INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant

DATE: September 5, 2013

RE: Aventine Renewable Energy / 129-31693-00051

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

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 6/13/13

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Commissioner

Mr. Steve Antonacci
Aventine Renewable Energy - Mt. Vernon LLC
1300 South Second Street
Pekin, IL 61544

September 5, 2013

Re: 129-31693-00051
Significant Source Modification to
Part 70 Source No.: T 129-31281-00051

Dear Mr. Antonacci:

Aventine Renewable Energy - Mt. Vernon LLC was issued a Part 70 Operating Permit on September 20, 2007, for a stationary ethanol production plant with a maximum undenatured ethanol production rate of 116.325 million gallons per year. A letter requesting changes to this permit was received on December 19, 2011. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

(a) Grain receiving and handling operations:

(1) One (1) grain transfer operation, identified as EP-14, installed in 2008, with a maximum capacity of 143 tons of grain per hour, controlled by one (1) baghouse, C-1B, exhausting to stack S-1B.

(b) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, installed in 2008, consisting of the following emission units:

(1) Two (2) Cooler Baghouses controlling particulate emissions from the two (2) DDGS Coolers, installed in 2008. The Cooler Baghouses may exhaust to the DDGS Dryers as make-up air.

(c) One (1) diesel-fired emergency fire pump, installed in 2008, with a capacity of 420 horsepower (HP). This pump is identified as process P-12.

(d) One (1) cooling tower with three (3) cells identified as F-1, installed in 2008, with a total circulation rate of 2,256,000 gallons of water per hour.

(e) One (1) gasoline dispensing operation for plant vehicles, identified as T009, installed in 2008, with a 265 gallon capacity storage tank and an estimated annual throughput of 1,200 gallons per year.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13 17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

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

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

This decision is subject to the Indiana Administrative Orders and Procedures Act – IC 4-21.5-3-5. If you have any questions on this matter, please contact Joshua Levering, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Joshua Levering or extension (4-6543), or dial (317) 234-6543.

Sincerely,

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

Attachments:
Updated Permit
Technical Support Document
PTE Calculations

JLA/jjl

cc: File – Posey County
Posey County Health Department
U.S. EPA, Region V
Southwest Regional Office
Compliance and Enforcement Branch

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

Significant Modification to a Part 70 Source

OFFICE OF AIR QUALITY

Aventine Renewable Energy - Mt. Vernon LLC
7201 Port Road
Mount Vernon, Indiana 47620

(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.

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

Significant Source Modification No.: 129-31693-00051	
Issued by: Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: September 5, 2013

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Attachment A: Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984 [40 CFR 60, Subpart Kb] [326 IAC 12]
Attachment B: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60, Subpart Dc] [326 IAC 12]

Attachment C: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 [40 CFR 60, Subpart VVa] [326 IAC 12]

Attachment D: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR 60, Subpart IIII] [326 IAC 12]

Attachment E: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR 63, Subpart ZZZZ] [326 IAC 20-82]

Attachment F: National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities [40 CFR 63, Subpart CCCCCC]

Attachment G: National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing [40 CFR 63, Subpart FFFF]

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)]

The Permittee owns and operates a stationary ethanol production plant.

Source Address:	7201 Port Road, Mount Vernon, Indiana 47620
General Source Phone Number:	(812) 838-9840
SIC Code:	2869
County Location:	Posey
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD Rules Greenhouse Gas (GHG) potential to emit (PTE) is equal to or more than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year Area Source, Section 112 of the Clean Air Act Not 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)]

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

(a) Grain receiving and handling operations, identified as process P-1, installed in 2008, with a maximum capacity of 350 tons of grain per hour and an average annual throughput of 143 tons of grain per hour. The grain when received from various sources is already dried and cleaned. These operations include the following:

(1) One (1) grain truck dump pit, identified as EP-01a, installed in 2008, with one (1) conveyor and one (1) elevator system. The particulate emissions from the dump pit are controlled by one (1) baghouse, C-1A, exhausting to stack S-1A.

(2) One (1) rail dump pit, identified as EP-01b, installed in 2008, with conveyor system and elevator system. The particulate emissions from the dump pit are controlled by baghouse, C-1A, exhausting to stack S-1A.

(3) Two (2) corn storage silos, identified as EP-02a and EP-02b, installed in 2008, with a total storage capacity of 600,000 bushels with two (2) conveyor systems.

(4) One (1) grain scalper, identified as EP-03a installed in 2008, and one (1) surge bin, identified as EP-03b, installed in 2008, both units controlled by one (1) baghouse, C-1B, exhausting to stack S-1B.

(b) Grain milling operation, identified as process P-2, installed in 2008, which include the following:

(1) One (1) hammermill feed system, installed in 2008, with a maximum capacity of 6,000 bushels of grain per hour.

(2) Four (4) hammermills, identified as EP-05 through EP-08, installed in 2008, each has a capacity of 1,700 bushels per hour (7,000 bushels per hour total). The particulate emissions from these hammermills are controlled by four (4) baghouses, C-2A through C-2D, exhausting to stacks S-2A through S-2D.

(c) Milled grain cooking operation, identified as process P-4, installed in 2008, which includes the following:

(1) Milled grain cooking operation, consisting of the following major components:

(A) One (1) process condensate tank, installed in 2008,

(B) One (1) slurry mix tank, installed in 2008,

(C) Two (2) liquification tanks, installed in 2008, and

(D) One (1) yeast tank, installed in 2008.

The emissions from these tanks will be controlled by two (2) Thermal Oxidizers, C-6A and C-6B, exhausting to stacks S-6A and S-6B. Each thermal oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) One (1) ammonia tank, installed in 2008.

(d) Fermentation operation, identified as process P-5, installed in 2008, with a maximum throughput of 87,000 gallons of beer per hour or 13,302 gallons of ethanol per hour, controlled by one (1) CO_2 scrubber, C-5A, exhausting to stack S-5A. The maximum undenatured ethanol production rate is 13,302 gallons per hour or 116.5 million gallons per year. The exhaust gas stream from the scrubber may be sent to an offsite company for further processing of the CO_2 gas stream or vented directly to the atmosphere. The source has the option to use a supplemental additive, such as sodium bisulfite, in the CO_2 scrubber. This operation includes the following:

(1) Seven (7) fermenters tanks, installed in 2008.

(2) One (1) beer well tank, installed in 2008, controlled by the CO_2 scrubber, C-5A, exhausting to stack S-5A.

(e) Distillation and dehydration operations, identified as process P-6, installed in 2008, with a throughput of 13,302 gallons of undenatured ethanol per hour (116.5 million gallons of undenatured ethanol per year) consisting of the following emission units:

(1) Two (2) beer columns, #1 and #2, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B. Each Thermal Oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) One (1) acid reduction column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(3) One (1) rectifier column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(4) Two (2) molecular sieves, installed in 2008.

(5) One (1) 200 proof condenser, installed in 2008.

(6) One (1) whole stillage tank, installed in 2008.

(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, installed in 2008, , with a maximum throughput of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), consisting of the following emission units:

(1) Four (4) centrifuges, installed in 2008.

(2) One (1) thin stillage tank, installed in 2008.

(3) Two (2) evaporator systems, installed in 2008.

(4) One (1) syrup tank, installed in 2008.

(5) One (1) wet cake pad, installed in 2008.

(6) DDGS drying, #1 and #2, installed in 2008, with a total drying rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), with two (2) DDGS dryers, each with a heat input capacity of 90 MMBtu/hr. Dryer #1 is controlled by Thermal Oxidizer #1, C-6A, exhausting to stack S-6A, and Dryer #2 is controlled by Thermal Oxidizer #2, C-6B, exhausting to stack S-6B.

(7) Two (2) DDGS coolers, identified as EP-22 (#1) and EP-23 (#2), installed in 2008, with a maximum throughput of 391,148 tons (dry basis) of DDGS per year. Cooler #1 is controlled by Cooler Baghouse #1, C-7A, installed in 2008, and may exhaust to stack S-7A when not being used as make-up air for DDGS Dryer #1. Cooler #2 is controlled by Cooler Baghouse #2, C-7B, installed in 2008, and may exhaust to stack S-7B when not being used as make-up air for DDGS Dryer #2.

(g) DDGS handling, storage and loadout operations, identified as process P-8, installed in 2008, with a rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour) consisting of the following emission units:

(1) One (1) DDGS storage building, installed in 2008, which includes supporting equipment; one (1) enclosed DDGS conveyor, identified as EP-09, with a maximum throughput capacity of 44.65 tons per hour. Particulate emissions between the DDGS storage building and DDGS loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(2) One (1) truck loadout, identified as EP-10, installed in 2008, with a maximum rate of 55 tons (dry basis) per hour. Particulate emissions from truck loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(3) One (1) rail loadout, identified as EP-11, installed in 2008, with a maximum rate of 180 tons (dry basis) per hour. Particulate emissions from rail loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(h) Denatured ethanol loadout, identified as P-9, installed in 2008, with a total maximum throughput of 36,000 gallons per hour or an average throughput of 13,943 gallons per hour (122.1 million gallons per year) consisting of the following emission units:

(1) One (1) truck loadout, identified as EP-24, installed in 2008, and

(2) One (1) rail loadout, identified as EP-25, installed in 2008,

These two (2) loading racks are controlled by enclosed Flare system C-9, installed in 2008. The flare is fueled by natural gas and has a pilot gas flare heat input capacity of 0.092 MMBtu/hr.

(i) Product Storage, identified as process P-10, installed in 2008, consisting of the following emission units:

(1) Three (3) 200 proof above ground storage tanks, identified as Tk001 through Tk003, installed in 2008, each with a capacity of 172,000 gallons.

(2) One (1) denaturant storage tank, identified as Tk004, installed in 2008, with a capacity of 105,000 gallons, and a maximum design capacity less than 20,000 gallons per day throughput.

(3) Two (2) denatured ethanol storage tanks, identified as Tk005 and Tk006, installed in 2008, each storing a denatured ethanol with a Reid Vapor Pressure less than 27.6 kilopascals, each with a capacity of 1,406,000 gallons.

(4) One (1) corrosion inhibitor storage tank, identified as Tk007, installed in 2008, with a capacity of 6,392 gallons.

(j) Natural gas combustion sources, identified as P-11, consisting of four (4) natural gas-fired package boilers, identified as EP-26 through EP-29, installed in 2008, each with a heat input capacity of 92.4 MMBtu/hr.

(k) Two (2) Thermal Oxidizers, C-6A and C-6B, installed in 2008, with a heat input capacity of 18 million British thermal units per hour (MMBtu/hr), each, controlling emissions from the following:

(A) One (1) process condensate tank.

(B) One (1) slurry mix tank.

(C) Two (2) liquification tanks.

(D) One (1) yeast tank.

(E) Two (2) beer columns, identified as EP-16.

(F) One (1) side stripper (acid reduction column), identified as EP-17.

(G) One (1) rectifier column, identified as EP-18.

(H) One (1) whole stillage tank.

(I) One (1) thin stillage tank.

(J) One (1) syrup tank.

(K) Two (2) DDGS dryers, identified as EP-20 and EP-21.

Thermal oxidizer C-6A exhausts to stack S-6A and thermal oxidizer C-6B exhausts to stack S-6B.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)]

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

(a) One (1) diesel-fired emergency fire pump, identified as process P-12, installed in 2008, with a capacity of 420 horsepower (HP). [40 CFR 60, Subpart IIII] [40 CFR 63, Subpart ZZZZ]

(b) One (1) cooling tower with three (3) cells, identified as F-1, installed in 2008, with a total circulation rate of 2,256,000 gallons of water per hour.

(c) Fuel dispensing activities, as follows:

(1) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

(A) One (1) gasoline dispensing operation for plant vehicles, installed in 2008, with a maximum throughput of 75 gallons per month. [40 CFR 63, Subpart BBBBBB] [40 CFR 63, Subpart CCCCCC]

(B) Vapor collection-equipped gasoline cargo tanks, installed in 2008. [40 CFR 63, Subpart BBBBBB]

(d) Vehicular traffic on paved roads. [326 IAC 6-4]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, T129-31281-00051, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

(a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and

(2) 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)]

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

Indiana Department of Environmental Management
Compliance 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]

(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 Southwest 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
Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304.

