system are described below.

##### 6.2 Measurement System Components.

**6.2.1 Sample Probe.** A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.

**6.2.2 Sample Line.** Non-reactive tubing to transport the effluent from the sample probe to the EC cell.

**6.2.3 Calibration Assembly (optional).** A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.

**6.2.4 Particulate Filter (optional).** Filters before the inlet of the EC cell to prevent accumulation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.

**6.2.5 Sample Pump.** A leak-free pump to provide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.

**6.2.8 Sample Flow Rate Monitoring.** An adjustable rotameter or equivalent device used to adjust and maintain the sample flow rate through the analyzer as prescribed.

**6.2.9 Sample Gas Manifold (optional).** A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.

**6.2.10 EC cell.** A device containing one or more EC cells to determine the CO and O<sub>2</sub> concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.

**6.2.11 Data Recorder.** A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O<sub>2</sub>; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.

**6.2.12 Interference Gas Filter or Scrubber.** A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer's recommendations.

**7.0 Reagents and Standards.** What calibration gases are needed?

**7.1 Calibration Gases.** CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and O<sub>2</sub>. Use CO calibration gases with labeled concentration values certified by the manufacturer to be within ± 5 percent of the label value. Dry ambient air (20.9 percent O<sub>2</sub>) is acceptable for calibration of the O<sub>2</sub> cell. If needed, any lower percentage O<sub>2</sub> calibration gas must be a mixture of O<sub>2</sub> in nitrogen.

**7.1.1 Up-Scale CO Calibration Gas Concentration.** Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.

**7.1.2 Up-Scale O<sub>2</sub> Calibration Gas Concentration.**

Select an O<sub>2</sub> gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent O<sub>2</sub>. When the average exhaust gas O<sub>2</sub> readings are above 6 percent, you may use dry ambient air (20.9 percent O<sub>2</sub>) for the up-scale O<sub>2</sub> calibration gas.

**7.1.3 Zero Gas.** Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO<sub>2</sub>).

**8.0 Sample Collection and Analysis**

**8.1 Selection of Sampling Sites.**

**8.1.1 Control Device Inlet.** Select a sampling site sufficiently downstream of the engine so that the combustion gases should be well mixed. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

**8.1.2 Exhaust Gas Outlet.** Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

**8.2 Stack Gas Collection and Analysis.** Prior to the first stack gas sampling run, conduct that the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the "sample conditioning phase" once per minute until constant readings are obtained. Then begin the "measurement data phase" and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the "refresh phase" by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the "measurement data phase" readings to calculate the average stack gas CO and O<sub>2</sub> concentrations.

**8.3 EC Cell Rate.** Maintain the EC cell sample flow rate so that it does not vary by more than  $\pm 10$  percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check. Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that does not affect the gas concentration readings by more than  $\pm 3$  percent, as instructed by the EC cell manufacturer.

#### 9.0 Quality Control (Reserved)

#### 10.0 Calibration and Standardization

**10.1 Pre-Sampling Calibration.** Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer's recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.

**10.1.1 Zero Calibration.** For both the O<sub>2</sub> and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

**10.1.2 Zero Calibration Tolerance.** For each zero gas introduction, the zero level output must be less than or equal to  $\pm 3$  percent of the up-scale gas value or  $\pm 1$  ppm, whichever is less restrictive, for the CO channel and less than or equal to  $\pm 0.3$  percent O<sub>2</sub> for the O<sub>2</sub> channel.

**10.1.3 Up-Scale Calibration.** Individually introduce each calibration gas to the measurement system (e.g., at the calibration assembly) and record the start time. Record all EC cell output responses and the flow rate during this "sample conditioning phase" once per minute until readings are constant for at least two minutes. Then begin the "measurement data phase" and record readings every 15 seconds for a total of two minutes, or as otherwise required. Finally, perform the "refresh phase" by introducing dry air, free from CO and other combustion gases, until readings are constant for at least two consecutive minutes. Then repeat the steps in this section at least once to verify the calibration for each component gas. Introduce all gases to flow through the entire sample handling system (i.e., at the exit end of the sampling probe or the calibration assembly).

**10.1.4 Up-Scale Calibration Error.** The mean of the difference of the "measurement data phase" readings from the reported standard gas value must be less than or equal to  $\pm 5$  percent or  $\pm 1$  ppm for CO or  $\pm 0.5$  percent O<sub>2</sub>, whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single "measurement data phase" reading must be less than or equal to  $\pm 2$  percent or  $\pm 1$  ppm for CO or  $\pm 0.5$  percent O<sub>2</sub>, whichever is less restrictive, respectively.

**10.2 Post-Sampling Calibration Check.** Conduct a stack gas post-sampling calibration check after the stack gas sampling run or set of runs and within 12 hours of the initial calibration. Conduct up-scale and zero calibration checks using the protocol in Section 10.1. Make no changes to the sampling system or EC cell calibration until all post-sampling calibration checks have been recorded. If either the zero or up-scale calibration error exceeds the respective specification in Sections 10.1.2 and 10.1.4 then all measurement data collected since the previous successful calibrations are invalid and re-calibration and re-sampling are required. If the sampling system is disassembled or the EC cell calibration is adjusted, repeat the calibration check before conducting the next analyzer sampling run.

#### 11.0 Analytical Procedure

The analytical procedure is fully discussed in Section 8.

#### 12.0 Calculations and Data Analysis

Determine the CO and O<sub>2</sub> concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the "measurement data phase".

#### 13.0 Protocol Performance

Use the following protocols to verify consistent analyzer performance during each field sampling day.

**13.1 Measurement Data Phase Performance Check.** Calculate the mean of the readings from the "measurement data phase". The maximum allowable deviation from the mean for each of the individual readings is  $\pm 2$  percent, or  $\pm 1$  ppm, whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must



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[78 FR 6721, Jan. 30, 2013]

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

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

<b>Source Background and Description</b>
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<b>Source Name:</b>	<b>Buckeye Terminals, LLC</b>
<b>Source Location:</b>	<b>400 East Columbus Drive, East Chicago, Indiana 46312</b>
<b>County:</b>	<b>Lake</b>
<b>SIC Code:</b>	<b>5171</b>
<b>Permit Renewal No.:</b>	<b>T089-33112-00320</b>
<b>Permit Reviewer:</b>	<b>Aida DeGuzman</b>

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Buckeye Terminals, LLC relating to the operation of a stationary pipeline breakout tank farm and bulk liquid fuel storage and transfer terminal. On April 23, 2013, Buckeye Terminals, LLC submitted an application to the OAQ requesting to renew its operating permit. Buckeye Terminals, LLC was issued its second Part 70 Operating Permit Renewal T089-26500-00320 on January 22, 2009.

<b>Source Definition</b>
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The "East" East Chicago Terminal (source ID 089-00326) and the "West" East Chicago Terminal (source ID 089-00320) have been determined to be part of the same major source.

Buckeye Terminals operates many plants in northwest Indiana. The "East" East Chicago Terminal (source ID 089-00326) and the "West" East Chicago Terminal (source ID 089-00320) are located on contiguous properties in East Chicago, Indiana and were previously determined to be part of the same major source. For this analysis they will be referred to as one plant, the East Chicago Terminal. The Hammond Terminal (source ID 089-00239) is located 2.8 miles from the East Chicago Terminal. The Hartsdale Station (source ID 089-00291) is located 9.5 miles from the East Chicago Terminal in Schererville, Indiana. In addition, Buckeye operates several pipeline pump stations and valve sites in Lake and Porter Counties. IDEM, OAQ has examined whether these plants are part of the same major source. Buckeye also operates pipeline pump stations and other plants in Illinois, but these plants are quite distant from the Indiana plants and do not present a major source issue.

The term "major source" is defined at 326 IAC 2-7-1(22). In order for two or more plants to be considered one major source, they must meet all three of the following criteria:

- (1) the plants must be under common ownership or common control;
- (2) the plants must have the same two-digit Standard Industrial Classification (SIC) Code or one must serve as a support facility for another; and,
- (3) the plants must be located on contiguous or adjacent properties.

The plants are all owned by Buckeye Terminals. Therefore, the plants are under common ownership and therefore common control, meeting the first part of the major source definition.

The SIC Code Manual of 1987 sets out how to determine the proper SIC Code for each type of business. More information about SIC Codes is available at [http://www.osha.gov/pls/imis/sic\\_manual.html](http://www.osha.gov/pls/imis/sic_manual.html) on the Internet. The SIC Code is determined by looking

at the principal product or activity of each plant. The Hartsdale, Hammond and East Chicago plants have the two-digit SIC Code 42, with the four-digit SIC Code 4226, which includes petroleum terminals. All the pipeline pump stations and valve site plants have the two-digit SIC Code 46, for the Major Group Pipelines, Except Natural Gas.

A plant is a support facility to another plant if it dedicates 50% or more of its output to the other plant. The Hartsdale, Hammond and East Chicago plants each send less than 12% of their total output to any one of the other two plants. Even though the Hartsdale, Hammond and East Chicago plants do not have a support relationship, they all have the same two-digit SIC Code, meeting the second part of the major source definition.

The pump stations and valve sites function to maintain pressure in the pipeline system and to regulate the flow of pipeline contents. They do not have any actual production output. However, since all the pump stations and valve sites have the same two-digit SIC Codes, they all meet the second part of the major source definition.

The last part of the definition is whether the plants are on the same, contiguous or adjacent properties. None of the plants are located on the same or contiguous properties. Therefore, IDEM must determine if the plants are located on adjacent properties.

The term "adjacent" is not defined in Indiana's rules. IDEM's Nonrule Policy Document Air-005 adds the following guidance:

- properties that actually abut at any point would satisfy the requirement of contiguous or adjacent property.
- properties that are separated by a public road or public property would satisfy this requirement, absent special circumstances.
- other scenarios would be examined on an individual basis with the focus on the distance between the activities and the relationship between the activities.

The U.S. EPA has a similar view on how to interpret the term "adjacent" when defining a source. Two U.S. EPA letters; the May 21, 1988 letter from U.S. EPA Region 8 to the Utah Division of Air Quality, and the U.S. EPA Region 5 letter dated October 18, 2010 to Scott Huber at Summit Petroleum Corporation, discuss the term "adjacent" as it is used in making major source determinations. These letters are not binding on IDEM but they are persuasive for two reasons. The letters follow the guidance in NPD Air-005 that IDEM will examine both the distance between the sources and their relationship and, secondly, they illustrate a longstanding U.S. EPA analysis used to determine if two sources are "adjacent" going back to the preamble to the 1980 NSR program definition of "major source". U.S. EPA's consistent approach is that any evaluation of what is "adjacent" must relate to the guiding principal of a common sense notion of "source".

All IDEM evaluations of adjacency are done on a case-by-case basis looking at the specific factors for the plants involved. In addition to determining the distance between the plant properties, IDEM asks:

- (1) Are materials routinely transferred between the plants?
- (2) Do managers or other workers frequently shuttle back and forth to be involved actively in the plants?
- (3) Is the production process itself split in any way between the plants?

These questions focus on whether the separate sources are so interrelated that they are functioning as one plant, and whether the distance between them is small enough that it enables them to operate as one plant. U.S. EPA Assistant Administrator Gina McCarty issued a memorandum on September 22, 2009 that confirmed U.S. EPA's view that each source determination must be done on a case-by-case basis and stated that after that analysis is completed it may be that physical proximity serves as an overwhelming factor in determining if the plants are adjacent.

The Hartsdale, Hammond and East Chicago plants are located on properties that are 2.8 or more miles apart. Materials are transferred between the plants but not frequently. Less than 12% of any one plant's output goes to either of the other two plants. There is no production process going on at any plant, since their principal function is storage and transportation. Each plant has its own dedicated staff, though plant managers may be shared between plants. None of the plants is physically close to the other two plants. Considering all of these factors, IDEM, OAQ finds that the Hartsdale, Hammond and East Chicago plants are not located on adjacent properties. They do not meet the third part of the major source definition.