(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 T129-31281-00051 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(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(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]

(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)]

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

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

B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) 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(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(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 forty percent (40%) 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 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

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 61-53 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]

(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]

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]

(a) 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)]

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

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

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

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

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

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

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

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

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

C.14 Response to Excursions or Exceedances [40 CFR 64] [326 IAC 3-8] [326 IAC 2-7-5] [326 IAC 2-7-6]

(I) 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]

In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 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]

(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. 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.

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

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

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [40 CFR 64] [326 IAC 3-8]

(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 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.

(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.

Stratospheric Ozone Protection

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

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

SECTION D.1 EMISSION UNIT OPERATION CONDITIONS

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

(a) Grain receiving and handling operations, identified as process P-1, installed in 2008, with a maximum capacity of 350 tons of grain per hour and an average annual throughput of 143 tons of grain per hour. The grain when received from various sources is already dried and cleaned. These operations include the following:

(1) One (1) grain truck dump pit, identified as EP-01a, installed in 2008, with one (1) conveyor and one (1) elevator system. The particulate emissions from the dump pit are controlled by one (1) baghouse, C-1A, exhausting to stack S-1A.

(2) One (1) rail dump pit, identified as EP-01b, installed in 2008, with conveyor system and elevator system. The particulate emissions from the dump pit are controlled by baghouse, C-1A, exhausting to stack S-1A.

(3) Two (2) corn storage silos, identified as EP-02a and EP-02b, installed in 2008, with a total storage capacity of 600,000 bushels with two (2) conveyor systems.

(4) One (1) grain scalper, identified as EP-03a installed in 2008, and one (1) surge bin, identified as EP-03b, installed in 2008, both units controlled by one (1) baghouse, C-1B, exhausting to stack S-1B.

(b) Grain milling operation, identified as process P-2, installed in 2008, which include the following:

(1) One (1) hammermill feed system, installed in 2008, with a maximum capacity of 6,000 bushels of grain per hour.

(2) Four (4) hammermills, identified as EP-05 through EP-08, installed in 2008, each has a capacity of 1,700 bushels per hour (7,000 bushels per hour total). The particulate emissions from these hammermills are controlled by four (4) baghouses, C-2A through C-2D, exhausting to stacks S-2A through S-2D.

(g) DDGS handling, storage and loadout operations, identified as process P-8, installed in 2008, with a rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour) consisting of the following emission units:

(1) One (1) DDGS storage building, installed in 2008, which includes supporting equipment; one (1) enclosed DDGS conveyor, identified as EP-09, with a maximum throughput capacity of 44.65 tons per hour. Particulate emissions between the DDGS storage building and DDGS loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(2) One (1) truck loadout, identified as EP-10, installed in 2008, with a maximum rate of 50 tons (dry basis) per hour. Particulate emissions from truck loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(3) One (1) rail loadout, identified as EP-11, installed in 2008, with a maximum rate of 180 tons (dry basis) per hour. Particulate emissions from rail loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(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 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

The PM, PM_{10}, and $PM_{2.5}$ emissions from the following emission units at Aventine's ethanol production plant shall not exceed the emission limits in the table below:

Process ID	Process Description	Control ID	PM Emissions Limits (lbs/hr)	PM_{10} Emissions Limits (lbs/hr)	$PM_{2.5}$ Emissions Limits (lbs/hr)
EP-01a	Truck dump pit	Baghouse C-1A	0.46	0.46	0.46
EP-01b	Rail dump pit				
EP-05	Hammermill	Baghouse C-2A	0.30	0.30	0.30
EP-06	Hammermill	Baghouse C-2B	0.30	0.30	0.30
EP-07	Hammermill	Baghouse C-2C	0.30	0.30	0.30
EP-08	Hammermill	Baghouse C-2D	0.28	0.28	0.28
EP-03a	Grain Scalper	Baghouse C-1B	0.44	0.44	0.44
EP-09	DDGS conveyor	Baghouse C-8A	0.08	0.08	0.08
	DDGS storage				

Compliance with the above PM, PM_{10}, and $PM_{2.5}$ emission limits and the PM, PM_{10}, and $PM_{2.5}$ emission limits in Conditions D.2.4, D.3.2, D.4.4, and D.6.1 in conjunction with the unrestricted PTE from this source, shall limit the PM, PM_{10}, and $PM_{2.5}$ emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for PM, PM_{10}, or $PM_{2.5}$.

D.1.2 Particulate Emission Limitations [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the following processes shall not exceed the pound per hour limits as follows:

Process ID	Process Description	Process Weight Rate (tons/hr)	Particulate Emissions Limits (lbs/hr)
EP-01a and EP-01b	Truck dump pit	350	64.76
	Rail dump pit		
EP-02a	Corn storage bin	350	64.76
EP-02b	Corn storage bin	350	64.76
EP-03b	Surge bin	350	64.76
EP-05	Hammermill	47.6	44.12
EP-06	Hammermill	47.6	44.12
EP-07	Hammermill	47.6	44.12
EP-08	Hammermill	47.6	44.12
EP-03a	Grain Scalper	196	58.29
EP-09	DDGS conveyor	44.65	43.55
	DDGS storage		
EP-10	DDGS truck loadout	50	44.58
EP-11	DDGS rail loadout	80	49.06

The pounds per hour limitations for the emissions units in the above table shall be calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), when the process weight rate exceeds two hundred (200) tons per hour, the allowable emissions may exceed that shown in the table in 326 IAC 6-3-2(e) provided the concentration of particulate in the discharge gases to the atmosphere is less than one tenth (0.10) pound per one thousand (1,000) pounds of gases.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.4 Particulate Control

(a) In order to comply with Conditions D.1.1 through D.1.2, each of the following emission units shall be controlled by the associated baghouses at all times the following units are operating:

Process ID	Process Description	Control ID
EP-01a and EP-01b	Truck dump pit	restricting vehicles unloading grain to trucks with choke unloading applications
	Rail dump pit	restricting vehicles unloading grain to hopper bottom rail cars
	Truck dump pit conveyance & elevators	Baghouse C-1A
	Rail dump pit conveyance & elevator	
EP-05	Hammermill	Baghouse C-2A
EP-06	Hammermill	Baghouse C-2B
EP-07	Hammermill	Baghouse C-2C
EP-08	Hammermill	Baghouse C-2D
EP-03a	Grain Scalper	Baghouse C-1B
EP-09	DDGS conveyor	Baghouse C-8
	DDGS storage	
EP-10	DDGS truck loadout	shoot extension with a funnel device
EP-11	DDGS rail loadout	shoot extension with a funnel device

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.5 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform the following testing utilizing methods as approved by the Commissioner:

(a) PM, PM_{10} and $PM_{2.5}$ testing for Baghouse C-1A, controlling the truck/rail dump pit (EP-01a and EP-01b).

(b) PM, PM_{10} and $PM_{2.5}$ testing for one (1) of Baghouses C-2A through C-2D, controlling four (4) hammermills (EP-05 through EP-08). Repeat testing for the hammermills shall be conducted on a different baghouse than the one tested for the previous testing period.

(c) PM, PM_{10} and $PM_{2.5}$ testing for Baghouse C-1B, controlling grain scalper (EP-03a).

(d) PM, PM_{10} and $PM_{2.5}$ testing for Baghouse C-8, controlling DDGS conveyor and DDGS storage (EP-09).

PM_{10} and $PM_{2.5}$ includes filterable and condensable PM.

Testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

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

D.1.6 Compliance Assurance Monitoring (CAM) Visible Emissions Notations [40 CFR 64}

(a) Visible emission notations of the stacks exhausts from:

(1) Baghouse C-1A, controlling the truck/rail dump pit (EP-01a and EP-01b),

(2) Baghouses C-2A through C-2D, controlling four (4) hammermills (EP-05 through EP-08),

(3) Baghouse C-1B, controlling grain scalper (EP-03a),

(4) Baghouse C-8A, controlling DDGS conveyor and DDGS storage (EP-09),

shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.7 Compliance Assurance Monitoring (CAM) Baghouses Parametric Monitoring [40 CFR 64]

(a) The Permittee shall record the pressure drop across Baghouse C-1C, controlling the truck/rail dump pit (EP-01a and EP-01b) at least once per day when the emission unit is in operation. When, for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

(b) The Permittee shall record the pressure drop across Baghouses C-2A through C-2D, controlling four (4) hammermills (EP-05 through EP-08) at least once per day when the respective emission units are in operation. When, for any one reading, the pressure drop across a baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

(c) The Permittee shall record the pressure drop across Baghouse C-1B, controlling grain scalper (EP-03a) at least once per day when the respective emission units are in operation. When, for any one reading, the pressure drop across a baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

(d) The Permittee shall record the pressure drop across Baghouse C-8A, controlling DDGS storage (EP-09) at least once per day when the respective emission units are in operation. When, for any one reading, the pressure drop across a baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.1.8 Broken or Failed Bag Detection

For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions), or

For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, or leaks, or dust traces.

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

D.1.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.6, the Permittee shall maintain a daily record of visible emission notations of the stacks exhausts from:

(1) Baghouse C-1A, controlling the truck/rail dump pit (EP-01a and EP-01b),

(2) Baghouses C-2A through C-2D, controlling four (4) hammermills (EP-05 through EP-08),

(3) Baghouse C-1B, controlling grain scalper (EP-03a),

(4) Baghouse C-8A, controlling DDGS conveyor and DDGS storage (EP-09),

The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.1.7, the Permittee shall maintain a daily record of the pressure drop across:

(1) Baghouse C-1A, controlling the truck/rail dump pit (EP-01a and EP-01b),

(2) Baghouses C-2A through C-2D, controlling four (4) hammermills (EP-05 through EP-08),

(3) Baghouse C-1B, controlling grain scalper (EP-03a),

(4) Baghouse C-8A, controlling DDGS conveyor and DDGS storage (EP-09).

The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping requirements of this permit.

SECTION D.2 EMISSION UNIT OPERATION CONDITIONS

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

(c) Milled grain cooking operation, identified as process P-4, installed in 2008, which includes the following:

(1) Milled grain cooking operation, consisting of the following major components:

(A) One (1) process condensate tank, installed in 2008,

(B) One (1) slurry mix tank, installed in 2008,

(C) Two (2) liquification tanks, installed in 2008, and

(D) One (1) yeast tank, installed in 2008.

The emissions from these tanks will be controlled by two (2) Thermal Oxidizers, C-6A and C-6B, exhausting to stacks S-6A and S-6B. Each thermal oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) One (1) ammonia tank, installed in 2008.

(e) Distillation and dehydration operations, identified as process P-6, installed in 2008, with a throughput of 13,302 gallons of undenatured ethanol per hour (116.5 million gallons of undenatured ethanol per year) consisting of the following emission units:

(1) Two (2) beer columns, #1 and #2, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B. Each Thermal Oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) One (1) acid reduction column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(3) One (1) rectifier column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(4) Two (2) molecular sieves, installed in 2008.

(5) One (1) 200 proof condenser, installed in 2008.

(6) One (1) whole stillage tank, installed in 2008.

(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, installed in 2008, , with a maximum throughput of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), consisting of the following emission units:

(1) Four (4) centrifuges, installed in 2008.

(2) One (1) thin stillage tank, installed in 2008.

(3) Two (2) evaporator systems, installed in 2008.

(4) One (1) syrup tank, installed in 2008.

(5) One (1) wet cake pad, installed in 2008.

(6) DDGS drying, #1 and #2, installed in 2008, with a total drying rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), with two (2) DDGS dryers, each with a heat input capacity of 90 MMBtu/hr. Dryer #1 is controlled by Thermal Oxidizer #1, C-6A, exhausting to stack S-6A, and Dryer #2 is controlled by Thermal Oxidizer #2, C-6B, exhausting to stack S-6B.

(7) Two (2) DDGS coolers, identified as EP-22 (#1) and EP-23 (#2), installed in 2008, with a maximum throughput of 391,148 tons (dry basis) of DDGS per year. Cooler #1 is controlled by Cooler Baghouse #1, C-7A, installed in 2008, and may exhaust to stack S-7A when not being used as make-up air for DDGS Dryer #1. Cooler #2 is controlled by Cooler Baghouse #2, C-7B, installed in 2008, and may exhaust to stack S-7B when not being used as make-up air for DDGS Dryer #2.

(k) Two (2) Thermal Oxidizers, C-6A and C-6B, installed in 2008, with a heat input capacity of 18 million British thermal units per hour (MMBtu/hr), each, controlling emissions from the following:

(A) One (1) process condensate tank.

(B) One (1) slurry mix tank.

(C) Two (2) liquification tanks.

(D) One (1) yeast tank.

(E) Two (2) beer columns, identified as EP-16.

(F) One (1) side stripper (acid reduction column), identified as EP-17.

(G) One (1) rectifier column, identified as EP-18.

(H) One (1) whole stillage tank.

(I) One (1) thin stillage tank.

(J) One (1) syrup tank.

(K) Two (2) DDGS dryers, identified as EP-20 and EP-21.

Thermal oxidizer C-6A exhausts to stack S-6A and thermal oxidizer C-6B exhausts to stack S-6B.

(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 Prevention of Significant Deterioration (PSD) Minor VOC Limits [326 IAC 2-2]

The VOC emissions from the following ethanol emissions units shall not exceed the following emission limits:

Operating Scenario One: DDGS Cooler Baghouse #1 (C-7A) exhausting into DDGS dryer #1 and DDGS Cooler Baghouse #2 (C-7B) exhausting into the DDGS dryer #2.

(a1) The VOC emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 8.77 pounds per hour.

(b1) The VOC emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 8.77 pounds per hour.

(c1) The VOC emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall exhaust to the DDGS dryer #1.

(d1) The VOC emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall exhaust to the DDGS dryer #2.

Operating Scenario Two: DDGS Cooler Baghouse #1 (C-7A) and DDGS Cooler Baghouse #2 (C-7B) exhausting to atmosphere.

(a2) The VOC emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 6.4 pounds per hour.

(b2) The VOC emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 6.4 pounds per hour.

(c2) The VOC emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall not exceed 1.85 pounds per hour.

(d2) The VOC emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall not exceed 1.55 pounds per hour.

Compliance with the above VOC emission limits and the VOC emission limits in Conditions D.3.1 and D.4.1 in conjunction with the unrestricted PTE from this source, shall limit the VOC emissions from the entire source to less than two hundred fifty (250) tons per year. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for VOC.

D.2.2 Prevention of Significant Deterioration (PSD) Minor NOx Limits [326 IAC 2-2]

(a) The NOx emissions from the two (2) Thermal Oxidizers stack exhaust shall not exceed 86.4 pounds per million cubic feet of natural gas burned by the two (2) DDGS Dryers and two (2) RTOs.

(b) The total throughput of natural gas to the two (2) DDGS dryers #1 and #2 and two (2) Thermal Oxidizers, C-6A andC-6B shall be limited to 1,892 million cubic feet per twelve month period, with compliance determined at the end of each month.

Compliance with the above NOx emission limits and the NOx emission limit in Conditions D.4.3 and D.7.1 in conjunction with the unrestricted PTE from this source, shall limit the NOx emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for NOx.

D.2.3 Prevention of Significant Deterioration (PSD) Minor CO Limits [326 IAC 2-2]

The Carbon Monoxide (CO) emissions from the following ethanol emissions units shall not exceed the following emission limits:

(a) The CO emissions from Thermal Oxidizer #1 (C-6A), which controls the CO emissions from the DDGS dryer #1, shall not exceed 7.1 pounds per hour.

(b) The CO emissions from Thermal Oxidizer #2 (C-6B), which controls the CO emissions from the DDGS dryer #2, shall not exceed 7.1 pounds per hour.

Compliance with the above CO emission limits and the CO emission limit in Conditions D.4.2 and D.7.1 in conjunction with the unrestricted PTE from this source, shall limit the CO emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for CO.

D.2.4 Prevention of Significant Deterioration (PSD) Minor PM, PM_{10}, and $PM_{2.5}$ Emission Limits [326 IAC 2-2]

The PM, PM_{10}, and $PM_{2.5}$ emissions from the following ethanol emissions units shall not exceed the following emission limits:

Operating Scenario One: DDGS Cooler Baghouse #1 (C-7A) exhausting into the DDGS dryer #1 and DDGS Cooler Baghouse #2 (C-7B) exhausting into DDGS dryer #2.

(a1) The PM, PM_{10}, and $PM_{2.5}$ emissions from the Thermal Oxidizer #1 exhaust (C-6A), which controls the DDGS dryer #1, shall not exceed 11.75 pounds per hour.

(b1) The PM, PM_{10}, and $PM_{2.5}$ emissions from the Thermal Oxidizer #2 exhaust (C-6B), which controls the DDGS dryer #2, shall not exceed 11.68 pounds per hour.

(c1) The PM, PM_{10}, and $PM_{2.5}$ emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall exhaust to the DDGS dryer #1.

(d1) The PM, PM_{10}, and $PM_{2.5}$ emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall exhaust to the DDGS dryer #2.

Operating Scenario Two: DDGS Cooler Baghouse #1 (C-7A) and DDGS Cooler Baghouse #2 (C-7B) exhausting to atmosphere.

(a2) The PM, PM_{10}, and $PM_{2.5}$ emissions from the Thermal Oxidizer #1 exhaust (C-6A), which controls the DDGS dryer #1, shall not exceed 11.2 pounds per hour.

(b2) The PM, PM_{10}, and $PM_{2.5}$ emissions from the Thermal Oxidizer #2 exhaust (C-6B), which controls the DDGS dryer #2, shall not exceed 11.2 pounds per hour.

(c2) The PM, PM_{10}, and $PM_{2.5}$ emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall not exceed 0.56 pounds per hour.

(d2) The PM, PM_{10}, and $PM_{2.5}$ emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall not exceed 0.48 pounds per hour.

Compliance with the above PM, PM_{10}, and $PM_{2.5}$ emission limits and the PM, PM_{10}, and $PM_{2.5}$ emission limits in Conditions D.1.1, D.3.2, D.4.4, and D.6.1 in conjunction with the unrestricted PTE from this source, shall limit the PM, PM_{10}, and $PM_{2.5}$ emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for PM, PM_{10}, or $PM_{2.5}$.

D.2.5 Prevention of Significant Deterioration (PSD) Minor SO_2 Limits [326 IAC 2-2]

(a) The sulfur dioxide (SO_2) emissions from the two (2) DDGS dryers #1 and #2 shall not exceed 0.053 pound per ton of DDGS dried.

(b) The total DDGS throughput to the two DDGS dryers shall not exceed 391,148 tons per twelve consecutive month period, with compliance determined at the end of each month.

Compliance with the above SO_2 emission limits in conjunction with the unrestricted PTE from this source, shall limit the SO_2 emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for SO_2.

D.2.6 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the following processes shall not exceed the pound per hour limits as follows:

Process/Facility		**Process Weight Rate** (tons/hr)	**Particulate Emissions Limit** (lbs/hr)
EP-20	DDGS Dryer #1	22.3	32.85
EP-21	DDGS Dryer #2	22.3	32.85
EP-22	DDGS Cooler #1	22.3	32.85
EP-23	DDGS Cooler #2	22.3	32.85

The pounds per hour limitations for the emissions units in the above table shall be calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

D.2.7 HAP Minor Limits [40 CFR 63]

The HAP emissions from the following ethanol emissions units shall not exceed the following emission limits:

Operating Scenario One: DDGS Cooler Baghouse #1 (C-7A) exhausting into the DDGS dryer #1 and DDGS Cooler Baghouse #2 (C-7B) exhausting into DDGS dryer #2.

(a1) The single HAP emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.25 pounds per hour.

(b1) The single HAP emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.33 pounds per hour.

(c1) The total HAP emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.46 pounds per hour.

(d1) The total HAP emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.57 pounds per hour.

(e1) The HAP emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall exhaust to the DDGS dryer #1.

(f1) The HAP emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall exhaust to the DDGS dryer #2.

Operating Scenario Two: DDGS Cooler Baghouse #1 (C-7A) and DDGS Cooler Baghouse #2 (C-7B) exhausting to atmosphere.

(a2) The single HAP emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.18 pounds per hour.

(b2) The single HAP emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.20 pounds per hour.

(c2) The single HAP emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall not exceed 0.07 pounds per hour.

(d2) The single HAP emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall not exceed 0.13 pounds per hour.

(e2) The total HAP emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.35 pounds per hour.

(f2) The total HAP emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.39 pounds per hour.

(g2) The total HAP emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall not exceed 0.11 pounds per hour.

(h2) The total HAP emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall not exceed 0.18 pounds per hour.

Compliance with the above HAP emission limits and the HAP emission limits in Condition D.3.3 in conjunction with the unrestricted PTE from this source, shall limit the HAP emissions from the entire source to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year for total HAPs. Therefore, the requirements of 326 IAC 2-4.1 (Major Source of Hazardous Air Pollutants) are not applicable to the ethanol emissions units described above, and the entire source is rendered an area source of HAP emissions under 40 CFR 63.

D.2.8 VOC Emissions [326 IAC 8-5-6]

Pursuant to 326 IAC 8-5-6(c), the Permittee shall control the VOC emissions from the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation using a thermal oxidation system with an overall control efficiency of not less than ninety-eight percent (98%), or the VOC outlet concentration shall not exceed ten (10) parts per million (ppm).

D.2.9 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.10 VOC and HAP Control

In order to comply with Condition D.2.1, both Thermal Oxidizers (C-6A and C-6B) used for VOC control, shall be in operation at all times when an emission unit that the Thermal Oxidizers control is in operation.

D.2.11 Particulate Control

(a) In order to comply with Conditions D.2.4 through D.2.6, each of the following emission units shall be controlled by the associated baghouses at all times the following units are operating:

Process ID	Process Description	Control ID
DDGS Cooler #1	DDGS Cooler	Baghouse C-7A
DDGS Cooler #2	DDGS Cooler	Baghouse C-7B

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.2.12 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 8-5-6]

(a) In order to verify compliance with Conditions D.2.2 and D.2.3, the Permittee shall perform NOx and CO testing for the DDGS Dryers and the Thermal Oxidizers utilizing methods as approved by the Commissioner.

(b) In order to verify compliance with Condition D.2.5, the Permittee shall perform SO_2 testing for the DDGS Dryers to determine compliance with Condition D.2.5 utilizing methods as approved by the Commissioner.

Operating Scenario One: DDGS Cooler Baghouse #1 (C-7A) exhausting into the DDGS dryer #1 and DDGS Cooler Baghouse #2 (C-7B) exhausting into DDGS dryer #2.

(c1) In order to verify compliance with Conditions D.2.1(a1) through (d1) and D.2.8, the Permittee shall perform VOC testing, including capture and destruction efficiency testing on the two (2) Thermal Oxidizers (C-6A and C-6B) utilizing methods as approved by the Commissioner.

(d1) In order to verify compliance with Conditions D.2.4(a1) through (d1) and D.2.6, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing for the two (2) Thermal Oxidizers (C-6A and C-6B) utilizing methods as approved by the Commissioner. PM_{10} and $PM_{2.5}$ includes filterable and condensable PM.

(e1) In order to verify compliance with Condition D.2.7(a1) through (f1), the Permittee shall perform HAP testing (acetaldehyde, acrolein, formaldehyde, and methanol), including capture and destruction efficiency testing on the two (2) Thermal Oxidizers (C-6A and C-6B) utilizing methods as approved by the Commissioner.