The pipeline pump stations and valve site plants are located on properties that are seven hundred feet or more apart. Materials are transferred from one site to another but there is no production process, as the pump stations and valve sites function to maintain pressure in the pipeline system and to regulate the flow of pipeline contents. These plants may share some staff but are mostly unstaffed plants where staff may be present periodically for maintenance or other duties. None of these plants are physically very close to each other. Considering all these factors, IDEM, OAQ finds that the pipeline pump stations and valve sites are not located on adjacent properties. They do not meet the third part of the major source definition.

None of these Buckeye plants meet all three elements of the major source definition Therefore, IDEM, OAQ finds that the Hartsdale Station, the Hammond Terminal, the East Chicago Terminal, the pipeline pump stations and the valve sites are not part of the same major source. This determination does not affect the previous determination that the "East" East Chicago Terminal (source ID 089-00326) and the "West" East Chicago Terminal (source ID 089-00320) are part of the same major source.

<b>Permitted Emission Units and Pollution Control Equipment</b>
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The source consists of the following permitted emission units:

**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 rail 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) One (1) 2,000 gallon horizontal fixed roof gasoline additive storage tank, identified as T-1508 and one (1) 500 gallon horizontal fixed-roof jet fuel additive storage tank, identified T-1509, approved in 2014 to replace two (2) existing additive storage tanks (T-1501 and T-1502).
- (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.

<b>Insignificant Activities</b>
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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.

**PROPYLENE STORAGE AND LOADING FACILITY**

- (c) One (1) 550 gallon red-dye additive tank.

- (d) One (1) butane truck off load station. Butane comes in trucks and injected through piping under pressure to fill existing butane tanks. Before the off load station, butane comes from underground piping networks from other states.
- (e) One (1) rail fueling station
- (f) One trailer mounted flare for control of propylene maintenance activities that are below the ideal operating range of the existing portable vapor combustion units (PVCU).

#### EAST COLUMBUS DRIVE TERMINAL

- (g) Two (2) horizontal above ground storage tanks, identified as BD-1 and BD-2, with a maximum capacity of 20,000 gallon each, permitted in 2012.
- (h) One (1) 32 horsepower (Hp) emergency fire pump, ID IC-1.

#### ENTIRE SITE

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

<b>Emission Units and Pollution Control Equipment Constructed and/or Operated Without a Permit</b>
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The following insignificant activities were constructed that are associated with the existing Propylene Storage and Loading Facility.

- (a) One (1) 550 gallon red-dye additive tank.
- (b) One (1) butane truck off load station. Butane comes in trucks and injected through piping under pressure to fill existing butane tanks. Before the off load station, butane comes from underground piping networks from other states.
- (c) One (1) rail fueling station
- (d) One trailer mounted flare for control of propylene maintenance activities that are below the ideal operating range of the existing portable vapor combustion units (PVCU).

*Note: The construction of these insignificant activities will result in an increase in VOC emissions of 1.53 tons/year. Even if these insignificant activities are considered part of the propylene storage and loading project permitted in SSM No. 089-30669-00320, issued on December 22, 2011, they will not make the propylene storage and loading project significant under 326 IAC 2-3, Emission Offset. ( $27.07 \text{ tons/yr} + 1.53 \text{ tons/yr} = 28.6 \text{ tons/yr} < 40 \text{ tons/yr}$ ). New limit in D.5.1(e)  $2.80 \text{ tons/yr} + 1.53 \text{ ton/yr} = 4.32 \text{ tons/yr}$ .*

<b>Existing Approvals</b>
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Since the issuance of the Part 70 Operating Permit No. 089-26500-00320 on January 22, 2009, the source has constructed or has been operating under the following additional approvals:

- (a) Significant Source Modification No. 089-30669-00320, issued on December 22, 2011;
- (b) Significant Permit Modification No. 089-30673-00320, issued on January 19, 2012, and
- (c) Administrative Amendment No. 089-31989-00320, issued on June 20, 2012.

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

**Enforcement Issue**

There are no enforcement actions pending.

**Emission Calculations**

See Appendixes A and B of this Technical Support Document for detailed emission calculations.

**County Attainment Status**

The source is located in Lake County.

Pollutant	Designation
SO <sub>2</sub>	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 <sub>3</sub>	Attainment effective May 11, 2010, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>2.5</sub>	Attainment effective February 6, 2012, for the annual PM2.5 standard.
PM <sub>10</sub>	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 <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.

<sup>1</sup>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. Effective July 20, 2012, U.S. EPA has designated Lake County as nonattainment under the 8-hr ozone standard.

(a) Ozone Standards

U.S. EPA, in the Federal Register Notice 77 FR 112 dated June 11, 2012, has designated Lake as nonattainment for ozone. On August 1, 2012 the air pollution control board issued an emergency rule adopting the U.S. EPA's designation. This rule became effective, August 9, 2012. IDEM does not agree with U.S. EPA's designation of nonattainment. IDEM filed a suit against US EPA in the US Court of Appeals for the DC Circuit on July 19, 2012. 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 designation. Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) 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<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Therefore, VOC and NO<sub>x</sub> emissions were evaluated pursuant to the requirements of Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.

(b) PM<sub>2.5</sub>

U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Lake County as nonattainment for PM<sub>2.5</sub>. On March 7, 2005, the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit 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<sub>2.5</sub> promulgated on May 8, 2008. These rules became effective on July 15, 2008. Therefore, direct PM<sub>2.5</sub> and SO<sub>2</sub> 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) Other Criteria Pollutants

Lake County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants. 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 capacity exceeding three hundred thousand (300,000) barrels", it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 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.

**Unrestricted Potential to Emit**

The uncontrolled PTE for Part 70 permit level was determined from the following previous approvals. Therefore, the potential to emit was not recalculated for this source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	0.99
PM <sub>10</sub>	1.16
PM <sub>2.5</sub>	1.16
SO <sub>2</sub>	0.11
VOC	1,834.34
CO	306.29
NO <sub>x</sub>	66.52
GHGs as CO <sub>2</sub> e	17,764

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC and CO are each equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.

HAPs	tons/year	
	Uncontrolled	*Controlled/Limited
Single (Isooctane)	14.05	3.54
Combined HAPs	67.56	19.25

- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

\*The source has taken limits of less than 10 tons per year for single HAP and less than 25 tons per year for combined HAPs in order to be an area source for HAPs.

**Actual Emissions**

The following table shows the actual emissions as reported by the source. This information reflects the 2012 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.0
PM <sub>10</sub>	0.0
PM <sub>2.5</sub>	0.0
SO <sub>2</sub>	0.0
VOC	113
CO	3.0
NO <sub>x</sub>	1.0
HAP (specify)	0.0

**Part 70 Permit Conditions**

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

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

**Potential to Emit of the Entire Source After Issuance of Renewal**

<b>Controlled/Limited Potential to Emit (tons/year)</b>										
<b>Process / Emission Unit</b>	<b>GHGs</b>	<b>CO</b>	<b>NO<sub>x</sub></b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>Combined HAPs</b>	<b>Single HAP (Isooctane)</b>
<b>Indianapolis Blvd. Terminal</b>										
Sphere 1 - full ventdown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.38	--	--
Sphere 1 - depressure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.39	--	--
Sphere 1 - breathing losses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	--	--
Sphere 2 - full ventdown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.38	--	--
Sphere 2 - depressure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.39	--	--
Propylene Rail Loading Rack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.22	--	--
Line Purging (both halves)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	--	--
Propylene Disconnect Calculation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	--	--
Emissions from Equipment Leaks	0.0	0.0	0.0	0.0	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	--	--
<b>East Columbus Terminal</b>										
Storage Tanks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	123.44	8.87	2.33 (Isooctane)
Loading Rack, VCU + Fugitives (FLRACK, RACK)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.15	4.60	1.21 (Isooctane)
Non Tank Processes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.17	2.14	0.61 (Toluene)
VCU	0.0	47.7	9.8	0.0	0.0	0.0	0.0	0.09	0.00	0.00
Insignificant Activities	0.0	0.05	0.25	0.02	0.02	0.02	0.02	9.45	3.64	1.26 (Xylene)
<b>Totals:</b>	<b>17,764</b>	<b>67.51</b>	<b>13.70</b>	<b>0.87</b>	<b>0.87</b>	<b>0.87</b>	<b>0.02</b>	<b>241.36</b>	<b>19.25</b>	<b>3.54 (Isooctane)</b>
PSD Threshold Levels	100,000	100	--	100	100	--	100	--	--	--
Emission Offset and Nonattainment NSR Major Source Threshold	--	--	100	--	--	100	--	100	--	--

- (a) This existing stationary source was determined to be major for PSD because the emissions of VOC, an attainment pollutants at that time (Lake County was re-designated to attainment status for the 8-hour ozone in May 11, 2010), are greater than one hundred (>100) tons per year, and it is in one of the twenty-eight (28) listed source categories.

- (a) This existing stationary source is major for Emission Offset because the emissions of the nonattainment pollutant, VOC are greater than one hundred (>100) tons per year.

**Federal Rule Applicability**

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets 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 following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Sphere 1 Depressure	Portable Vapor Combustion Unit (VCU)	Y	VOC = 119.32	VOC = 2.39	100	Y	N
Sphere 2 Depressure	Portable Vapor Combustion Unit (VCU)	Y	VOC = 119.32	VOC = 2.39	100	Y	N
Rail Loading Rack	Stationary VCU	Y	VOC = 811.20	VOC = 16.22	100	Y	N
Truck Loading Rack	Stationary VCU	Y	VOC = 444.93	VOC = 49.86	100	Y	N

Notes:

- (1) There is only 1 stationary VCU controlling both plants' rail loading rack at Plt ID 00320 and truck loading rack at Plt ID 00326.
- (2) Only 1 portable VCU is used in the sphere depressure.
- (3) Stationary VCU has a control efficiency of 98%.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to sphere 1 depressure, sphere 2 depressure, rail loading rack and truck loading rack for VOC. The CAM for these units is incorporated into this TV Renewal which is the following.

**VOC CAM for propylene loading and unloading from spheres and railcar loading (D.5):**

One Stationary and One Portable Vapor Combustion Units (VCUs) Monitoring

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 continuously when the vapors are being vented to the stationary and portable VCUs. 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 stationary and portable VCUs.

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.

**VOC CAM for tank truck loading rack, identified as RACK (D.7):**

Stationary VCU Monitoring

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 continuously when the vapors are being vented to the stationary 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 stationary VCU.

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.

Monthly Visible Checks for Liquid Leaks

- (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.

### NSPS

#### **40 CFR Part 60, Subpart Kb - Volatile Organic Liquid Storage Vessels, (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984**

This rule applies to the following emission units:

#### 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.

Nonapplicable portions of the NSPS will not be included in the permit. The following requirements shall apply to the above storage vessels:

- (1) 40 CFR 60.110b;
  - (2) 40 CFR 60.111b;
  - (3) 40 CFR 60.112b;
  - (4) 40 CFR 60.113b;
  - (5) 40 CFR 60.114b;
  - (6) 40 CFR 60.115b;
  - (7) 40 CFR 60.116b;
  - (8) 40 CFR 60.117b
- (c) The propylene storage vessels have been inadvertently determined in SSM No. 089-30669-00320 issued on December 22, 2011 to be subject to 40 CFR Part 60, Subpart Kb. Part 60.110b (d)(2) of this rule specifically exempts pressure vessels since they operate in excess of 204.9 kPa and without emissions to the atmosphere. Therefore, the applicability of this rule has been removed for the following emission units:

#### PROPYLENE STORAGE AND LOADING FACILITY

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

#### **40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

This rule applies to manufacturers, owners and operators of stationary CI ICE that commence construction (date the engine was ordered) as specified below:

- (1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:
  - (i) 2007 or later, for engines that are not fire pump engines;

- (ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.
- (2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:
  - (i) Manufactured after April 1, 2006, and are not fire pump engines, or
  - (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.
- (3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.
- (4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.
- (5) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.
  - (i) The 32 HP emergency fire pump permitted in ENSR/T 089-7520-00326 on June 12, 1998 is not subject to the requirements of Subpart IIII, since it has a commencement of construction date that predates the applicability of this rule, July 11, 2005.