Operating Scenario Two: DDGS Cooler Baghouse #1 (C-7A) and DDGS Cooler Baghouse #2 (C-7B) exhausting to atmosphere.

(c2) In order to verify compliance with Conditions D.2.1(a2) through (d2) and D.2.8, the Permittee shall perform VOC testing, including capture and destruction efficiency testing on the two (2) Thermal Oxidizers (C-6A and C-6B) and the two (2) the DDGS Cooler Baghouses (C-7A and C-7B), no later than 180 days after issuance of Significant Source Modification No. 129-31693-00051 or no later than 180 days after re-start of the plant, whichever occurs later, utilizing methods as approved by the Commissioner.

(d2) In order to verify compliance with Conditions D.2.4(a2) through (d2) and D.2.6, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing for the two (2) Thermal Oxidizers (C-6A and C-6B) and the two (2) the DDGS Cooler Baghouses (C-7A and C-7B), no later than 180 days after issuance of Significant Source Modification No. 129-31693-00051 or no later than 180 days after re-start of the plant, whichever occurs later, utilizing methods as approved by the Commissioner. PM_{10} and $PM_{2.5}$ includes filterable and condensable PM.

(e2) In order to verify compliance with Condition D.2.7(a2) through (f2), the Permittee shall perform HAP testing (acetaldehyde, acrolein, formaldehyde, and methanol), including capture and destruction efficiency testing on the two (2) Thermal Oxidizers (C-6A and C-6B) and the two (2) the DDGS Cooler Baghouses (C-7A and C-7B), no later than 180 days after issuance of Significant Source Modification No. 129-31693-00051 or no later than 180 days after re-start of the plant, whichever occurs later, utilizing methods as approved by the Commissioner.

Testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

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

D.2.13 Compliance Assurance Monitoring (CAM) Visible Emissions Notations [40 CFR 64]

(a) Visible emission notations of the Thermal Oxidizers stacks and Baghouses stacks exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.14 Compliance Assurance Monitoring (CAM) Thermal Oxidizers Parametric Monitoring [326 IAC 8-5-6] [40 CFR 64]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the two (2) Thermal Oxidizers (C-6A and C-6B) for measuring the duct pressure or fan amperage. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour average. From the date of startup until the stack test results are available, the Permittee shall maintain the 3-hour average duct pressure or fan amperage within the normal range.

(b) The Permittee shall determine the appropriate 3-hour average duct pressure or fan amperage from the latest valid stack test that demonstrates compliance with the limits in Conditions D.2.1, D.2.3, and D.2.8.

(c) On and after the date the stack test results are available, the 3-hour average duct pressure or fan amperage shall be maintained within the 3-hour average normal range as established in the latest compliant stack test.

(d) When, for any one reading, the 3-hour average duct pressure or fan amperage is outside the above mentioned 3-hour average ranges, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.15 Thermal Oxidizers Temperature [326 IAC 8-5-6]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the two (2) Thermal Oxidizers (C-6A and C-6B) for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour average. From the date of startup until the stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature of 1,600°F.

(b) The Permittee shall determine the 3-hour average temperature from the latest valid stack test that demonstrates compliance with the PSD minor limits in Condition D.2.1, D.2.3 and the requirements of 326 IAC 8-5-6 in Condition D.2.8.

(c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizers at or above the 3-hour average temperature as observed during the latest compliant stack test.

(d) If the 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.16 Compliance Assurance Monitoring (CAM) Baghouses Parametric Monitoring [40 CFR 64]

The Permittee shall record the pressure drop across cooler baghouses C-7A and C-7B controlling the DDGS Coolers #1 and #2, and at least once per day when the respective emission units are in operation.When, for any one reading, the pressure drop across a baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for each of these units is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.2.17 Broken or Failed Bag Detection

For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, or leaks, or dust traces.

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

D.2.18 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.2(b), the Permittee shall maintain a monthly record of the natural gas fuel usage from the two (2) DDGS dryers and from the two (2) Thermal Oxidizers.

(b) To document the compliance status with Condition D.2.5(b), the Permittee shall maintain a monthly record of the DDGS throughput to the two (2) DDGS dryers.

(c) To document the compliance status with Condition D.2.12, the Permittee shall maintain a daily record of visible emission notations of the stacks exhaust from the Thermal Oxidizers controlling the two (2) DDGS dryers and from the Baghouses controlling the two (2) DDGS coolers. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(d) To document the compliance status with Condition D.2.14, the Permittee shall maintain continuous Thermal Oxidizers duct pressure or fan amperage records (on a 3-hour average basis) and the 3-hour average used to document compliance during the most recent compliant stack test.

(e) To document the compliance status with Condition D.2.15, the Permittee shall maintain continuous temperature records (on a three-hour average basis) of the Thermal Oxidizers and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(f) To document the compliance status with Condition D.2.16, the Permittee shall maintain a daily record of the pressure drop across each of the baghouses controlling the DDGS coolers. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day, etc.).

(g) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping requirements of this permit.

D.2.19 Reporting Requirements

A monthly summary of the information to document the compliance status with Conditions D.2.2 and D.2.5 shall be submitted quarterly using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar 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 obligation with regard to the reporting requirements of this permit.

SECTION D.3 EMISSION UNIT OPERATION CONDITIONS

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

(d) Fermentation operation, identified as process P-5, installed in 2008, with a maximum throughput of 87,000 gallons of beer per hour or 13,302 gallons of ethanol per hour, controlled by one (1) CO_2 scrubber, C-5A, exhausting to stack S-5A. The maximum undenatured ethanol production rate is 13,302 gallons per hour or 116.5 million gallons per year. The exhaust gas stream from the scrubber may be sent to an offsite company for further processing of the CO_2 gas stream or vented directly to the atmosphere. The source has the option to use a supplemental additive, such as sodium bisulfite, in the CO_2 scrubber. This operation includes the following:

(1) Seven (7) fermenters tanks, installed in 2008.

(2) One (1) beer well tank, installed in 2008, controlled by the CO_2 scrubber, C-5A, exhausting to stack S-5A.

(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.3.1 Prevention of Significant Deterioration (PSD) Minor VOC Limit [326 IAC 2-2]

The VOC emissions from Fermentation, Scrubber C-5A, shall not exceed 8.23 pounds per hour.

Compliance with the above VOC emission limit and the VOC emission limits in Conditions D.2.1 and D.4.1 in conjunction with the unrestricted PTE from this source, shall limit the VOC emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for VOC.

D.3.2 Prevention of Significant Deterioration (PSD) Minor PM, PM_{10}, and $PM_{2.5}$ Limits [326 IAC 2-2]

(a) The PM emissions from Fermentation, Scrubber C-5A, shall not exceed 0.24 pound per hour.

(b) The PM_{10} emissions from Fermentation, Scrubber C-5A, shall not exceed 0.24 pound per hour.

(c) The $PM_{2.5}$ emissions from Fermentation, Scrubber C-5A, shall not exceed 0.24 pound per hour.

Compliance with the above PM, PM_{10}, and $PM_{2.5}$ emission limits and the PM, PM_{10}, and $PM_{2.5}$ emission limits in Conditions D.1.1, D.2.4, D.4.4, and D.6.1 in conjunction with the unrestricted PTE from this source, shall limit the PM, PM_{10}, and $PM_{2.5}$ emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for PM, PM_{10}, or $PM_{2.5}$.

D.3.3 HAP Minor Limits [40 CFR 63]

(a) The single HAP emissions from the CO_2 Scrubber (C-5A) exhaust shall not exceed 1.67 pounds per hour.

(b) The total HAP emissions from the CO_2 Scrubber (C-5A) exhaust shall not exceed 1.75 pounds per hour.

Compliance with the above HAP emission limits and the HAP emission limits in Conditions D.2.7 in conjunction with the unrestricted PTE from this source, shall limit the HAP emissions from the entire source to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year for total HAPs. Therefore, the requirements of 326 IAC 2-4.1 (Major Source of Hazardous Air Pollutants) are not applicable to the fermentation emissions units described above, and the entire source is rendered an area source of HAP emissions under 40 CFR 63.

D.3.4 VOC Emissions [326 IAC 8-5-6]

Pursuant to 326 IAC 8-5-6(c), the Permittee shall control the VOC emissions from the Fermentation process using a wet scrubber system with an overall control efficiency of not less than ninety-eight percent (98%), or the VOC outlet concentration shall not exceed twenty (20) part per million (ppm).

D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirement

D.3.6 Volatile Organic Compounds (VOC) Emissions Control

In order to comply with Condition D.3.1, and D.3.2, the Scrubber, C-5A, for VOC control shall be in operation at all times when the Fermentation process is in operation.

D.3.7 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 8-5-6]

(a) In order to determine compliance with Condition D.3.1, the Permittee shall perform VOC testing (including the capture and absorption efficiency) on Scrubber C-5A for controlling the fermentation process utilizing methods as approved by the Commissioner.

(b) In order to determine compliance with Condition D.3.2, no later than 180 days after issuance of Significant Source Modification No. 129-31693-00051 or no later than 180 days after re-start of the plant, whichever occurs later, the Permittee shall perform PM, PM_{10} and $PM_{2.5}$ testing on Scrubber C-5A for controlling the fermentation process utilizing methods as approved by the Commissioner. PM_{10} and $PM_{2.5}$ includes filterable and condensible PM.

(c) In order to determine compliance with Condition D.3.3, the Permittee shall perform HAP testing (acetaldehyde, acrolein, formaldehyde, and methanol) (including the capture and absorption efficiency and sodium bisulfite addition rate) on Scrubber C-5A for controlling the fermentation process utilizing methods as approved by the Commissioner. If the plant is operating, testing shall be performed no later than 180 days after issuance of Significant Source Modification No. 129-31693-00051. If the plant is not operating and the Significant Source Modification is issued, testing shall be performed no later than 180 days after re-commencing operations.

Testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

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

D.3.8 Compliance Assurance Monitoring (CAM) Scrubber Parametric Monitoring [326 IAC 8-5-6] [40 CFR 64]

(a) The Permittee shall monitor and record the flow rate of Scrubber C-5A at least once per day when the associated processes are in operation.

(1) The Permittee shall determine the minimum flow rate and sodium bisulfite injection rate from the latest valid stack test that demonstrates compliance with the PSD minor limits in Condition D.3.1 and the requirements of 326 IAC 8-5-6 in Condition D.3.2.

(2) On and after the date the stack test results are available, the Permittee shall maintain a flow rate at or above the minimum rate as observed during the latest compliant stack test. When for any one reading, the flow rate is below the above mentioned minimum, the Permittee shall take a reasonable response.

(3) On and after the date the stack test results are available, the Permittee shall maintain a sodium bisulfite injection rate at or above the minimum rate as observed during the latest compliant stack test. When for any one reading, the injection rate is below the above mentioned minimum, the Permittee shall take a reasonable response.

(b) Pursuant to 326 IAC 8-5-6(e)(2)(A), the Permittee shall monitor and record the pressure drop across Scrubber C-5A at least once per day when the associated processes are in operation. When for any one reading, the pressure drop across a scrubber is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

(c) The instruments used for determining the pressure drop shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

(d) Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.3.9 Scrubber Detection

In the event that malfunction has been observed:

Failed units and the associated fermentation process shall be shutdown immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions). Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.3.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.8, the Permittee shall maintain once per day records of the scrubbing liquid, pressure drop, scrubbing liquid flow rate, and sodium bisulfite injection rate from scrubber C-5A. The Permittee shall include in its daily record when scrubbing liquid, pressure drop, scrubbing liquid flow rate, and sodium bisulfite injection rate notations are not taken and the reason for the lack of notations (e.g. the process did not operate that day, etc.).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping requirements of this permit.

SECTION D.4 EMISSION UNIT OPERATION CONDITIONS

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

(h) Denatured ethanol loadout, identified as P-9, installed in 2008, with a total maximum throughput of 36,000 gallons per hour or an average throughput of 13,943 gallons per hour (122.1 million gallons per year) consisting of the following emission units:

(1) One (1) truck loadout, identified as EP-24, installed in 2008, and

(2) One (1) rail loadout, identified as EP-25, installed in 2008,

These two (2) loading racks are controlled by enclosed Flare system C-9, installed in 2008. The flare is fueled by natural gas and has a pilot gas flare heat input capacity of 0.092 MMBtu/hr.

(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.4.1 Prevention of Significant Deterioration (PSD) Minor VOC Limits [326 IAC 2-2]

The VOC emissions from the loading racks shall be limited as follows:

(a) The VOC emissions from the enclosed Flare, C-9, which controls one (1) truck ethanol loadout and one (1) rail ethanol loadout systems shall not exceed 0.00015 pound per gallon of ethanol loaded out.

(b) The trucks and rail loading racks shall be limited to a combined throughput of 122,141,250 gallons of denatured ethanol per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above VOC emission limits and the VOC emission limits in Conditions D.2.1 and D.3.1 in conjunction with the unrestricted PTE from this source, shall limit the VOC emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for VOC.

D.4.2 Prevention of Significant Deterioration (PSD) Minor CO Limits [326 IAC 2-2]

The CO emissions from the enclosed Flare, C-9, which controls one (1) truck ethanol loadout and one (1) rail ethanol loadout systems shall not exceed 0.0835 pound per kilogallon of ethanol loaded out.

Compliance with the above CO emission limit and the CO emission limits in Conditions D.2.3 and D.7.1 in conjunction with the unrestricted PTE from this source, shall limit the CO emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for CO.

D.4.3 Prevention of Significant Deterioration (PSD) Minor NO_X Limits [326 IAC 2-2]

The NO_X emissions from the enclosed Flare, C-9, which controls one (1) truck ethanol loadout and one (1) rail ethanol loadout systems shall not exceed 0.0334 pound per kilogallon of ethanol loaded out.

Compliance with the above NO_X emission limit and the NO_X emission limits in Conditions D.2.2 and D.7.1 in conjunction with the unrestricted PTE from this source, shall limit the NO_X emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for NO_X.

D.4.4 Prevention of Significant Deterioration (PSD) Minor PM, PM_{10}, and $PM_{2.5}$ Limits [326 IAC 2-2]

The PM, PM_{10}, and $PM_{2.5}$ emissions from the enclosed Flare, C-9, which controls one (1) truck ethanol loadout and one (1) rail ethanol loadout systems shall not exceed 0.000299 pound per kilogallon of ethanol loaded out.

Compliance with the above PM, PM_{10}, and $PM_{2.5}$ emission limit and the PM, PM_{10}, and $PM_{2.5}$ emission limits in Conditions D.1.1, D.2.4, D.3.2, and D.6.1 in conjunction with the unrestricted PTE from this source, shall limit the PM, PM_{10}, and $PM_{2.5}$ emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for PM, PM_{10}, and $PM_{2.5}$.

D.4.5 VOC Emissions [326 IAC 8-5-6]

Pursuant to 326 IAC 8-5-6(c), the Permittee shall control the VOC emissions from the truck and rail loading racks using enclosed flare C-9 with an overall control efficiency of not less than ninety-eight percent (98%).

D.4.6 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their control device. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirement

D.4.7 Volatile Organic Compounds (VOC)

In order to comply with Condition D.4.1(a), the enclosed Flare, C-9, shall be in operation at all times when denatured ethanol or undenatured ethanol is being loaded out.

D.4.8 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 8-5-6]

In order to determine compliance with Conditions D.4.1 and D.4.5, the Permittee shall perform VOC testing (including capture and destruction efficiency), on the enclosed Flare C-9 controlling the ethanol loading racks utilizing methods as approved by the Commissioner.

Testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

D.4.9 Flare Pilot Flame

The flare must be operated with a flame present at all times the ethanol loading racks are in operation and are loading ethanol to trucks or railcars.

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

D.4.10 Flare Pilot Flame [326 IAC 8-5-6]

In order to comply with Conditions D.4.1, D.4.2, D.4.3, D.4.4, and D.4.5, the Permittee shall monitor the presence of a flare pilot flame for enclosed flare C-9 using a thermocouple or any other equivalent device to detect the presence of a flame when the loading racks (EP-24 and EP-25) are in operation.

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

D.4.11 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.1(b), the Permittee shall maintain a monthly record of the denatured ethanol loaded out into the loading racks.

(b) To document the compliance status with Condition D.4.10, the Permittee shall maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when loading racks (EP-24 and EP-25) are in operation. The Permittee shall include in its records when the presence of a pilot flame is not detected and the reason for the lack of detection (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping requirements of this permit.

D.4.12 Reporting Requirements

A monthly summary of the information to document the compliance status with Condition D.4.1(b), shall be submitted quarterly using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of the each calendar 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 obligation with regard to the reporting requirements of this permit.

SECTION D.5 EMISSION UNIT OPERATION CONDITIONS

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

(i) Product Storage, identified as P-10, consisting of the following emission units:

(1) Three (3) 200 proof above ground storage tanks, identified as Tk001 through Tk003, installed in 2008, with a capacity of 172,000 gallons, each.

(2) One (1) denaturant storage tank, identified as Tk004, installed in 2008, with a capacity of 105,000 gallons.

(3) Two (2) denatured ethanol storage tanks, identified as Tk005 and Tk006, installed in 2008, with a capacity of 1,406,000 gallons, each.

(4) One (1) corrosion inhibitor storage tank, identified as Tk007, installed in 2008, with a capacity of 6,392 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.5.1 Volatile Organic Compounds (VOC) [326 IAC 8-4-3]

(a) Pursuant to 326 IAC 8-4-3(b)(1)(B), denaturant storage tank Tk006 shall be maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials.

(1) Pursuant to 326 IAC 8-4-3(b)(1)(C), all openings, except stub drains, are equipped with covers, lids, or seals such that:

(2) The cover, lid or seal in the closed potion at all times except when in actual use;

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

(4) 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) Pursuant to 326 IAC 8-4-3(d) (Petroleum Liquid Storage Facilities), the Permittee shall maintain the following records for a period of two (2) years for denaturant storage tank Tk006:

(1) The types of volatile petroleum liquid stored;

(2) The maximum true vapor pressure of the liquids as stored; and

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

The above records shall be made available to the IDEM, OAQ upon written request.

D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.5.3 Record Keeping Requirements

(a) To document the compliance status with Condition D.5.1, the Permittee shall maintain the following records for denaturant storage tank Tk006:

(1) The types of volatile petroleum liquid stored;

(2) The maximum true vapor pressure of the liquids as stored; and

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

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping requirements of this permit.

SECTION D.6 EMISSION UNIT OPERATION CONDITIONS

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

Insignificant Activity:

(b) One (1) cooling tower with three (3) cells, identified as F-1, installed in 2008, with a total circulation rate of 2,256,000 gallons of water per hour.

(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.6.1 Prevention of Significant Deterioration (PSD) Minor PM, PM_{10}, and $PM_{2.5}$ Emission Limits [326 IAC 2-2]

The PM, PM_{10}, and $PM_{2.5}$ emissions from the cooling tower shall not exceed 0.38 pounds per hour, and it shall be designed with a drift rate of 0.0005% and circulation rate of 2,256,000 gallons of make up water per hour.

Compliance with the above PM, PM_{10}, and $PM_{2.5}$ emission limits and the PM, PM_{10}, and $PM_{2.5}$ emission limits in Conditions D.1.1, D.2.4, D.3.2, and D.4.4, in conjunction with the unrestricted PTE from this source, shall limit the PM, PM_{10}, and $PM_{2.5}$ emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for PM, PM_{10}, or $PM_{2.5}$.

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

D.6.2 Record Keeping Requirements

(a) To document the compliance status with Condition D.6.1, the Permittee shall maintain on file vendor guarantees and/or certifications for the cooling tower drift rate and circulation rate.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping requirements of this permit.

SECTION D.7 EMISSION UNIT OPERATION CONDITIONS

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

(j) Natural gas combustion sources, identified as P-11, consisting of four (4) natural gas-fired package boilers, identified as EP-26 through EP-29, installed in 2008, with a heat input capacity of 92.4 MMBtu/hr, each.

(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.7.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

(a) The four (4) package boilers shall only combust natural gas. The natural gas throughput to the four package boilers shall be limited to 3,237.5 MMCF per twelve consecutive month period, with compliance determined at the end of each month.

(b) The NO_X emissions from the four (4) package boilers shall not exceed 30.0 pounds per million cubic feet of natural gas.

(c) The CO emissions from the four (4) package boilers shall not exceed 18 pounds per million cubic feet of natural gas.

Compliance with these NOx and CO limits shall limit the NO_X and CO emissions from the four (4) package boilers to less than 100 tons per year, which renders the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.

Compliance with the above NOx and CO emission limits and the NOx and CO emission limits in Conditions D.2.2, D.2.3, D.4.2, and D.4.3 in conjunction with the unrestricted PTE from this source, shall limit the NOx and CO emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for NOx and CO.

D.7.2 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the four (4) package boilers shall be limited to 0.23 pound per million British thermal units (lb/MMBtu):

The limit shall be established using the following equation:

$$Pt = 1.09/(Q^{0.26})$$

Where: Pt = Pounds of particulate matter emitted per million BTU (lb/MMBtu) heat input
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr)
Q = 369.6 MMBtu heat input

D.7.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.7.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to determine compliance with Conditions D.7.1, D.7.2, the Permittee shall conduct performance tests to measure CO and NOx, from two (2) package boilers utilizing methods as approved by the Commissioner: Testing of the package boilers shall be conducted such that every five (5) years a set of two (2) of the four (4) package boilers is tested. The source will test the two (2) boilers for which the longest period of time has passed since the last valid compliance test.

Testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

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

D.7.5 Record Keeping Requirements

(a) To document the compliance status with Condition D.7.4, the Permittee shall maintain monthly records of the amount of natural gas combusted in the boilers.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping requirements of this permit.

D.7.6 Reporting Requirements

A monthly summary of the information to document the compliance status with Condition D.7.1, shall be submitted quarterly using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of the each calendar 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 obligation with regard to the reporting requirements of this permit.

SECTION E.1 Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)

Emission Unit Description [326 IAC 2-7-5(14)]:

(i) Product Storage, identified as process P-10, installed in 2008, consisting of the following emission units:

(1) Three (3) 200 proof above ground storage tanks, identified as Tk001 through Tk003, installed in 2008, each with a capacity of 172,000 gallons.

(2) One (1) denaturant storage tank, identified as Tk004, installed in 2008, with a capacity of 105,000 gallons.

(3) Two (2) denatured ethanol storage tanks, identified as Tk005 and Tk006, installed in 2008, each with a capacity of 1,406,000 gallons.

(4) One (1) corrosion inhibitor storage tank, identified as Tk007, installed in 2008, with a capacity of 6,392 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]

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, 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) [40 CFR Part 60, Subpart Kb] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Kb, the Permittee shall comply with the provisions of Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) (included as Attachment A), which are incorporated by reference as 326 IAC 12, as specified as follows:

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

SECTION E.2 Standards of Performance for Small Industrial, Commercial, Institutional Steam Generating Units

Emission Unit Description [326 IAC 2-7-5(14)]:

(j) Natural gas combustion sources, identified as P-11, consisting of four (4) natural gas-fired package boilers, identified as EP-26 through EP-29, installed in 2008, each with a heat input capacity of 92.4 MMBtu/hr.

(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.2.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart Dc.