**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**

This rule has been inadvertently determined in SSM 089-30669-00320 issued on December 22, 2011 to be applicable to the emission units involved in propylene service. This rule is only applicable to sources that manufacture or produce the listed chemicals in the rule. Although propylene is one of the listed chemical in the rule, it is not manufactured or produced by Buckeye Terminals. It comes from piping network from other sources and it is only loaded and stored at the source. Therefore, 40 CFR Part 60, Subpart VV does not apply to the propylene loading and storage operation.

NESHAP

**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**

This rule applies to the following emission units:

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) One (1) 2,000 gallon horizontal fixed roof gasoline additive storage tank, identified as T-1508 and one (1) 500 gallon horizontal fixed-roof jet fuel additive storage tank, identified T-1509, approved in 2014 to replace two (2) existing additive storage tanks (T-1501 and T-1502).
- (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.

Nonapplicable portions of the NESHAP will not be included in the permit. The following requirements shall apply to the above storage vessels:

- (1) 40 CFR 63.11080
- (2) 40 CFR 63.11081(a)
- (3) 40 CFR 63.11082(a)
- (4) 40 CFR 63.11083
- (5) 40 CFR 63.11085(a)
- (6) 40 CFR 63.11087
- (7) 40 CFR 63.11088
- (8) 40 CFR 63.11089
- (9) 40 CFR 63.11092(a), (b)
- (10) 40 CFR 63.11093
- (11) 40 CFR 63.11094
- (12) 40 CFR 63.11095
- (13) 40 CFR 63.11098
- (14) 40 CFR 63.11099
- (15) 40 CFR 63.11100
- (16) Table 1 to Subpart BBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Storage Tanks
- (17) Table 2 to Subpart BBBB of Part 63—Applicability Criteria, Emission Limits, and Management Practices for Loading Racks
- (18) Table 3 to Subpart BBBB of Part 63—Applicability of General Provisions

**40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE)**

The 32 HP emergency fire pump, located at an area source of HAPs with commencement of construction before June 12, 2006 is considered an existing affected source, (permitted in ENSR/T 089-7520-00326 on June 12, 1998). This emergency fire pump shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ no later than May 3, 2013:

- (1) 40 CFR § 63.6580
- (2) 40 CFR § 63.6585(a), (c)
- (3) 40 CFR § 63.6590(a)(1)(iii)
- (4) 40 CFR 63.6595(a)(1)
- (5) 40 CFR 63.6603(a)
- (6) 40 CFR 63.6605
- (7) 40 CFR 63.6625(e)(3), (f), (i)
- (8) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2), (f)(4)
- (9) 40 CFR 63.6645(a)(5)
- (10) 40 CFR 63.6655(d), (e)(2), (f)(2)
- (11) 40 CFR 63.6660
- (12) 40 CFR 63.6665
- (13) 40 CFR 63.6670
- (14) 40 CFR 63.6675
- (15) Table 2d to Subpart ZZZZ of Part 63 (item 4)
- (16) Table 6 to Subpart ZZZZ of Part 63 (item 9)
- (17) Table 8 to Subpart ZZZZ of Part 63

### **40 CFR Part 63, Subpart EEEE - Standards for Organic Liquids Distribution (Non-Gasoline)**

This subpart establishes national emission limitations, operating limits, and work practice standards for organic hazardous air pollutants (HAP) emitted from organic liquids distribution (OLD) (non-gasoline) operations at major sources of HAP emissions.

This rule is not applicable to the propylene handling facility at Buckeye Terminals because propylene is not considered an organic liquid. It is also not listed from among the organic liquids in Table 1 to Subpart EEEE of Part 63 that are subject to this rule.

#### **State Rule Applicability - Entire Source**

#### **326 IAC 1-6-3 (Preventive Maintenance Plan)**

The source is subject to 326 IAC 1-6-3.

#### **326 IAC 1-7 (Stack Height)**

The source is not subject to 326 IAC 1-7 because neither particulate matter nor sulfur dioxide has the potential to emit greater than 25 tpy.

#### **326 IAC 1-5-2 (Emergency Reduction Plans)**

This rule applies to a source that has the potential to emit one hundred (100) tons per year, or more, of any pollutant. Buckeye has the potential to emit VOC greater than 100 tons/year, therefore it is required to maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

#### **326 IAC 2-6 (Emission Reporting)**

Pursuant to 326 IAC 2-6-3(a)(1), an emission statement covering the previous calendar year must be submitted by July 1 of each year for each source subject to 326 IAC 2-6-1(a)(2), located in Lake County that has a potential to emit VOC greater than or equal to twenty-five (25) tons per year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c).

#### **326 IAC 5-1 (Opacity Limitations)**

This source is subject to the following opacity limitations specified in 326 IAC 5-1-2(2)(B):

- (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 6.8-1-1 (PM Limitations for Lake County)**

The source is not subject to the requirements of 326 IAC 6.8-1-1, because the potential particulate matter (PM) emissions from the source are less than 100 tons per year and the actual PM emissions are less than 10 tons per year.

#### **326 IAC 6.8-2 (Lake County PM10 Emissions Requirements)**

326 IAC 6.8-2 applies to sources that are specifically listed in this rule. The source is not listed in 326 IAC 6.8-2. Therefore, pursuant to 326 IAC 6.8-2, the requirements of 326 IAC 6.8-2 do not apply.

**326 IAC 6.8-10-1 (Lake County: Fugitive Particulate Matter)**

326 IAC 6.8-10 applies to sources in Lake County with potential to emit five (5) tons per year of fugitive particulate matter and to sources specifically listed in this rule. Buckeye Terminals, LLC is subject to the following requirements of this rule since it is listed in the rule:

- (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) 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.
- (d) 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.
- (e) 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.
- (f) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (g) 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.

**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) through (4) are violated pursuant to 326 IAC 6-4-2. 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.

<b>State Rule Applicability – Individual Facilities</b>
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**326 IAC 2-2 (PSD Rules) and 326 IAC 2-3 (Emission Offset Rules)**

This existing stationary source was determined to be major for PSD because the emissions of VOC, an attainment pollutant at that time (Lake County was re-designated to attainment status for the 8-hour ozone in May 11, 2010), are greater than one hundred (>100) tons per year, and it is in one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

This existing source is a major stationary source under Emission Offset (326 IAC 2-3), because VOC, a nonattainment regulated pollutant, is emitted at a rate of 100 tons per year or more.

Lake County was severe nonattainment for the one-hour ozone standards before it was revoked in June 15, 2005. The following 1998 modification (CP 089-9508-00320) was evaluated based upon this status of Lake County at that time.

CP 089-9508-00320, issued on July 27, 1999

This permit allowed for the construction of Tank 134 and Tank 135 and the modification of Tank 151 fixed roof to internal floating roof. This permit also increased the limit in the amount of petroleum products from 544,320,000 gallons to 673,663,000 gallons per twelve (12) consecutive

month period, while maintaining the VOC emissions below 25 tons per year to avoid the requirements of 326 IAC 2-3 (Emission Offset Rules).

Minor Source Modification No. 089-11190-00320, issued on September 27, 1999

This permit allowed for the construction of two (2) internal floating roof tanks with VOC PTE of 0.4 tons/year.

Significant Source Modification No. 089-30669-00320, issued on December 22, 2011

This allowed for the construction of a propylene storage and loading facility and the consolidation of two (2) Buckeye terminal plants located at 400 East Columbus Drive, in East Chicago, Indiana, and the Buckeye Terminals, LLC, located at 3823 Indianapolis Blvd, in East Chicago, Indiana, since they were considered one plant. This modification has a PTE of 27.07 tons of VOC per year, which is less than 40 tons per year (significant level for PSD).

Note: Lake County was re-designated to attainment status for the 8-hour ozone in May 11, 2010. EPA re-designated Lake County back to nonattainment for the 8-hr ozone in June 11, 2012. IDEM in an Emergency Rule adopted the US EPA's nonattainment designation for the 8-hr ozone standards on August 9, 2012. Therefore, at the time of this Source Modification No. 089-30669-00320, Lake County was attainment for ozone.

**326 IAC 8-1-6 (New facilities; General Reduction Requirements)**

Significant Source Modification No. 089-30669-00320, issued on December 22, 2011, established the following BACT for the propylene storage and loading:

- (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.

No other facility has the potential VOC emission of 25 tons per year or more.

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

This rule applies to storage vessels; 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 require 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.

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

This rule applies to the bulk gasoline terminal which requires the following:

- (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.

### **326 IAC 8-4-9 (Leaks from transports and vapor collection systems; records)**

This rule applies to the vapor control systems at the source subject to sections 4 through 6 of this rule. 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.

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

This rule applies to this source because it is located in Lake County, and the VOC PTE is greater than 25 tons per year.

Pursuant to 326 IAC 8-7-2, potential VOC emissions from Tank 106, Tank 107, Tank 108, Tank 112, Tank 120, Tank 123, Tank 130, Tank 131, Tank 132, Tank 133, Tank 134, Tank 135 and Tank 151 shall not be included to determine whether thresholds in this section are exceeded. Each tank qualifies as an exception under 326 IAC 8-7-2(a)(3) because each is subject to 326 IAC 8-4. Therefore, these tanks are exempt from the emission limit requirements of 326 IAC 8-7-3.

Pursuant to 326 IAC 8-7-2, potential VOC emissions from Tank 103, Tank 122, 140, Tank 141, Tank 142, Tank 150, AT-01 and AT-02 shall not be included to determine whether thresholds in this section are exceeded. Each tank qualifies as an exception under 326 IAC 8-7-2(a)(3) because each belongs to the source category of volatile organic liquids storage. Therefore, these tanks are exempt from the emission limit requirements of 326 IAC 8-7-3.

There are no other facilities with potential VOC emissions (i.e., affected facilities) located at this source.

### **326 IAC 8-7-8 (General Record Keeping and Reports)**

The source is subject to the following record keeping requirements under 326 IAC 8-7-8:

- (a) All records required by this rule shall be maintained for at least three (3) years.
- (b) Records required by this rule or records used to demonstrate that a source is exempt as established in 326 IAC 8-7-2(3) shall be submitted to the department or the 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 of this rule.

- (c) Sources subject to this rule shall notify the department at least thirty (30) days prior to the addition or modification of a facility which may result in a potential increase in VOC emissions.

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

Since tanks 134, 135 and 151 are subject to 40 CFR 60, subpart Kb (New Source Performance Standards for Volatile Organic Liquid Storage) they are exempt from 326 IAC 8-9, pursuant to 326 IAC 8-9-2(8).

The source is located in Lake County and has ten (10) vertical domed internal floating roof storage tanks that are not subject to 40 CFR 60, subpart Kb. Therefore, Tank 106, Tank 107, Tank 108, Tank 112, Tank 120, Tank 123, Tank 130, Tank 131, Tank 132, and Tank 133 are subject to the requirements of 326 IAC 8-9-4(c), 326 IAC 8-9-5 and 326 IAC 8-9-6.

The source is located in Lake County and has ten (10) vertical fixed roof cone storage tanks that are not subject to 40 CFR 60, Subpart Kb. Therefore, Tank 103, Tank 122, Tank 140, Tank 141, Tank 142, and Tank 150 are subject to the requirements of 326 IAC 8-9-6.

The source is located in Lake County and has two (2) horizontal distillate additive tanks that are not subject to 40 CFR 60, Subpart Kb. Therefore, Tank AT-01 and Tank AT-02 are subject to the requirements of 326 IAC 8-9-6.

326 IAC 8-9-4 Requirements:

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.

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.

326 IAC 8-9-5 Testing and Procedures:

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.

**326 IAC 2-4.1-1 (New Source Toxics Control)**

- (a) The operation of the entire source 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.
- (b) The VOC capture efficiency and VOC emissions from tank truck loading rack, identified as RACK has been required at a minimum of 97.3% capture and 35 mg of VOC emissions per liter of gasoline loaded. These limitations will, likewise, limit the single HAP emissions below 10 tons per year and less than 25 tons per year for combined HAPs to avoid the requirements of 326 IAC 2-4.1-1.

**326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)**

The source is not subject to 326 IAC 326 IAC 7-1.1 because its SO<sub>2</sub> PTE is less than 25 tons/year or 10 pounds/hour.

**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.

The compliance monitoring requirements applicable to this source are as follows:

Control	Process Being Controlled	Parameter	Frequency	Range	Excursions and Exceedances
Portable Vapor Combustion Unit (VCU)	Propylene Storage Sphere 1 and Sphere 2 (D.5(a))	Presence of pilot light	Using heat sensing device at all times	-	Response Steps
		Visible checks for liquid and vapor leaks (incorporating smell, sound and sight)	Monthly	-	
Stationary Vapor Combustion Unit (VCU)	Propylene Loading Rack (D.5(f))	Presence of pilot light	Using heat sensing device at all times	-	Response Steps

Control	Process Being Controlled	Parameter	Frequency	Range	Excursions and Exceedances
	Tank Truck Loading Rack, identified as RACK (D.7(ee)), and Fractionator, identified as FRACT (D.7(ff))	Visible checks for liquid and vapor leaks (incorporating smell, sound and sight)	Monthly	-	

These monitoring conditions are necessary because; the portable VCU for the storage pressure spheres and stationary VCU for the twelve (12) stand propylene loading rack, tank truck loading rack, and VOC fractionator must operate properly to ensure compliance with 326 IAC 8-1-6 (VOC BACT), 326 IAC 8-7-3 (Specific VOC Reduction Requirements for Lake/Porter/Clark/Floyd Counties), 326 IAC 8-4 (Petroleum Sources) and to avoid the requirements of 326 IAC 2-4.1-1 for the gasoline tank truck loading rack.

**Recommendation**

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

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

An application for the purposes of this review was received on April 23, 2013. Additional information was received on August 30, 2013 and October 11, 2013.

**Conclusion**

The operation of this stationary pipeline breakout tank farm and bulk liquid fuel storage and transfer terminal shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. 089-33112-00320.

**IDEM Contact**

- (a) Questions regarding this proposed permit can be directed to Aida DeGuzman at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-4972 or toll free at 1-800-451-6027 extension 3-4972.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

SOURCEWIDE PTE										
Uncontrolled Potential To Emit (ton/yr)										
Process / Emission Unit	GHGs	CO	NO <sub>x</sub>	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	VOC	Combined HAPs	Single HAP (Isooctane)
<b>Indianapolis Blvd. Terminal</b>										
Sphere 1 - full ventdown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.78	--	--
Sphere 1 - depressure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	119.32	--	--
Sphere 1 - breathing losses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	--	--
Sphere 2 - full ventdown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.78	--	--
Sphere 2 - depressure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	119.32	--	--
Sphere 1 - breathing losses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	--	--
Propylene Rail Loading Rack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	811.20	--	--
Line Purging (both halves)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.55	--	--
Propylene Disconnect Calculation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	--	--
Emissions from Equipment Leaks	0.0	0.0	0.0	0.0	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	--	--
<b>East Columbus Terminal</b>										
Storage Tanks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	123.44	8.87	2.33
Loading Rack, VCU + Fugitives (FLRACK, RACK)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	620.16	44.42	11.72
Non Tank Processes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	130.50	10.35	2.57
VCU	426	402.00	85.38	0.00	0.00	0.00	0.0000	0.95	0.00	0.00
Insignificant Activities	0.0	0.1	85.6	0.1	0.3	0.3	0.0	9.45	3.91	1.28
<b>Totals:</b>	<b>17,764</b>	<b>19.77</b>	<b>3.63</b>	<b>0.85</b>	<b>0.85</b>	<b>0.85</b>	<b>0.0053</b>	<b>1,269.25</b>	<b>67.56</b>	<b>14.05</b>

toluene

isooctane

Controlled/Limited Potential To Emit (ton/yr)										
Process / Emission Unit	GHGs	CO	NO <sub>x</sub>	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	VOC	Combined HAPs	Single HAP (Isooctane)
<b>Indianapolis Blvd. Terminal</b>										
Sphere 1 - full ventdown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.38	--	--
Sphere 1 - depressure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.39	--	--
Sphere 1 - breathing losses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	--	--
Sphere 2 - full ventdown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.38	--	--
Sphere 2 - depressure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.39	--	--
Propylene Rail Loading Rack	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.22	--	--
Line Purging (both halves)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	--	--
Propylene Disconnect Calculation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	--	--
Emissions from Equipment Leaks	0.0	0.0	0.0	0.0	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	--	--
<b>East Columbus Terminal</b>										
Storage Tanks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	123.44	8.87	2.33
Loading Rack, VCU + Fugitives (FLRACK, RACK)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.15	4.60	1.21
Non Tank Processes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.17	2.14	0.61
VCU	0.0	47.7	9.8	0.0	0.0	0.0	0.0	0.09	0.00	0.00
Insignificant Activities	0.0	0.05	0.25	0.02	0.02	0.02	0.02	9.45	3.64	1.26
<b>Totals:</b>	<b>17,764</b>	<b>67.51</b>	<b>13.70</b>	<b>0.87</b>	<b>0.87</b>	<b>0.87</b>	<b>0.02</b>	<b>241.36</b>	<b>19.25</b>	<b>3.54</b>

Toluene

xylene

isooctane

PSD Threshold Levels	100,000	100	--	100	100	--	100	--	--	--
Emission Offset and Nonattainment NSR Major Source Threshold	--	--	100	--	--	100	--	100	--	--

FLRACK - Fugitive from loading rack

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.

## Appendix A: Emission Calculations

Company Name: Buckeye Terminals  
 Address: 400 East Columbus Drive, East Chicago, Indiana 46312  
 TV Renewal No. T089-33112-00320  
 Reviewer: Aida DeGuzman  
 Date: April 23, 2013

## East Columbus Terminal

Total Potential To Emit (tons/year)						
Emissions Generating Activity						
Pollutant	Storage Tanks	Loading Rack VCU + Fugitives	Non-tank Processes Significant	VCU Emissions	Insignificant Activities	TOTAL
PM	0.00	0.00	0.00	0.06	0.02	0.08
PM10	0.00	0.00	0.00	0.23	0.02	0.25
SO2	0.00	0.00	0.00	0.02	0.02	0.04
NOx	0.00	0.00	0.00	85.38	0.25	85.63
VOC	123.44	620.16	130.50	0.95	9.45	884.51
CO	0.00	0.00	0.00	402.00	0.05	402.05
total HAPs	8.87	44.42	10.35	0.00	3.91	67.56
worst case single HAP	2.33 isooctane	11.72 isooctane	2.57 Toluene	0.00	1.28 xylene	3.60 isooctane

Total emissions based on rated capacities at 8,760 hours/year.

Limited Potential To Emit (tons/year)						
Emissions Generating Activity						
Pollutant	Storage Tanks	Loading Rack VCU + Fugitives	Non-tank Processes Significant	VCU Emissions	Insignificant Activities	TOTAL
PM	0.00	0.00	0.00	0.00	0.02	0.02
PM10	0.00	0.00	0.00	0.00	0.02	0.02
SO2	0.00	0.00	0.00	0.00	0.02	0.02
NOx	0.00	0.00	0.00	9.82	0.25	10.07
VOC	123.44	64.15	16.17	0.09	9.45	213.30
CO	0.00	0.00	0.00	47.68	0.05	47.73
total HAPs	8.87	4.60	2.14	0.00	3.64	19.25
worst case single HAP	2.33 isooctane	1.21 isooctane	0.61 Toluene	0.00	1.26 xylene	3.54 isooctane

Total emissions based on rated capacities at 8,760 hours/year.

\* Single HAP and total HAPs emissions are limited to less than 10 and 25 tons per year, respectively, to satisfy the requirements of 326 IAC 2-8-4.

Emissions from insignificant activities come from the IC engine, FILT2, FILT3, PIG1, FUG LIQ, FUG VAP, and OWS2.

**Appendix A: Emission Calculations  
Potential Tank VOC Emissions**

**Company Name: Buckeye Terminals  
Address: 400 East Columbus Drive, East Chicago, Indiana 46312  
TV Renewal No. T089-33112-00320  
Reviewer: Aida DeGuzman  
Date: April 23, 2013**

**East Columbus Terminal**

Tank Number	Product Stored							Total VOC
		Working	Withdraw	Rim Seal	Deck Fitting	Deck Seam	Breathing	Tons/yr
T-1501	Gasoline Add.	0.24	--	--	--	--	0.02	0.26
T-1502	Gasoline Add.	0.01	--	--	--	--	0.08	0.09
T-202	Gasoline	--	0.90	0.97	9.05	0.00	--	10.92
T-204	Gasoline	--	0.87	0.45	1.15	0.00	--	2.47
T-205	Distillate	0.75	--	--	--	--	0.07	0.83
T-206	Distillate	0.75	--	--	--	--	0.08	0.84
T-207	Gasoline	--	0.73	0.13	1.15	0.00	--	2.00
T-208	Kerosene	1.02	--	--	--	--	0.03	1.05
T-209	Gasoline	--	0.42	0.13	1.15	0.00	--	1.69
T-2101	Kerosene	3.63	--	--	--	--	0.60	4.23
T-2102	Kerosene	3.63	--	--	--	--	0.60	4.22
T-240	Kerosene	1.25	--	--	--	--	0.06	1.31
T-2601	Kerosene	4.25	--	--	--	--	0.73	4.97
T-2602	Kerosene	4.25	--	--	--	--	0.73	4.97
T-401	Gasoline	--	0.36	0.19	0.35	0.00	--	0.90
T-201	Gasoline	--	0.81	1.00	9.26	0.00	--	11.07
T-801	Gasoline	--	0.73	2.00	9.07	0.00	--	11.80
T-802	Gasoline	--	0.49	2.02	3.13	0.00	--	5.64
T-803	Gasoline	--	0.50	2.00	3.13	0.00	--	5.63
T-804	Gasoline	--	0.50	2.00	15.90	0.00	--	18.40
T-805	Gasoline	--	0.49	2.00	15.90	0.00	--	18.39
T-806	Gasoline	--	0.50	2.00	3.13	0.00	--	5.63
T-807	Distillate	1.36	--	--	--	--	0.10	1.46
T-808	Gasoline	--	0.41	0.26	0.30	0.00	--	0.98
T-809	Gasoline	--	0.41	0.26	0.31	0.00	--	0.98
T-810	Gasoline	--	0.41	0.26	0.31	0.00	--	0.98
T-103	Gasoline	--	1.74	0.00	0.01	0.00	--	1.75
<b>Total VOC</b>		<b>21.1</b>	<b>10.3</b>	<b>15.7</b>	<b>73.3</b>	<b>0.0</b>	<b>3.1</b>	<b>123.4</b>

- Note: (1) All storage tank emissions estimated using EPA's TANKS 4.09 software program.  
(2) Worst case VOC emissions due to withdraw loss were determined based on the following assumptions:  
(a) All gasoline is transferred through T-202, T-204 or T-801 with a total limited annual throughput of 2,007 million gallons (47.8 million barrels), with Tanks T-801 - T-810 (except for T-807 which is not a gasoline tank) handling more than 50% of total throughput.  
(b) All distillate/kerosene is transferred through T-2602 with a limited annual throughput of 788.8 million gallons (18.8 million barrels).