E.2.2 Standards of Performance for Small Industrial, Commercial, Institutional Steam Generating Units [40 CFR Part 60, Subpart Dc] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall comply with the provisions of Standard of Performance for Small Industrial, Commercial, Institutional Steam Generating Units (included as Attachment B), which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.40c(a)
(2) 40 CFR 60.40c(b)
(3) 40 CFR 60.41c
(4) 40 CFR 60.48c(a)(1)
(5) 40 CFR 60.48c(g)
(6) 40 CFR 60.48c(i)
(7) 40 CFR 60.48c(j)

SECTION E.3 Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Emission Unit Description [326 IAC 2-7-5(14)]:

(d) Fermentation operation, identified as process P-5, installed in 2008, with a maximum throughput of 87,000 gallons of beer per hour or 13,302 gallons of ethanol per hour, controlled by one (1) CO_2 scrubber, C-5A, exhausting to stack S-5A. The maximum undenatured ethanol production rate is 13,302 gallons per hour or 116.5 million gallons per year. The exhaust gas stream from the scrubber may be sent to an offsite company for further processing of the CO_2 gas stream or vented directly to the atmosphere. The source has the option to use a supplemental additive, such as sodium bisulfite, in the CO_2 scrubber. This operation includes the following:

(1) Seven (7) fermenters tanks, installed in 2008.

(2) One (1) beer well tank, installed in 2008, controlled by the CO_2 scrubber, C-5A, exhausting to stack S-5A.

(e) Distillation and dehydration operations, identified as process P-6, installed in 2008, with a throughput of 13,302 gallons per hour (116.5 million gallons of undenatured ethanol per year) consisting of the following emission units:

(1) Two (2) beer columns, #1 and #2, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B. Each Thermal Oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) One (1) acid reduction column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(3) One (1) rectifier column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(4) Two (2) molecular sieves, installed in 2008.

(5) One (1) 200 proof condenser, installed in 2008.

(6) One (1) whole stillage tank, installed in 2008.

(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, installed in 2008, , with a maximum throughput of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), consisting of the following emission units:

(1) Four (4) centrifuges, installed in 2008.

(2) One (1) thin stillage tank, installed in 2008.

(3) Two (2) evaporator systems, installed in 2008.

(4) One (1) syrup tank, installed in 2008.

(5) One (1) wet cake pad, installed in 2008.

(6) DDGS drying, #1 and #2, installed in 2008, with a total drying rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), with two (2) DDGS dryers, each with a

heat input capacity of 90 MMBtu/hr. Dryer #1 is controlled by Thermal Oxidizer #1, C-6A, exhausting to stack S-6A, and Dryer #2 is controlled by Thermal Oxidizer #2, C-6B, exhausting to stack S-6B.

(7) Two (2) DDGS coolers, identified as EP-22 (#1) and EP-23 (#2), installed in 2008, with a maximum throughput of 391,148 tons (dry basis) of DDGS per year. Cooler #1 is controlled by Cooler Baghouse #1, C-7A, installed in 2008, and may exhaust to stack S-7A when not being used as make-up air for DDGS Dryer #1. Cooler #2 is controlled by Cooler Baghouse #2, C-7B, installed in 2008, and may exhaust to stack S-7B when not being used as make-up air for DDGS Dryer #2.

(h) Denatured ethanol loadout, identified as P-9, installed in 2008, with a total maximum throughput of 122.1 million gallons per year (13,943 gallons per hour), consisting of the following emission units:

(1) One (1) truck loadout, identified as EP-24, installed in 2008, and

(2) One (1) rail loadout, identified as EP-25, installed in 2008,

These two (2) loading racks are controlled by enclosed Flare system C-9, installed in 2008. The flare is fueled by natural gas and has a pilot gas flare heat input capacity of 0.092 MMBtu/hr.

(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.3.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart VVa.

E.3.2 Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry [40 CFR Part 60, Subpart VVa] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart VVa, the Permittee shall comply with the provisions of Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (included as Attachment C), which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.480a(a), (b), (c), (d), and (f)
(2) 40 CFR 60.481a
(3) 40 CFR 60.482-1a
(4) 40 CFR 60.482-2a
(5) 40 CFR 60.482-3a
(6) 40 CFR 60.482-4a
(7) 40 CFR 60.482-5a
(8) 40 CFR 60.482-6a
(9) 40 CFR 60.482-7a
(10) 40 CFR 60.482-8a
(11) 40 CFR 60.482-9a
(12) 40 CFR 60.482-10a
(13) 40 CFR 60.482-11a
(14) 40 CFR 60.483-1a
(15) 40 CFR 60.483-2a

(16) 40 CFR 60.484a
(17) 40 CFR 60.485a
(18) 40 CFR 60.486a
(19) 40 CFR 60.487a
(20) 40 CFR 60.488a
(21) 40 CFR 60.489a

SECTION E.4 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII] [326 IAC 12]

Emission Unit Description [326 IAC 2-7-5(14)]:

Insignificant Activities:

(a) One (1) diesel-fired emergency fire pump, identified as process P-12, installed in 2008, with a capacity of 420 horsepower (HP).

(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.4.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart IIII.

E.4.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart IIII, the Permittee shall comply with the provisions of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (included as Attachment D), which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.40c(a)
(2) 40 CFR 60.40c(b)
(3) 40 CFR 60.41c
(4) 40 CFR 60.48c(a)(1)
(5) 40 CFR 60.48c(g)
(6) 40 CFR 60.48c(i)
(7) 40 CFR 60.48c(j)

SECTION E.5 National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

(a) One (1) diesel-fired emergency fire pump, identified as process P-12, installed in 2008, with a capacity of 420 horsepower (HP).

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

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

E.5.1 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 63.6665, 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, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

E.5.2 National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

Pursuant to 326 IAC 20-82-1 and 40 CFR Part 63, Subpart ZZZZ, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (included as Attachment E), which are incorporated by reference as 326 IAC 20-82, as specified as follows:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585, (a), (c), and (d)
(3) 40 CFR 63.6590, (a), (a)(2)(iii), and (c)(1)
(4) 40 CFR 63.6595(a)(6), (b)
(5) 40 CFR 63.6665
(6) 40 CFR 636.6670
(7) 40 CFR 63.6675

SECTION E.6 National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities [40 CFR 63, Subpart CCCCCC]

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

(c) Fuel dispensing activities, as follows:

(1) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

(A) One (1) gasoline dispensing operation for plant vehicles, installed in 2008, with a maximum throughput of 75 gallons per month.

(B) Vapor collection-equipped gasoline cargo tanks, installed in 2008.

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

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

E.6.1 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 63.11130, 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, except as otherwise specified in 40 CFR Part 63, Subpart CCCCCC.

E.6.2 National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities [40 CFR 63, Subpart CCCCCC]

Pursuant to 40 CFR Part 63, Subpart CCCCCC, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities (included as Attachment F), as specified as follows:

(1) 40 CFR 63.11110
(2) 40 CFR 63.11111 (a), (b), (e), (f), (h), (i), (j), and (k)
(3) 40 CFR 63.11112(a) and (b)
(4) 40 CFR 63.11113(a), (a)(1), (d), (d)(1), (e), and (e)(1)
(5) 40 CFR 63.11115
(6) 40 CFR 63.11116
(7) 40 CFR 63.11125(d)
(8) 40 CFR 63.11126(b)
(9) 40 CFR 63.11130
(10) 40 CFR 63.11131
(11) 40 CFR 63.11132
(12) Table 3 to 40 CFR 63 Subpart CCCCCC

SECTION E.7 National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing [40 CFR 63, Subpart FFFF]

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

(c) Milled grain cooking operation, identified as process P-4, installed in 2008, which includes the following:

(1) Milled grain cooking operation, consisting of the following major components:

(A) One (1) process condensate tank, installed in 2008,

(B) One (1) slurry mix tank, installed in 2008,

(C) Two (2) liquification tanks, installed in 2008, and

(D) One (1) yeast tank, installed in 2008.

The emissions from these tanks will be controlled by two (2) Thermal Oxidizers, C-6A and C-6B, exhausting to stacks S-6A and S-6B. Each thermal oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) One (1) ammonia tank, installed in 2008.

(d) Fermentation operation, identified as process P-5, installed in 2008, with a maximum throughput of 87,000 gallons of beer per hour or 13,302 gallons of ethanol per hour, controlled by one (1) CO_2 scrubber, C-5A, exhausting to stack S-5A. The maximum undenatured ethanol production rate is 13,302 gallons per hour or 116.5 million gallons per year. The exhaust gas stream from the scrubber may be sent to an offsite company for further processing of the CO_2 gas stream or vented directly to the atmosphere. The source has the option to use a supplemental additive, such as sodium bisulfite, in the CO_2 scrubber. This operation includes the following:

(1) Seven (7) fermenters tanks, installed in 2008.

(2) One (1) beer well tank, installed in 2008, controlled by the CO_2 scrubber, C-5A, exhausting to stack S-5A.

(e) Distillation and dehydration operations, identified as process P-6, installed in 2008, with a throughput of 13,302 gallons of undenatured ethanol per hour (116.5 million gallons of undenatured ethanol per year) consisting of the following emission units:

(1) Two (2) beer columns, #1 and #2, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B. Each Thermal Oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) One (1) acid reduction column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(3) One (1) rectifier column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(4) Two (2) molecular sieves, installed in 2008.

(5) One (1) 200 proof condenser, installed in 2008.

(6) One (1) whole stillage tank, installed in 2008.

(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, installed in 2008, , with a maximum throughput of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), consisting of the following emission units:

(1) Four (4) centrifuges, installed in 2008.

(2) One (1) thin stillage tank, installed in 2008.

(3) Two (2) evaporator systems, installed in 2008.

(4) One (1) syrup tank, installed in 2008.

(5) One (1) wet cake pad, installed in 2008.

(6) DDGS drying, #1 and #2, installed in 2008, with a total drying rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), with two (2) DDGS dryers, each with a heat input capacity of 90 MMBtu/hr. Dryer #1 is controlled by Thermal Oxidizer #1, C-6A, exhausting to stack S-6A, and Dryer #2 is controlled by Thermal Oxidizer #2, C-6B, exhausting to stack S-6B.

(7) Two (2) DDGS coolers, identified as EP-22 (#1) and EP-23 (#2), installed in 2008, with a maximum throughput of 391,148 tons (dry basis) of DDGS per year. Cooler #1 is controlled by Cooler Baghouse #1, C-7A, installed in 2008, and may exhaust to stack S-7A when not being used as make-up air for DDGS Dryer #1. Cooler #2 is controlled by Cooler Baghouse #2, C-7B, installed in 2008, and may exhaust to stack S-7B when not being used as make-up air for DDGS Dryer #2.

(g) DDGS handling, storage and loadout operations, identified as process P-8, installed in 2008, with a rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour) consisting of the following emission units:

(1) One (1) DDGS storage building, installed in 2008, which includes supporting equipment; one (1) enclosed DDGS conveyor, identified as EP-09, with a maximum throughput capacity of 44.65 tons per hour. Particulate emissions between the DDGS storage building and DDGS loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(2) One (1) truck loadout, identified as EP-10, installed in 2008, with a maximum rate of 55 tons (dry basis) per hour. Particulate emissions from truck loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(3) One (1) rail loadout, identified as EP-11, installed in 2008, with a maximum rate of 180 tons (dry basis) per hour. Particulate emissions from rail loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(h) Denatured ethanol loadout, identified as P-9, installed in 2008, with a total maximum throughput of 36,000 gallons per hour or an average throughput of 13,943 gallons per hour (122.1 million gallons per year) consisting of the following emission units:

(1) One (1) truck loadout, identified as EP-24, installed in 2008, and

(2) One (1) rail loadout, identified as EP-25, installed in 2008,

These two (2) loading racks are controlled by enclosed Flare system C-9, installed in 2008. The flare is fueled by natural gas and has a pilot gas flare heat input capacity of 0.092 MMBtu/hr.

(i) Product Storage, identified as process P-10, installed in 2008, consisting of the following emission units:

(1) Three (3) 200 proof above ground storage tanks, identified as Tk001 through Tk003, installed in 2008, each with a capacity of 172,000 gallons.

(2) One (1) denaturant storage tank, identified as Tk004, installed in 2008, with a capacity of 105,000 gallons, and a maximum design capacity less than 20,000 gallons per day throughput.

(3) Two (2) denatured ethanol storage tanks, identified as Tk005 and Tk006, installed in 2008, each storing a denatured ethanol with a Reid Vapor Pressure less than 27.6 kilopascals, each with a capacity of 1,406,000 gallons.

(4) One (1) corrosion inhibitor storage tank, identified as Tk007, installed in 2008, with a capacity of 6,392 gallons.

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

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

E.7.1 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 63.2540, 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, except as otherwise specified in 40 CFR Part 63, Subpart CCCCCC.

E.7.2 National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing [40 CFR 63, Subpart FFFF]

Pursuant to 40 CFR Part 63, Subpart FFFF, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (included as Attachment G), as specified as follows:

(1) 40 CFR 63.2430
(2) 40 CFR 63.2435 (a), (b)(1)(i), (b)(2), (b)(3), (d), (e)
(3) 40 CFR 63.2440 (a), (b), (c)(1)
(4) 40 CFR 63.2445 (a)(2), (c), (f)
(5) 40 CFR 63.2450 (a), (b), (c)(1), (c)(2)(i-iii), (e)(1-2), (f), (g)(1), (g)(2), (g)(4), (g)(5), (h), (i), (k)(1-3), (k)(5), (l), (m), (p), (r), (s)
(6) 40 CFR 63.2455 (a), (b)(1-3)
(7) 40 CFR 63.2460 (a), (b)(1-7)
(8) 40 CFR 63.2470 (a), (c), (e),
(9) 40 CFR 63.2475 (a), (b)
(10) 40 CFR 63.2480 (a)
(11) 40 CFR 63.2485
(12) 40 CFR 63.2505 (a)(1)(i)(A), (b)
(13) 40 CFR 63.2515 (a), (b)(2), (c)
(14) 40 CFR 63.2520 (a), (b), (c), (d), (e)
(15) 40 CFR 63.2525 (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k)

(16) 40 CFR 63.2535 (a), (c)
(17) 40 CFR 63.2540
(18) 40 CFR 63.2545
(19) 40 CFR 63.2550
(20) 40 CFR 63, Subpart FFFF
Table 1, 2, 4, 5, 6, 7, 8, 9, 11, 12

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Aventine Renewable Energy - Mt. Vernon LLC
Source Location: 7201 Port Road, Mount Vernon, Indiana 47620
Part 70 Operating Permit No.: T129-24836-00051

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: Aventine Renewable Energy - Mt. Vernon LLC
Source Location: 7201 Port Road, Mount Vernon, Indiana 47620
Part 70 Operating Permit No.: T129-24836-00051

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), no later than four (**4**) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance and Enforcement Branch); and
- The Permittee must submit notice in writing or by facsimile no later than two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? ☐ Y ☐ N Describe: Type of Pollutants Emitted: ☐ TSP ☐ PM-10 ☐ SO_2 ☐ VOC ☐ NO_X ☐ CO ☐ Pb ☐ other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Aventine Renewable Energy - Mt. Vernon LLC
Source Location: 7201 Port Road, Mount Vernon, Indiana 47620
Part 70 Operating Permit No.: T129-24836-00051
Facility: Two (2) Dryers and Two (2) Thermal Oxidizers
Parameter: Natural Gas Usage
Total Limit: 1,892 million cubic feet of natural gas usage per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	Column 1 Natural Gas Usage for This Month (MMCF)	Column 2 Natural Gas Usage for Previous 11 Months (MMCF)	Column 1 + 2 Natural Gas Usage for 12-Month Period (MMCF)

☐ 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 Quarterly Report

Source Name: Aventine Renewable Energy - Mt. Vernon LLC
Source Location: 7201 Port Road, Mount Vernon, Indiana 47620
Part 70 Operating Permit No.: T129-24836-00051
Facility: Two (2) DDGS Dryers
Parameter: SO_2 - DDGS Throughput
Limit: 391,148 tons of DDGS throughput to the two (2) dryers per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	Column 1 DDGS Throughput for This Month (tons)	Column 2 DDGS Throughput for Previous 11 Months (tons)	Column 1 + 2 DDGS Throughput for 12-Month Period (tons)

☐ No deviation occurred in this quarter.

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

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Aventine Renewable Energy - Mt. Vernon LLC
Source Location: 7201 Port Road, Mount Vernon, Indiana 47620
Part 70 Operating Permit No.: T129-24836-00051
Facility: Truck and rail loading racks
Parameter: Denatured Ethanol Loaded Out
Limit: Combined limit of 122,141,250 gallons of denatured ethanol per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	Column 1 Denatured Ethanol Loaded Out for This Month (gallons)	Column 2 Denatured Ethanol Loaded Out for Previous 11 Months (gallons)	Column 1 + 2 Denatured Ethanol Loaded Out for 12-Month Period (gallons)

☐ No deviation occurred in this quarter.

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

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Aventine Renewable Energy - Mt. Vernon LLC
Source Location: 7201 Port Road, Mount Vernon, Indiana 47620
Part 70 Operating Permit No.: T129-24836-00051
Facility: Four (4) Package Boilers
Parameter: Natural Gas Usage to limit NO_X and CO
Limit: 3,237.5 million cubic feet of natural gas usage per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	Column 1 Natural Gas Usage for This Month (MMCF)	Column 2 Natural Gas Usage for Previous 11 Months (MMCF)	Column 1 + 2 Natural Gas Usage for 12-Month Period (MMCF)

☐ 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: Aventine Renewable Energy - Mt. Vernon LLC
Source Location: 7201 Port Road, Mount Vernon, Indiana 47620
Part 70 Operating Permit No.: T129-24836-00051

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

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".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attachment A
Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 [40 CFR 60, Subpart Kb]

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

§ 60.110b Applicability and designation of affected facility.

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

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

(c) [Reserved]

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

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

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

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

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

(5) Vessels located at bulk gasoline plants.

(6) Storage vessels located at gasoline service stations.

(7) Vessels used to store beverage alcohol.

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

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

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

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

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

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

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

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

§ 60.111b Definitions.

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

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

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

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

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

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

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

(1) In accordance with methods described in American Petroleum institute Bulletin 2517, Evaporation Loss From External Floating Roof Tanks, (incorporated by reference—see § 60.17); or

(2) As obtained from standard reference texts; or

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

(4) Any other method approved by the Administrator.

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

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

Process tank means a tank that is used within a process (including a solvent or raw material recovery process) to collect material discharged from a feedstock storage vessel or equipment within the process before the material is transferred to other equipment within the process, to a product or by-product storage vessel, or to a vessel used to store recovered solvent or raw material. In many process tanks, unit operations such as reactions and blending are conducted. Other process tanks, such as surge control vessels and bottoms receivers, however, may not involve unit operations.

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

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

(1) Frames, housing, auxiliary supports, or other components that are not directly involved in the containment of liquids or vapors;

(2) Subsurface caverns or porous rock reservoirs; or

(3) Process tanks.

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

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

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

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

(a) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with one of the following:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

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

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

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

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

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

(b) The owner or operator of each storage vessel with a design capacity greater than or equal to 75 m^3 which contains a VOL that, as stored, has a maximum true vapor pressure greater than or equal to 76.6 kPa shall equip each storage vessel with one of the following:

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

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

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

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

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

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

§ 60.113b Testing and procedures.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(i) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 Cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.

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

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

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

(A) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (b)(2)(iii) of this section.

(B) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

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

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

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

(6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

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

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

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

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

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

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

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

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

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

§ 60.114b Alternative means of emission limitation.

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in § 60.112b,

the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative means for purposes of compliance with that requirement.

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

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

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

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

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

§ 60.115b Reporting and recordkeeping requirements.

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

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

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

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

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

(4) After each inspection required by § 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in § 60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of § 61.112b(a)(1) or § 60.113b(a)(3) and list each repair made.

(b) After installing control equipment in accordance with § 61.112b(a)(2) (external floating roof), the owner or operator shall meet the following requirements.

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

(2) Within 60 days of performing the seal gap measurements required by § 60.113b(b)(1), furnish the Administrator with a report that contains:

(i) The date of measurement.

(ii) The raw data obtained in the measurement.

(iii) The calculations described in § 60.113b (b)(2) and (b)(3).

(3) Keep a record of each gap measurement performed as required by § 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:

(i) The date of measurement.

(ii) The raw data obtained in the measurement.

(iii) The calculations described in § 60.113b (b)(2) and (b)(3).

(4) After each seal gap measurement that detects gaps exceeding the limitations specified by § 60.113b(b)(4), submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (b)(2) of this section and the date the vessel was emptied or the repairs made and date of repair.

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

(1) A copy of the operating plan.

(2) A record of the measured values of the parameters monitored in accordance with § 60.113b(c)(2).

(d) After installing a closed vent system and flare to comply with § 60.112b, the owner or operator shall meet the following requirements.

(1) A report containing the measurements required by § 60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator as required by § 60.8 of the General Provisions. This report shall be submitted within 6 months of the initial start-up date.

(2) Records shall be kept of all periods of operation during which the flare pilot flame is absent.

(3) Semiannual reports of all periods recorded under § 60.115b(d)(2) in which the pilot flame was absent shall be furnished to the Administrator.

§ 60.116b Monitoring of operations.

(a) The owner or operator shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.

(b) The owner or operator of each storage vessel as specified in § 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

(c) Except as provided in paragraphs (f) and (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

(d) Except as provided in paragraph (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor vapor pressure values for each volume range.

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

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

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

(i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see § 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

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

(3) For other liquids, the vapor pressure:

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

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

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

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

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

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

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

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

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

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

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

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

§ 60.117b Delegation of authority.

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

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

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

Attachment B
Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60, Subpart Dc]

SOURCE: 72 FR 32759, June 13, 2007, unless otherwise noted.

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, § 60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO_2) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§ 60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in § 60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under § 60.14.

(e) Affected facilities (*i.e.* heat recovery steam generators and fuel heaters) that are associated with stationary combustion turbines and meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators, fuel heaters, and other affected facilities that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/h) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/h) heat input of fossil fuel. If the heat recovery steam generator, fuel heater, or other affected facility is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The stationary combustion turbine emissions are subject to subpart GG or KKKK, as applicable, of this part.)

(f) Any affected facility that meets the applicability requirements of and is subject to subpart AAAA or subpart CCCC of this part is not subject to this subpart.

(g) Any facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not subject to this subpart.

(h) Affected facilities that also meet the applicability requirements under subpart J or subpart Ja of this part are subject to the PM and NO_X standards under this subpart and the SO_2 standards under subpart J or subpart Ja of this part, as applicable.

(i) Temporary boilers are not subject to this subpart.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

§ 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential

heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see § 60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (*i.e.* , the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see § 60.17), diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see § 60.17), kerosine, as defined by the American Society of Testing and Materials in ASTM D3699 (incorporated by reference, see § 60.17), biodiesel as defined by the American Society of Testing and Materials in ASTM D6751 (incorporated by reference, see § 60.17), or biodiesel blends as defined by the American Society of Testing and Materials in ASTM D7467 (incorporated by reference, see § 60.17).

Dry flue gas desulfurization technology means a SO_2 control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO_2 control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under § 60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see § 60.17); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO_2 emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see § 60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Temporary boiler means a steam generating unit that combusts natural gas or distillate oil with a potential SO_2 emissions rate no greater than 26 ng/J (0.060 lb/MMBtu), and the unit is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A steam generating unit is not a temporary boiler if any one of the following conditions exists:

(1) The equipment is attached to a foundation.

(2) The steam generating unit or a replacement remains at a location for more than 180 consecutive days. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.

(3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.

(4) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition.

Wet flue gas desulfurization technology means an SO_2 control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO_2 .

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

§ 60.42c Standard for sulfur dioxide (SO_2).

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under § 60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under § 60.8, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO_2 emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of SO_2 in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SO_2 emissions limit or the 90 percent SO_2 reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO_2 emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 50 percent (0.50) of the potential SO_2 emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO_2 reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).