## Appendix A: Emission Calculations

Company Name: Buckeye Terminals  
 Address: 400 East Columbus Drive, East Chicago, Indiana 46312  
 TV Renewal No. T089-33112-00320  
 Reviewer: Aida DeGuzman  
 Date: April 23, 2013

## East Columbus Terminal

HAP UNCONTROLLED PTE															
Source	Service	VOC Emissions	Vapor Weight Percent												Total
			Benzene	Toluene	Ethylbenzene	Xylenes	Cumene	Hexane	Isocotane	MTBE	Naphthalene	TEL	Phenol	Methanol	
	Gasoline/Distillate		0.90%	1.71%	0.10%	0.50%	0.01%	1.60%	1.89%	0.43%	0.02%	0.00%	0.00%	0.00%	
	Additive		0.47%	2.98%	0.54%	1.28%	0.06%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	10.38%	
	Process Liquid		2.90%	20.10%	3.70%	23.37%	0.98%	3.16%	12.05%	0.50%	0.49%	0.08%	0.00%	0.00%	
	Stripper Exh.		25.00%	25.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	
HAP Emissions (tons/yr)															
T-1501	Gasoline Add.	0.26	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.04
T-1502	Gasoline Add.	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
T-202	Gasoline	10.92	0.10	0.19	0.01	0.05	0.00	0.17	0.21	0.05	0.00	0.00	0.00	0.00	0.78
T-204	Gasoline	2.47	0.02	0.04	0.00	0.01	0.00	0.04	0.05	0.01	0.00	0.00	0.00	0.00	0.18
T-205	Distillate	0.83	0.01	0.01	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.06
T-206	Distillate	0.84	0.01	0.01	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.06
T-207	Gasoline	2.00	0.02	0.03	0.00	0.01	0.00	0.03	0.04	0.01	0.00	0.00	0.00	0.00	0.14
T-208	Kerosene	1.05	0.01	0.02	0.00	0.01	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.08
T-209	Gasoline	1.69	0.02	0.03	0.00	0.01	0.00	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.12
T-2101	Kerosene	4.23	0.04	0.07	0.00	0.02	0.00	0.07	0.08	0.02	0.00	0.00	0.00	0.00	0.30
T-2102	Kerosene	4.22	0.04	0.07	0.00	0.02	0.00	0.07	0.08	0.02	0.00	0.00	0.00	0.00	0.30
T-240	Kerosene	1.31	0.01	0.02	0.00	0.01	0.00	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.09
T-2601	Kerosene	4.97	0.04	0.09	0.00	0.02	0.00	0.08	0.09	0.02	0.00	0.00	0.00	0.00	0.36
T-2602	Kerosene	4.97	0.04	0.09	0.00	0.02	0.00	0.08	0.09	0.02	0.00	0.00	0.00	0.00	0.36
T-401	Gasoline	0.90	0.01	0.02	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.06
T-201	Gasoline	11.07	0.10	0.19	0.01	0.06	0.00	0.18	0.21	0.05	0.00	0.00	0.00	0.00	0.79
T-801	Gasoline	11.80	0.11	0.20	0.01	0.06	0.00	0.19	0.22	0.05	0.00	0.00	0.00	0.00	0.84
T-802	Gasoline	5.64	0.05	0.10	0.01	0.03	0.00	0.09	0.11	0.02	0.00	0.00	0.00	0.00	0.40
T-803	Gasoline	5.63	0.05	0.10	0.01	0.03	0.00	0.09	0.11	0.02	0.00	0.00	0.00	0.00	0.40
T-804	Gasoline	18.40	0.17	0.31	0.02	0.09	0.00	0.29	0.35	0.08	0.00	0.00	0.00	0.00	1.32
T-805	Gasoline	18.39	0.17	0.31	0.02	0.09	0.00	0.29	0.35	0.08	0.00	0.00	0.00	0.00	1.32
T-806	Gasoline	5.63	0.05	0.10	0.01	0.03	0.00	0.09	0.11	0.02	0.00	0.00	0.00	0.00	0.40
T-807	Distillate	1.46	0.01	0.03	0.00	0.01	0.00	0.02	0.03	0.01	0.00	0.00	0.00	0.00	0.10
T-808	Gasoline	0.98	0.01	0.02	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.07
T-809	Gasoline	0.98	0.01	0.02	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.07
T-810	Gasoline	0.98	0.01	0.02	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.07
T-103	Gasoline	1.75	0.02	0.03	0.00	0.01	0.00	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.13
FLRACK	Gasoline	175.23	1.58	3.00	0.18	0.88	0.02	2.80	3.31	0.75	0.04	0.00	0.00	0.00	12.55
RACK	Gasoline	444.93	4.00	7.61	0.44	2.22	0.05	7.12	8.41	1.91	0.09	0.00	0.00	0.00	31.87
TNKCLN GAS	Gasoline	64.72	0.58	1.11	0.06	0.32	0.01	1.04	1.22	0.28	0.01	0.00	0.00	0.00	4.64
FILT1	Gasoline	14.95	0.13	0.26	0.01	0.07	0.00	0.24	0.28	0.06	0.00	0.00	0.00	0.00	1.07
PROVE	Gasoline	15.20	0.14	0.26	0.02	0.08	0.00	0.24	0.29	0.07	0.00	0.00	0.00	0.00	1.09
OWS1	Gasoline	3.94	0.04	0.07	0.00	0.02	0.00	0.06	0.07	0.02	0.00	0.00	0.00	0.00	0.28
SUMPS 1-5	Gasoline	26.28	0.24	0.45	0.03	0.13	0.00	0.42	0.50	0.11	0.01	0.00	0.00	0.00	1.88
SUMP 6	Gasoline	3.94	0.04	0.07	0.00	0.02	0.00	0.06	0.07	0.02	0.00	0.00	0.00	0.00	0.28
STRIPPER	Stripper Exh.	1.47	0.37	0.37	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10
FILT2	Gasoline	0.43	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.03
FILT3	Gasoline	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIG1	Gasoline	2.68	0.02	0.05	0.00	0.01	0.00	0.04	0.05	0.01	0.00	0.00	0.00	0.00	0.19
FUG LIQ	Process Liquid	5.38	0.16	1.08	0.20	1.26	0.05	0.17	0.65	0.03	0.03	0.00	0.00	0.00	3.62
FUG VAP	Gasoline	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OWS2	Gasoline	0.88	0.01	0.01	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.06
<b>Total PTE</b>	<b>tons/yr</b>	<b>883.5</b>	<b>8.4</b>	<b>16.4</b>	<b>1.4</b>	<b>5.6</b>	<b>0.2</b>	<b>14.2</b>	<b>17.2</b>	<b>3.8</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>67.6</b>
<b>Tanks PTE</b>	<b>tons/yr</b>	<b>123.44</b>	<b>1.11</b>	<b>2.12</b>	<b>0.12</b>	<b>0.62</b>	<b>0.01</b>	<b>1.97</b>	<b>2.33</b>	<b>0.53</b>	<b>0.03</b>	<b>0.00</b>	<b>0.00</b>	<b>0.04</b>	<b>8.9</b>
<b>Rack, VCU + Fugitives</b>		<b>620.16</b>	<b>5.58</b>	<b>10.60</b>	<b>0.62</b>	<b>3.10</b>	<b>0.07</b>	<b>9.92</b>	<b>11.72</b>	<b>2.67</b>	<b>0.13</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>44.4</b>
<b>Non Tank Processes</b>		<b>130.50</b>	<b>1.53</b>	<b>2.57</b>	<b>0.50</b>	<b>0.65</b>	<b>0.02</b>	<b>2.06</b>	<b>2.44</b>	<b>0.55</b>	<b>0.03</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>10.35</b>
<b>Insignificant Activities</b>		<b>9.43</b>	<b>0.19</b>	<b>1.15</b>	<b>0.20</b>	<b>1.28</b>	<b>0.05</b>	<b>0.23</b>	<b>0.72</b>	<b>0.04</b>	<b>0.03</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3.91</b>

Note: (1) All storage tank emissions are calculated using EPA's TANKS 4.09 software program.

(2) Potential HAP emissions (tons/yr) = Potential VOC emissions (tons/yr) \* Vapor Weight % HAPs

(3) FUG HAP emissions were conservatively estimated assuming all fluids in service had liquid gasoline HAP composition. Percent (%) by weight in liquid based on speciation for gasoline.

(4) Percent (%) weight in vapor conservatively based on speciation data either provided by Buckeye or Gasoline Distribution MACT, Background Information for Proposed Standards (EPA-453/R-94-002A, Table C-5)

(5) HAPs emissions from additives are based on worst case gasoline additive HAP speciation provided by Buckeye.

(6) Phenol and methanol are present only in fuel additive.

## Appendix A: Emission Calculations

Company Name: Buckeye Terminals  
Address: 400 East Columbus Drive, East Chicago, Indiana 46312  
TV Renewal No. T089-33112-00320  
Reviewer: Aida DeGuzman  
Date: April 23, 2013

## East Columbus Terminal

HAPS CONTROLLED/LIMITED PTE															
Source	Service	VOC Emissions	Vapor Weight Percent											Total	
			Benzene	Toluene	Ethylbenzene	Xylenes	Cumene	Hexane	Isocotane	MTBE	Naphthalene	TEL	Phenol		Methanol
	Gasoline/Distillate		0.90%	1.71%	0.10%	0.50%	0.01%	1.60%	1.89%	0.43%	0.02%	0.00%	0.00%	0.00%	
	Additive		0.47%	2.98%	0.54%	1.28%	0.06%	0.00%	0.00%	0.02%	0.00%	0.00%	10.38%		
	Process Liquid		2.90%	20.10%	3.70%	23.37%	0.98%	3.16%	12.05%	0.50%	0.49%	0.08%	0.00%		
	Stripper Exh.		25.00%	25.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%		
<b>HAP Emissions (tons/yr)</b>															
T-1501	Gasoline Add.	0.26	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.04
T-1502	Gasoline Add.	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
T-202	Gasoline	10.92	0.10	0.19	0.01	0.05	0.00	0.17	0.21	0.05	0.00	0.00	0.00	0.00	0.78
T-204	Gasoline	2.47	0.02	0.04	0.00	0.01	0.00	0.04	0.05	0.01	0.00	0.00	0.00	0.00	0.18
T-205	Distillate	0.83	0.01	0.01	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.06
T-206	Distillate	0.84	0.01	0.01	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.06
T-207	Gasoline	2.00	0.02	0.03	0.00	0.01	0.00	0.03	0.04	0.01	0.00	0.00	0.00	0.00	0.14
T-208	Kerosene	1.05	0.01	0.02	0.00	0.01	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.08
T-209	Gasoline	1.69	0.02	0.03	0.00	0.01	0.00	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.12
T-2101	Kerosene	4.23	0.04	0.07	0.00	0.02	0.00	0.07	0.08	0.02	0.00	0.00	0.00	0.00	0.30
T-2102	Kerosene	4.22	0.04	0.07	0.00	0.02	0.00	0.07	0.08	0.02	0.00	0.00	0.00	0.00	0.30
T-240	Kerosene	1.31	0.01	0.02	0.00	0.01	0.00	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.09
T-2601	Kerosene	4.97	0.04	0.09	0.00	0.02	0.00	0.08	0.09	0.02	0.00	0.00	0.00	0.00	0.36
T-2602	Kerosene	4.97	0.04	0.09	0.00	0.02	0.00	0.08	0.09	0.02	0.00	0.00	0.00	0.00	0.36
T-401	Gasoline	0.90	0.01	0.02	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.06
T-201	Gasoline	11.07	0.10	0.19	0.01	0.06	0.00	0.18	0.21	0.05	0.00	0.00	0.00	0.00	0.79
T-801	Gasoline	11.80	0.11	0.20	0.01	0.06	0.00	0.19	0.22	0.05	0.00	0.00	0.00	0.00	0.85
T-802	Gasoline	5.64	0.05	0.10	0.01	0.03	0.00	0.09	0.11	0.02	0.00	0.00	0.00	0.00	0.40
T-803	Gasoline	5.63	0.05	0.10	0.01	0.03	0.00	0.09	0.11	0.02	0.00	0.00	0.00	0.00	0.40
T-804	Gasoline	18.40	0.17	0.31	0.02	0.09	0.00	0.29	0.35	0.08	0.00	0.00	0.00	0.00	1.32
T-805	Gasoline	18.39	0.17	0.31	0.02	0.09	0.00	0.29	0.35	0.08	0.00	0.00	0.00	0.00	1.32
T-806	Gasoline	5.63	0.05	0.10	0.01	0.03	0.00	0.09	0.11	0.02	0.00	0.00	0.00	0.00	0.40
T-807	Distillate	1.46	0.01	0.03	0.00	0.01	0.00	0.02	0.03	0.01	0.00	0.00	0.00	0.00	0.10
T-808	Gasoline	0.98	0.01	0.02	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.07
T-809	Gasoline	0.98	0.01	0.02	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.07
T-810	Gasoline	0.98	0.01	0.02	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.07
T-103	Gasoline	1.75	0.02	0.03	0.00	0.01	0.00	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.13
FLRACK	Gasoline	14.29	0.13	0.24	0.01	0.07	0.00	0.23	0.27	0.06	0.00	0.00	0.00	0.00	1.02
RACK	Gasoline	49.86	0.45	0.85	0.05	0.25	0.01	0.80	0.94	0.21	0.01	0.00	0.00	0.00	3.57
TNKCLN GAS	Gasoline	13.53	0.12	0.23	0.01	0.07	0.00	0.22	0.26	0.06	0.00	0.00	0.00	0.00	0.97
FILT1	Gasoline	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PROVE	Gasoline	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
OWS1	Gasoline	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
SUMPS 1-5	Gasoline	0.75	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.05
SUMP 6	Gasoline	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
STRIPPER	Stripper Exh.	1.45	0.36	0.36	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
FILT2	Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FILT3	Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIG1	Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUG LIQ	Process Liquid	5.38	0.16	1.08	0.20	1.26	0.05	0.17	0.65	0.03	0.03	0.00	0.00	0.00	3.62
FUG VAP	Gasoline	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OWS2	Gasoline	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
<b>Total</b>	<b>tons/yr</b>	<b>209.3</b>	<b>2.34</b>	<b>4.91</b>	<b>0.77</b>	<b>2.27</b>	<b>0.08</b>	<b>3.40</b>	<b>4.47</b>	<b>0.90</b>	<b>0.07</b>	<b>0.0051</b>	<b>0.00</b>	<b>0.04</b>	<b>19.25</b>
<b>Tanks PTE</b>	<b>tons/yr</b>	<b>123.44</b>	<b>1.11</b>	<b>2.12</b>	<b>0.12</b>	<b>0.62</b>	<b>0.01</b>	<b>1.97</b>	<b>2.33</b>	<b>0.53</b>	<b>0.03</b>	<b>0.00</b>	<b>0.00</b>	<b>0.04</b>	<b>8.9</b>
<b>Rack, VCU + Fugitives</b>		<b>64.15</b>	<b>0.58</b>	<b>1.10</b>	<b>0.06</b>	<b>0.32</b>	<b>0.01</b>	<b>1.03</b>	<b>1.21</b>	<b>0.28</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>4.60</b>
<b>Non Tank Processes</b>		<b>16.17</b>	<b>0.50</b>	<b>0.61</b>	<b>0.38</b>	<b>0.07</b>	<b>0.00</b>	<b>0.24</b>	<b>0.28</b>	<b>0.06</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2.14</b>
<b>Insignificant Activities</b>		<b>5.57</b>	<b>0.16</b>	<b>1.08</b>	<b>0.20</b>	<b>1.26</b>	<b>0.05</b>	<b>0.17</b>	<b>0.65</b>	<b>0.03</b>	<b>0.03</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3.64</b>

Note: (1) All storage tank emissions are calculated using EPA's TANKS 4.09 software program.

(2) Potential HAP emissions (tons/yr) = Potential VOC emissions (tons/yr) \* Vapor Weight % HAPs

(3) FUG HAP emissions were conservatively estimated assuming all fluids in service had liquid gasoline HAP composition. Percent (%) by weight in liquid based on speciation for gasoline.

(4) Percent (%) weight in vapor conservatively based on speciation data either provided by Phillips or Gasoline Distribution MACCT, Background Information for Proposed Standards (EPA-453/R-94-002A, Table C-5).

(5) HAPs emissions from additives are based on worst case gasoline additive HAP speciation provided by Phillips Pipe Line Co.

(6) Phenol and methanol are present only in fuel additive.

**Appendix A: Emission Calculations  
Potential Non-Tank Emissions**

**Company Name:** Buckeye Terminals  
**Address:** 400 East Columbus Drive, East Chicago, Indiana 46312  
**TV Renewal No.** T089-33112-00320  
**Reviewer:** Aida DeGuzman  
**Date:** April 23, 2013

**East Columbus Terminal**

	<b>Facility ID</b>	<b>Facility Description</b>	<b>VOC (1) (ton/yr)</b>
	<b>Significant Units</b>		
Truck Loading Rack	FLRACK	Loading Rack Fugitive (2)	175.23
	RACK	Loading Rack (3)	444.93
	TNKCLN GAS	Tank Cleaning (Gasoline)	64.72
	FILT1	Filter Changeout (Gasoline)	14.95
	PROVE	Meter Proving	15.20
Wastewater Handling and Treatment System	OWS1	Oil/Water Separator #1	3.94
	SUMPS 1-5	Sumps for Tanks	26.28
	SUMP 6	Sump for Loading Dock	3.94
	STRIPPER	Air Stripper	1.47
		<b>Sub Total</b>	750.66
	<b>Insignificant Units</b>		
	FILT2	Filter Changeout (KTF)	0.43
	FILT3	Filter Changeout (Distillate)	0.02
	PIG1	Pipeline Pigging	2.68
	FUG LIQ	Equip. Leaks (Liquid)	5.38
	FUG VAP	Equip. Leaks (Vapor)	0.04
	OWS2	Oil/Water Separator #2	0.88
		<b>Sub Total</b>	9.43
		<b>Grand Total</b>	<b>760.09</b>

**Note:**

- (1) The emissions listed are based on the emission calculations submitted by the applicant which were verified and found to be accurate and correct.
- (2) Fugitive VOC emissions are emissions due to loading of materials that are not routed to vapor combustion unit (VCU) with 98.7% capturing.
- (3) Emissions from loading of liquid fuels that are routed through VCU and the intermittent venting of the Fractionator during pressure relief. Allowable emission of 35 mg/L gasoline loaded is used for calculating emissions from gasoline loading.
- (4) VOC emissions from tank cleaning are based on each of the 27 tanks (16 gasoline and 11 distillate tanks) being cleaned once per year.

**Appendix A: Emission Calculations  
Limited Non-Tank Emissions**

**Company Name:** Buckeye Terminals  
**Address:** 400 East Columbus Drive, East Chicago, Indiana 46312  
**TV Renewal No.** T089-33112-00320  
**Reviewer:** Aida DeGuzman  
**Date:** April 23, 2013

**East Columbus Terminal**

	<b>Facility ID</b>	<b>Facility Description</b>	<b>VOC (1) (ton/yr)</b>		
<b>Significant Units</b>					
Truck Loading Rack	FLRACK	Loading Rack Fugitive (2)	14.29		
	RACK	Loading Rack (3)	49.86		
	TNKCLN GAS	Tank Cleaning (Gasoline)	13.53		
	FILT1	Filter Changeout (Gasoline)	0.01		
	PROVE	Meter Proving	0.13		
	<b>Sub Total</b>			80.32	
<b>Insignificant Units</b>					
Wastewater Handling and Treatment System	OWS1	Oil/Water Separator #1	0.15		
	SUMPS 1-5	Sumps for Tanks	0.75		
	SUMP 6	Sump for Loading Dock	0.15		
	STRIPPER	Air Stripper	1.45		
	<b>Sub Total</b>			5.57	
	<b>Grand Total</b>			<b>85.89</b>	
	FILT2			Filter Changeout (KTF)	0.00
	FILT3			Filter Changeout (Distillate)	0.00
PIG1			Pipeline Pigging	0.003	
FUG LIQ			Equip. Leaks (Liquid)	5.38	
FUG VAP			Equip. Leaks (Vapor)	0.04	
OWS2			Oil/Water Separator #2	0.15	

**Note:**

- (1) The emissions listed are based on the emission calculations submitted by the applicant which were verified and found to be accurate and correct.
- (2) Fugitive VOC emissions are emissions due to loading of materials that are not routed to vapor combustion unit (VCU) with 98.7% capturing.
- (3) Loading Rack emissions include emissions from loading of liquid fuels that are routed through VCU and the intermittent venting of the Fractionator during pressure relief. Controlled VOC emissions of 35 mg/L gasoline loaded is used for calculating emissions from gasoline loading.
- (4) Calculations for loading rack are based on the limited fuel throughputs of 320 mmGal/yr for each of gasoline and distillate and 9.142 mmGal/yr of ethanol,
- (5) Gasoline tank cleaning is limited to 4 tank cleanings per year.

**Appendix A: Emission Calculations  
Insignificant Internal Combustion Engines**

**Company Name: Buckeye Terminals  
Address: 400 East Columbus Drive, East Chicago, Indiana 46312  
TV Renewal No. T089-33112-00320  
Reviewer: Aida DeGuzman  
Date: April 23, 2013**

**East Columbus Terminal**

Emissions Factors for Internal Combustion Engines

	Diesel (lb/hp-hr)	Gasoline (lb/hp-hr)
NOx	0.0310	0.0110
SO2	0.0021	0.0006
CO	0.0068	0.4390
PM	0.0022	0.0007
VOC	0.0025	0.0150

Each of the listed engines qualify as an insignificant activity with maximum annual operation of 500 hours

Emission Unit ID	Name (fuel)	Size (hp)	Annual Hours in Service	Emissions (tons/yr)				
				NOx	SO2	CO	PM	VOC
IC-1	Fire Pump (Diesel)	32	500	0.25	0.02	0.05	0.02	0.02
<b>Total</b>				0.25	0.02	0.05	0.02	0.02

Note:  
Emission factors used are from AP-42, Table 3-3.1

**Appendix A: Emission Calculations  
Process Fugitive**

**Company Name: Buckeye Terminals  
Address: 400 East Columbus Drive, East Chicago, Indiana 46312  
TV Renewal No. T089-33112-00320  
Reviewer: Aida DeGuzman  
Date: April 23, 2013**

**East Columbus Terminal**

Component Type	Service	Avg. Emission Factor (lb/hr/unit)	Component Quantity	VOC Emissions (lb/hr)	VOC Emissions (tons/yr)
Pump Seals	Light Liquid	1.17E-03	70	0.082	0.36
Pump Seals	Heavy Liquid	1.17E-03	14	0.016	0.07
Valves	Light Liquid	9.00E-05	2822	0.254	1.11
Valves	Heavy Liquid	9.00E-05	1411	0.127	0.56
Connectors	Light Liquid	2.00E-05	11290	0.226	0.99
Connectors	Heavy Liquid	2.00E-05	5645	0.113	0.49
Open-ended Lines	Light Liquid	2.90E-04	845	0.245	1.07
Other	Light Liquid	2.90E-04	330	0.096	0.42
Relief Valves	Liquid	2.90E-04	240	0.070	0.30
			Total (Liquid):	1.228	5.38
Valves	Vapor	3.00E-05	38	0.001	0.00
Connectors	Vapor	9.00E-05	77	0.007	0.03
			Total (Vapor):	0.008	0.04
<b>Total</b>				<b>1.24</b>	<b>5.42</b>

Note: Emission factors are taken from: U.S. EPA. Office of Air Quality Planning and Standards. Protocol for Equipment Leak Emission Estimates. (Research Triangle Park, NC: U.S. EPA EPA-453/R-95-017, 1995). Table 2-3

**Methodology:**

VOC Emissions (tpy) = Quantity x Emission Factor x (1 ton/ 2000 lb) x (8760 hr / 1 yr)

**Company Name:** Buckeye Terminals  
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**TV Renewal No.** T089-33112-00320  
**Reviewer:** Aida DeGuzman  
**Date:** April 23, 2013

**East Columbus Terminal**

**I. Fuel Combustion**

Heat Input Capacity: 7.1 MMBtu/hr  
Potential Throughput: 61.8 MMCF/yr

Heat Input Capacity includes:  
one - 7 mmBtu/hr reboiler for the Fractionator  
one - 0.054 mmBtu/hr pilot for the VCU

Emission Factor in lb/MMCF	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.06	0.23	0.02	3.09	0.17	2.60

**Methodology:**  
MMBtu = 1,000,000 Btu  
MMCF = 1,000,000 Cubic Feet of Gas  
Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36  
Emission Factors for CO: uncontrolled = 21, Low NOx burner = 15, Flue Gas Recirculation = ND.  
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu  
Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03  
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**II. VCU Emissions**

Maximum Hourly Throughput: 612.0 1000 gal/hr  
Limited Throughput: 640.0 MMgal/yr

Emission Factor in lb/1000 gal throughput	Pollutant		
	NOx	CO	VOC (mg/1000 liter)
	0.0307	0.1490	35
Potential Emission in tons/yr	82.29	399.40	0.78
Limited Emission in tons/yr	9.82	47.68	0.09

**Methodology:**  
Emission factors were based on equipment manufacturer's information.  
Potential Emission (ton/yr) =  
Max. Hourly Throughput (1000 gal/hr) \* Emission Factor (lb/1000 gal throughput) \* 8760 (hr/yr) / 2000 (lb/ton)  
Limited Emission (ton/yr) =  
Limited Annual Throughput (mmgal/yr) \* 1000 (1000/million) \* Emission Factor (lb/1000 gal throughput) / 2000 (lb/ton)  
Pursuant to 326 IAC 8-4-4, allowable VOC emissions are 80 mg/1000 liter loaded  
Allowable VOC emissions = 80 mg/1000 liter \* 612 (1000 gal/hr) \* 3.78 liter/gal \* (1/453,590) lb/mg \* (1/2000) (ton/lb) \* 8760 (hr/yr)  
= 1.79 ton/yr

**Greenhouse Gas Calculations**

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emission in tons/yr	423	0	0
Summed Potential Emissions in tons/yr	423		
CO2e Total in tons/yr	426		

**Methodology**  
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.  
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.  
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.  
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton  
Using 11/29/2013 Global Warming Potential:  
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

**Indianapolis Blvd. Terminal - Propylene Storage and Loading facility, permitted in SSM No. 30669-00320, issued on December 22, 2011**

Uncontrolled Potential To Emit (ton/yr)								
Process / Emission Unit	GHGs	CO	NO <sub>x</sub>	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	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 Fugitive 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
<b>Totals:</b>	<b>17,764</b>	<b>19.77</b>	<b>3.63</b>	<b>0.85</b>	<b>0.85</b>	<b>0.85</b>	<b>0.0053</b>	<b>1,269.25</b>

Limited Potential To Emit (ton/yr)								
Process / Emission Unit	GHGs	CO	NO <sub>x</sub>	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	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 Fugitive 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
<b>Totals:</b>	<b>17,764</b>	<b>19.77</b>	<b>3.63</b>	<b>0.85</b>	<b>0.85</b>	<b>0.85</b>	<b>0.0053</b>	<b>29.06</b>

PSD Significant Threshold	75,000	100	40	25	15	NA	40	*40
Emission Offset and Nonattainment NSR Major Source Threshold	NA	NA	NA	NA	NA	100	NA	*100

Propylene or methylene is not an EPA listed HAP.

Note: \* This existing stationary source was determined to be major for PSD because the emissions of VOC, an attainment pollutants at that time (Lake County was re-designated to attainment status for the 8-hour ozone in May 11, 2010), are greater than one hundred (>100) tons per year, and it is in one of the twenty-eight (28) listed sources. U.S. EPA, in the Federal Register Notice 77 FR 112 dated June 11, 2012, has designated Lake as nonattainment for ozone. On issued an emergency August 1, 2012 the air pollution control board issued an emergency rule adopting the U.S. EPA's designation. This rule became effective, August 9, 2012.

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.

Company Name: Buckeye Terminals  
 Address: 400 East Columbus Drive, East Chicago, Indiana 46312  
 TV Renewal No. T089-33112-00320  
 Reviewer: Aida DeGuzman  
 Date: April 23, 2013

Indianapolis Blvd. Terminal

**Ventdown, Pressure Bleedoff, and Line Purging**

Design molecule	Pressure		Line Purging		Units	Methodology
	Full Ventdown	Bleedoff	Railcar Bleedoff	(each half of line)		
	Propylene	Ethane	Propylene	Propylene		
	C <sub>3</sub> H <sub>6</sub>	C <sub>2</sub> H <sub>6</sub>	C <sub>3</sub> H <sub>6</sub>	C <sub>3</sub> H <sub>6</sub>		
V, Capacity	20,144	20,144	987	1,477	bbbl	
	846,048	846,048	41,448	62,046	gallons	= Capacity (bbbl) x Barrel Volume (gal/barrel)
	113,093	113,093	5,540	8,294	cubic feet	= Capacity (gal) / 7.481 gal/ft <sup>3</sup>
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 <sup>3</sup> /(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 <sub>initial</sub> (psia) x V (ft <sup>3</sup> ) / (R (psia-ft <sup>3</sup> /(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 <sub>final</sub> (psia) x V (ft <sup>3</sup> ) / (R (psia-ft <sup>3</sup> /(deg R-lb-mol)) x T (deg R)
Total Mass Removed	137,563	29,830	2,046	8,774	lb/event	= m @ P <sub>initial</sub> - m @ P <sub>final</sub>
				17,548	lb/event (both sides)	
<b>Event Length and Frequency</b>						
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 year	
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
<b>Heat Loading to VCU's</b>						
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 <sub>initial</sub> (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 pages 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).
<b>Supplemental Fuel (only for starting and ending the combustion event)</b>						
Heat Loading for Pilot Flame	1.0	1.0	1.0	1.0	MMBTu/hr	
<b>Combustion Airflows (only used to estimate particulate emissions)</b>						
Combustion Air Ratio	2	2	2	2	ft <sup>3</sup> /MMBTu	
Exhaust Flow Rate	4,540	4,422	6,290	3,815	CFM	= Heat Loading to VCU (MMBTu/hr) x Combustion Air Ratio (ft <sup>3</sup> /MMBTu) x 60 min/hr

**Unrestricted Potential To Emit**

Emissions	AP-42 lb/MMBTU	Full Ventdown (per Sphere)			Sphere Depressure (per Sphere)			Rail Loading Rack			Line Purging (both halves)			Total Emissions (tons/yr)
		(lb/event)	(lb/yr)	(tons/yr)	(lb/event)	(lb/yr)	(tons/yr)	(lb/event)	(lb/yr)	(tons/yr)	(lb/event)	(lb/yr)	(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)			Sphere Depressure (per Sphere)			Rail Loading Rack			Line Purging* (both halves)			Total Emissions (tons/yr)
		(lb/event)	(lb/yr)	(tons/yr)	(lb/event)	(lb/yr)	(tons/yr)	(lb/event)	(lb/yr)	(tons/yr)	(lb/event)	(lb/yr)	(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 <sub>x</sub>	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 <sub>2</sub>	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 <sub>2</sub>	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 <sub>4</sub>	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 <sub>2</sub> O	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			

Company Name: Buckeye Terminals  
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**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 comparison for the VCU operations  
 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 <sub>2</sub> e	CO <sub>2</sub> e Factor
CO <sub>2</sub>	6,412	1	6,412	6,412
CH <sub>4</sub>	0.1229	21	2.58	54.20
N <sub>2</sub> O	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 maintenance.

One full ventdown event per tank per year is included in the emission estimate as a worst case emission level.

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 sphere.

The ethane will be bled off through the portable combustion unit several times per year as warranted. Eight sphere depressure events per year are assumed.

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 VOC.

Rail Rack - As the railcars are filled, any vapors present from the previous load will be displaced and routed to the existing vapor combustor.

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 car.

Equipment leaks - fugitive emissions from components in propylene service, see calculations below.

**Methodology**

CO, NO<sub>x</sub>, & SO<sub>2</sub> 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/hr

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<sub>x</sub>, & SO<sub>2</sub> 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/hr

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 Year

\*Line Purging Emissions are doubled because there are 2 halves of the line to be purged.

Emissions (ton/yr) = Emissions (lb/yr) / 2000 lb/ton

Company Name: Buckeye Terminals  
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Indianapolis Blvd. Terminal

**VCU Capacity Calculations**

Inlet Pressure	12 in H <sub>2</sub> O
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 <sup>3</sup> /truck trailer

**Abbreviations:**

HC = hydrocarbon  
 LHV = lower heating value  
 VCU = vapor control unit  
 CFM = cubic feet per minute  
 MMBtu = million British thermal units  
 F = degrees Fahrenheit

Organic Vapor Loss Rate 32.0 lb organic/load

**Assumptions/Methodology:**

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	40%	Standard design basis for gasoline loading racks GACT/MACT.
Expected air concentration of HC	60%	Standard design basis for gasoline loading racks GACT/MACT.
Max waste gas flow rate	936.0 CFM	Displacement of vapors as vessel is filled.
Max HC content	42.2%	Design specification of the device.
Max LHV	1.624 BTU/scf	Design specification of the device.
Max Heating Capacity of Load	91.20 MMBTU/hr	Max Heating Capacity of Load (MMBTU/hr) = Max LHV/1000000 x Max waste gas flow rate x 60 min/hr
Density of gasoline vapors	0.160 lb/ft <sup>3</sup>	calculated on the following pages
Volumetric Flowrate of gasoline vapors	199.67 ft <sup>3</sup> /load	Vol. gas vapors (ft <sup>3</sup> /load) = Organic Vapor Loss Rate (lb Org./load) / Density of gas vapors (lb/ft <sup>3</sup> )
	3,194.75 ft <sup>3</sup> /hr	Volumetric Flowrate of gas vapors (ft <sup>3</sup> /hr) = Vol. gas vapors (ft <sup>3</sup> /load) x No. trucks per loading rack x No. of loading racks = 199.67 x 4 x 4
	53.25 CFM	Volumetric Flowrate of gas vapors (CFM) = Volumetric Flowrate of gas vapors (ft <sup>3</sup> /hr) / 60 min/hr
Expected VCU Header Flow Rate	133.11 CFM	Expected VCU Header Flow Rate (CFM) = Vol. gas vapors (CFM) / Expected HC conc. (%) = 53.25 CFM / 40%
Flow Capacity (minus VCU Header)	802.89 CFM	Flow Capacity (minus VCU Header) (CFM) = Max waste flow rate - Expected VCU Header flow rate = 936 CFM - 133.11 CFM
Flow from Railcar Bleedoff	92.34 CFM	Flowrate from Railcar Bleedoff (CFM) = Railcar Bleedoff Rate for propylene (ft <sup>3</sup> /hr) / 60 min/hr = 5540 ft <sup>3</sup> /hr / 60 min/hr
Minimum Dilution Air Requirement	126.47 CFM (at max HC content)	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	218.81 CFM	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	584.07 CFM	Remaining Flow Capacity after Railcar Venting (CFM) = Flow Capacity (minus VCU Header) (CFM) - Total Flow From Railcar Venting (CFM)
Heat Value of Gasoline Vapors	20,000 BTU/lb	Standard Heating Value of gasoline vapors used for design purposes.
Mass of Gasoline Vapors	512.00 lb/hr	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 x 4
Rack Heat Load	10.24 MMBTU/hr	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	80.96 MMBTU/hr	Heat Load left (MMBTU/hr) = Max Heating Capacity of Load (MMBTU/hr) - Rack Heat Load (MMBTU/hr)
Heat Load From Railcar Bleedoff	52.42 MMBTU/hr	from propylene
Heat Load Remaining	28.55 MMBTU/hr	Heat Load Remaining (MMBTU/hr) = Heat Load left (MMBTU/hr) - Heat Load From Railcar Bleedoff from propylene (MMBTU/hr)

Company Name: Buckeye Terminals  
 Address: 400 East Columbus Drive, East Chicago, Indiana 46312  
 TV Renewal No. T089-33112-00320  
 Reviewer: Aida DeGuzman  
 Date: April 23, 2013

Indianapolis Blvd. Terminal

### Emissions from Equipment Leaks

Equipment leak emissions assuming no monitoring Program. This case represents the **uncontrolled potential emissions**.

<b>Process Piping - No monitoring</b>		20% budget factor			
Equipment Type	Emissions Factor' (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
<b>TOTAL VOCs</b>					<b>62.14</b>

Equipment leak emissions assuming a full leak detection and repair program. This case represents the **controlled potential emissions**.

<b>Process Piping - Correlation Equations</b>		10000 ppm screening value		2% Leak Fraction	
Equipment Type	Emissions Factor' Default Zero (kg/component-hr)	Emissions Factor' 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
<b>TOTAL VOCs</b>					<b>2.80</b>

<sup>1</sup> 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

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### Propylene Disconnect Calculation

Number of Cars Per Day 24  
 Loading Line Diameter 2 inches  
 Sphere Bleedoff Rate 0.123 lb/ft<sup>3</sup> / 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 <sup>3</sup>
Amount of Propylene in Headers at Disconnect	0.0108	0.0269	<b>0.0377</b>	lb/disconnect
	0.2583	0.6458	<b>0.9041</b>	lb/day
	0.1292	0.3229	<b>0.4521</b>	lb/session
	94.28	235.71	<b>330.00</b>	lb/yr
	0.0471	0.1179	<b>0.1650</b>	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<sup>3</sup>) = Arm Length (ft) x PI x (Line Radius (ft))<sup>2</sup>

Amount of propylene in Headers at Disconnect (lb/disconnect) = Sphere Bleedoff Rate (lb/ft<sup>3</sup> / disconnect) x Volume in Headers at Disconnect (ft<sup>3</sup>)

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/day) / 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

Company Name: Buckeye Terminals  
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### 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

#### Methodology:

Max propylene in car at 50 psig	2,647 lb/car	Assumed as all C3; calculated on a previous page [ $m \text{ (lb)} = n \times MW = MW \times P \times V / (R \times T)$ ]
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 Rail Car Venting	7,000,000 lb/yr 30% allocation	
Size of Rail Car	2,100,000 lb/yr 987 bbl/car 5,540 ft <sup>3</sup>	= Flaring Rate (lb/yr) x Rail Car Venting Allocation (%) = Railcar Capacity (ft <sup>3</sup> ) x 7.481 gal/ft <sup>3</sup> / barrel volume (gal/barrel) = $L (62') \times \{ \{ H (10') + W (8') \} / 12 \} / 2 \}^2 \times \pi$
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

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 Date: April 23, 2013

**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<sub>2</sub>O x bulk density of propylene

Maximum Sphere Loading Rate 211,897 lb/hr  
 1 car/hr

Max C2 concentration 0.7%  
 Vapor Density @ 250 psig 0.716 lb/ft<sup>3</sup>  
 Max C2 Throughput 35,599 lb/day  
 49,709 ft<sup>3</sup>/day  
 8,854 bbl/day

Design specification for maximum ethane concentration in propylene.  
 = 1 / m @ initial pressure  
 = Propylene Throughput (lb/day) x Max C2 Concentration of propylene (%)  
 = Max C2 Throughput (lb/day) / Vapor Density @ 250 psig (lb/ft<sup>3</sup>)  
 = Max C2 Throughput (ft<sup>3</sup>/day) x 7.481 gal/ft<sup>3</sup> / 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  
 33.2 MMBtu/hr

= Max C2 Throughput (lb/day) x HHV of ethane (Btu/lb) / 1000000 Btu/MMBtu

**Expected vessel void space**

Vessel Total Capacity 20,143 bbl  
 Vessel Working Capacity 17,121 bbl  
 Minimum void space per vessel 3,021 bbl  
 16,963 ft<sup>3</sup>  
 Total available void space 33,926 ft<sup>3</sup>  
 Number of day's C2 this represents 0.68 days

60 ft diameter spheres  
 15% void space  
 = Total Volume (bbl) - Working Volume (bbl)  
 = Minimum Void Space (bbl) x Barrel Volume (gal/barrel) / 7.481 gal/ft<sup>3</sup>  
 = Minimum Void Space x 2 Spheres  
 = Total Available Void Space (ft<sup>3</sup>) / Max C2 Throughput (ft<sup>3</sup>/day)

Sphere Ventdown 70% allocation  
 4,900,000 lb/yr  
 Days of venting at this rate @ max 138 days  
 Fraction of max C2 this represents 37.7%

= Flaring Rate (lb/yr) x Sphere Ventdown Allocation (%)  
 = Sphere Ventdown Rate (lb/yr) / Max C2 Throughput (lb/day)  
 = No. of days venting / 365 days/yr

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<b>Sphere Bleedoff</b>	<b>Units</b>	<b>Ethane</b>	<b>Gasoline</b>	<b>Air</b>	<b>Propylene</b>	
Design molecule		C <sub>2</sub> H <sub>6</sub>	C <sub>3</sub> H <sub>26</sub>	*	C <sub>3</sub> H <sub>6</sub>	
			C <sub>4</sub> H <sub>14</sub>		inlet side	outlet side
Capacity:	bbl	0.178	Cubic Foot Capacity (bbl) = 7.481 gal/ft <sup>3</sup> x 1 ft <sup>3</sup> / Volume (gal/barrel)			
<i>per cubic foot calculation</i>	gal/ft <sup>3</sup>	7.48				
	ft <sup>3</sup>	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 <sup>3</sup> / (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

<b>m Rack Header</b>	<b>0.11</b>	<b>lb @ initial pressure</b>	<b>Ethane</b>	<b>lb/ft<sup>3</sup></b>	<b>ft<sup>3</sup>/lb</b>
			@ 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%)

<b>Components in Dry Air*</b>	<b>Volume Ratio compared to Dry Air</b>	<b>Molecular Mass - M (kg/kmol)</b>	<b>Molecular Mass in Air</b>
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
<b>Total Molecular Mass of Air</b>			<b>28.97</b>

Company Name: Buckeye Terminals  
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### 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

#### Sphere vessels:

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 <sup>3</sup>	
conversion factor	0.1781 bbl/ft <sup>3</sup>	
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<sup>3</sup>) =  $\frac{4}{3} \times \pi \times (\text{sphere radius (ft)})^3$

Sphere Total Volume (bbl) = Sphere Volume (ft<sup>3</sup>) x 0.1781 bbl/ft<sup>3</sup>

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 spherical tank, a horizontal tank design was used.



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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**Michael R. Pence**  
*Governor*

**Thomas W. Easterly**  
*Commissioner*

## SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Mac Meade  
Buckeye Terminals, LLC  
3823 Indianapolis Blvd.  
East Chicago, IN 46312

DATE: February 20, 2014

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

SUBJECT: Final Decision  
Renewal of a Part 70 Operating Permit  
089-33112-00320

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:  
Nicholas Spitz, Manager  
Nicole Brower, Envirospec Engineering, PLLC  
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](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 6/13/2013



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**Michael R. Pence**  
*Governor*

**Thomas W. Easterly**  
*Commissioner*

February 20, 2014

TO: East Chicago Public Library – Pastrick Branch

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: 089-33112-00320**

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 6/13/2013



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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**Michael R. Pence**  
Governor

**Thomas W. Easterly**  
Commissioner

TO: Interested Parties / Applicant

DATE: February 20, 2014

RE: Buckeye Terminals, LLC / 089-33112-00320

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

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:  
<http://www.in.gov/ai/appfiles/idem-caats/>

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201  
100 North Senate Avenue, MC 50-07  
Indianapolis, IN 46204  
Phone: 1-800-451-6027 (ext. 4-0965)  
Fax (317) 232-8659

**Please Note:** *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at [PPEAR@IDEM.IN.GOV](mailto:PPEAR@IDEM.IN.GOV).*

Enclosures  
CD Memo.dot 6/13/2013

# Mail Code 61-53

IDEM Staff	VHAUN 2/20/2014 Buckeye Terminals, LLC 089-33112-00320 FINAL		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING	
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Mac Meade Buckeye Terminals, LLC 3823 Indianapolis Blvd East Chicago IN 46312 (Source CAATS)		Confirmed Delivery								
2		Nicholas Spitz Mgr Buckeye Terminals, LLC 3823 Indianapolis Blvd East Chicago IN 46312 (RO CAATS)										
3		East Chicago City Council 4525 Indianapolis Blvd East Chicago IN 46312 (Local Official)										
4		East Chicago Public Library 1008 W. Chicago Ave. East Chicago IN 46312 (Library)										
5		Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795 (Health Department)										
6		WJOB / WZVN Radio 6405 Olcott Ave Hammond IN 46320 (Affected Party)										
7		Shawn Sobocinski 3229 E. Atlanta Court Portage IN 46368 (Affected Party)										
8		Mark Coleman 107 Diana Road Portage IN 46368 (Affected Party)										
9		Mr. Chris Hernandez Pipefitters Association, Local Union 597 8762 Louisiana St., Suite G Merrillville IN 46410 (Affected Party)										
10		Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 (Affected Party)										
11		Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 (Local Official)										
12		Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 (Affected Party)										
13		Barbara G. Perez 506 Lilac Street East Chicago IN 46312 (Affected Party)										
14		Mr. Robert Garcia 3733 Parrish Avenue East Chicago IN 46312 (Affected Party)										
15		Ms. Karen Kroczek 8212 Madison Ave Munster IN 46321-1627 (Affected Party)										

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
<b>14</b>			

# Mail Code 61-53

IDEM Staff	VHAUN 2/20/2014 Buckeye Terminals, LLC 089-33112-00320 FINAL		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 (Affected Party)										
2		Gary City Council 401 Broadway # 209 Gary IN 46402 (Local Official)										
3		Mr. Larry Davis 268 South, 600 West Hebron IN 46341 (Affected Party)										
4		Nicole Brower Envirospec Engineering, PLLC 16 Computer Drive West Albany NY 12302 (Consultant)										
5		Ryan Dave 939 Cornwallis Munster IN 46321 (Affected Party)										
6		Matt Mikus 1710 Vale Park Rd Apt 302 Valparaiso IN 46383 (Affected Party)										
7												
8												
9												
10												
11												
12												
13												
14												
15												

Total number of pieces Listed by Sender  <b>6</b>	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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