(1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/h) or less;

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area; or

(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/MMBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of the following:

(1) The percent of potential SO_2 emission rate or numerical SO_2 emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel;

(ii) Has a heat input capacity greater than 22 MW (75 MMBtu/h); and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$$

Where:

E_s = SO_2 emission limit, expressed in ng/J or lb/MMBtu heat input;

K_a = 520 ng/J (1.2 lb/MMBtu);

K_b = 260 ng/J (0.60 lb/MMBtu);

K_c = 215 ng/J (0.50 lb/MMBtu);

H_a = Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

H_b = Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

H_c = Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO_2 emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO_2 emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO_2 control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), (3), or (4) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under § 60.48c(f), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

(2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(3) Coal-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h).

(4) Other fuels-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h).

(i) The SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) For affected facilities located in noncontinental areas and affected facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9462, Feb. 16, 2012]

§ 60.43c Standard for particulate matter (PM).

(a) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or

(2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph (c).

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) An owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under § 60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO_2 emissions is not subject to the PM limit in this section.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 77 FR 9462, Feb. 16, 2012]

§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and § 60.8(b), performance tests required under § 60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in § 60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under § 60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO_2 emission limits under § 60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) of this section and § 60.8, compliance with the percent reduction requirements and SO_2 emission limits under § 60.42c is based on the average percent reduction and the average SO_2 emission rates for 30 consecutive steam generating unit

operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO_2 emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO_2 emission rate (E_{ho}) and the 30-day average SO_2 emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate E_{ao} when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E_{ho} (E_{ho} o) is used in Equation 19-19 of Method 19 of appendix A of this part to compute the adjusted E_{ao} (E_{ao} o). The E_{ho} o is computed using the following formula:

$$E_{ho}o = \frac{E_{ho} - E_w(1 - X_k)}{X_k}$$

Where:

E_{ho} o = Adjusted E_{ho} , ng/J (lb/MMBtu);

E_{ho} = Hourly SO_2 emission rate, ng/J (lb/MMBtu);

E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume E_w = 0.

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(2) The owner or operator of an affected facility that qualifies under the provisions of § 60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters E_w or X_k if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under § 60.42c(a) or (b) shall determine compliance with the SO_2 emission limits under § 60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO_2 emission rate is computed using the following formula:

$$\%P_s = 100\left(1 - \frac{\%R_g}{100}\right)\left(1 - \frac{\%R_f}{100}\right)$$

Where:

$\%P_s$ = Potential SO_2 emission rate, in percent;

$\%R_g$ = SO_2 removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$ = SO_2 removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the $\%P_s$, an adjusted $\%R_g$ ($\%R_g$ o) is computed from E_{ao} o from paragraph (e)(1) of this section and an adjusted average SO_2 inlet rate (E_{ai} o) using the following formula:

$$\%R_g o = 100\left(1 - \frac{E^{\circ}_{ao}}{E^{\circ}_{ai}}\right)$$

Where:

$\%R_g$ o = Adjusted $\%R_g$, in percent;

E_{ao} o = Adjusted E_{ao} , ng/J (lb/MMBtu); and

E_{ai} o = Adjusted average SO_2 inlet rate, ng/J (lb/MMBtu).

(ii) To compute E_{ai} o, an adjusted hourly SO_2 inlet rate (E_{hi} o) is used. The E_{hi} o is computed using the following formula:

$$E_{hi}o = \frac{E_{hi} - E_w(1 - X_k)}{X_k}$$

Where:

E_{hi} o = Adjusted E_{hi} , ng/J (lb/MMBtu);

E_{hi} = Hourly SO_2 inlet rate, ng/J (lb/MMBtu);

E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume E_w = 0; and

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under § 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under § 60.46c(d)(2).

(h) For affected facilities subject to § 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in § 60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO_2 standards under § 60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam

generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(j) The owner or operator of an affected facility shall use all valid SO_2 emissions data in calculating $\%P_s$ and E_{ho} under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under § 60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating $\%P_s$ or E_{ho} pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

§ 60.45c Compliance and performance test methods and procedures for particulate matter.

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under § 60.43c shall conduct an initial performance test as required under § 60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.

(1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3A or 3B of appendix A-2 of this part shall be used for gas analysis when applying Method 5 or 5B of appendix A-3 of this part or 17 of appendix A-6 of this part.

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160 ±14 °C (320±25 °F).

(6) For determination of PM emissions, an oxygen (O_2) or carbon dioxide (CO_2) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O_2 or CO_2 measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A-4 of this part shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under § 60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(c) In place of PM testing with Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(14) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with § 60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under § 60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under § 60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (c)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (c)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under § 60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (c)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O_2 (or CO_2) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.

(i) For PM, Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall be used; and

(ii) For O2 (or CO_2), Method 3A or 3B of appendix A-2 of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(14) As of January 1, 2012, and within 90 days after the date of completing each performance test, as defined in § 60.8, conducted to demonstrate compliance with this subpart, you must submit relative accuracy test audit (*i.e.,* reference method) data and performance test (*i.e.,* compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/ert tool.html/*) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.

(d) The owner or operator of an affected facility seeking to demonstrate compliance under § 60.43c(e)(4) shall follow the applicable procedures under § 60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/h).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9463, Feb. 16, 2012]

§ 60.46c Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO_2 emission limits under § 60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO_2 concentrations and either O_2 or CO_2 concentrations at the outlet of the SO_2 control device (or the outlet of the steam generating unit if no SO_2 control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under § 60.42c shall measure SO_2 concentrations and either O_2 or CO_2 concentrations at both the inlet and outlet of the SO_2 control device.

(b) The 1-hour average SO_2 emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under § 60.42c. Each 1-hour average SO_2 emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under § 60.13(h)(2). Hourly SO_2 emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under § 60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities subject to the percent reduction requirements under § 60.42c, the span value of the SO_2 CEMS at the inlet to the SO_2 control device shall be 125 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted, and the span value of the SO_2 CEMS at the outlet from the SO_2 control device shall be 50 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of § 60.42c, the span value of the SO_2 CEMS at the outlet from the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) shall be 125 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2 emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2 emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO_2 input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO_2 at the inlet or outlet of the SO_2 control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO_2 and CO_2 measurement train operated at the candidate location and a second similar train operated according to the procedures in § 3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are

to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to § 60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under § 60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

§ 60.47c Emission monitoring for particulate matter.

(a) Except as provided in paragraphs (c), (d), (e), and (f) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under § 60.43c shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard in § 60.43c(c) that is not required to use a COMS due to paragraphs (c), (d), (e), or (f) of this section that elects not to use a COMS shall conduct a performance test using Method 9 of appendix A-4 of this part and the procedures in § 60.11 to demonstrate compliance with the applicable limit in § 60.43c by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A-4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.

(1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A-4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A-4 of this part performance test results.

(i) If no visible emissions are observed, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or

(iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.

(2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent

Method 9 of appendix A-4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.* , 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.,* 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (*i.e.,* 90 seconds) or conduct a new Method 9 of appendix A-4 of this part performance test using the procedures in paragraph (a) of this section within 45 calendar days according to the requirements in § 60.45c(a)(8).

(ii) If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

(b) All COMS shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.060 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO2 or PM emissions and that are subject to an opacity standard in § 60.43c(c) are not required to operate a COMS if they follow the applicable procedures in § 60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in § 60.45c(c). The CEMS specified in paragraph § 60.45c(c) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(e) Owners and operators of an affected facility that is subject to an opacity standard in § 60.43c(c) and that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO_2 , or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO discharged to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section; or

(1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.

(i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in § 60.58b(i)(3) of subpart Eb of this part.

(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in § 60.13(h)(2).

(iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(f) An owner or operator of an affected facility that is subject to an opacity standard in § 60.43c(c) is not required to operate a COMS provided that the affected facility meets the conditions in either paragraphs (f)(1), (2), or (3) of this section.

(1) The affected facility uses a fabric filter (baghouse) as the primary PM control device and, the owner or operator operates a bag leak detection system to monitor the performance of the fabric filter according to the requirements in section § 60.48Da of this part.

(2) The affected facility uses an ESP as the primary PM control device, and the owner or operator uses an ESP predictive model to monitor the performance of the ESP developed in accordance and operated according to the requirements in section § 60.48Da of this part.

(3) The affected facility burns only gaseous fuels and/or fuel oils that contain no greater than 0.5 weight percent sulfur, and the owner or operator operates the unit according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the permitting authority may require as an alternative to the notification and reporting requirements specified in §§ 60.8 and 60.11 that the owner or operator submit any deviations with the excess emissions report required under § 60.48c(c).

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§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by § 60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO_2 emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO_2 emission limits of § 60.42c, or the PM or opacity limits of § 60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

(c) In addition to the applicable requirements in § 60.7, the owner or operator of an affected facility subject to the opacity limits in § 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in paragraphs (c)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

(1) For each performance test conducted using Method 9 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) Dates and time intervals of all opacity observation periods;

(ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

(iii) Copies of all visible emission observer opacity field data sheets;

(2) For each performance test conducted using Method 22 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(2)(i) through (iv) of this section.

(i) Dates and time intervals of all visible emissions observation periods;

(ii) Name and affiliation for each visible emission observer participating in the performance test;

(iii) Copies of all visible emission observer opacity field data sheets; and

(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

(3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator

(d) The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO_2 emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO_2 emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO_2 or diluent (O_2 or CO_2) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier;

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in § 60.41c; and

(iii) The sulfur content or maximum sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in § 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in § 60.42C to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels,

excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

(h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under § 60.42c or § 60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

Attachment C

Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 [40 CFR 60, Subpart VVa]

SOURCE: 72 FR 64883, Nov. 16, 2007, unless otherwise noted.

§ 60.480a Applicability and designation of affected facility.

(a)(1) The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry.

(2) The group of all equipment (defined in § 60.481a) within a process unit is an affected facility.

(b) Any affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after November 7, 2006, shall be subject to the requirements of this subpart.

(c) Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(d)(1) If an owner or operator applies for one or more of the exemptions in this paragraph, then the owner or operator shall maintain records as required in § 60.486a(i).

(2) Any affected facility that has the design capacity to produce less than 1,000 Mg/yr (1,102 ton/yr) of a chemical listed in § 60.489 is exempt from §§ 60.482-1a through 60.482-11a.

(3) If an affected facility produces heavy liquid chemicals only from heavy liquid feed or raw materials, then it is exempt from §§ 60.482-1a through 60.482-11a.

(4) Any affected facility that produces beverage alcohol is exempt from §§ 60.482-1a through 60.482-11a.

(5) Any affected facility that has no equipment in volatile organic compounds (VOC) service is exempt from §§ 60.482-1a through 60.482-11a.

(e) *Alternative means of compliance* —(1) *Option to comply with part 65.* (i) Owners or operators may choose to comply with the provisions of 40 CFR part 65, subpart F, to satisfy the requirements of §§ 60.482-1a through 60.487a for an affected facility. When choosing to comply with 40 CFR part 65, subpart F, the requirements of §§ 60.485a(d), (e), and (f), and 60.486a(i) and (j) still apply. Other provisions applying to an owner or operator who chooses to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

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

(2) *Part 63, subpart H.* (i) Owners or operators may choose to comply with the provisions of 40 CFR part 63, subpart H, to satisfy the requirements of §§ 60.482-1a through 60.487a for an affected facility. When choosing to comply with 40 CFR part 63, subpart H, the requirements of § 60.485a(d), (e), and (f), and § 60.486a(i) and (j) still apply.

(ii) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 63, subpart H must also comply with §§ 60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for that equipment.

All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (e)(2)(ii) do not apply to owners or operators of equipment subject to this subpart complying with 40 CFR part 63, subpart H, except that provisions required to be met prior to implementing 40 CFR part 63 still apply. Owners and operators who choose to comply with 40 CFR part 63, subpart H, must comply with 40 CFR part 63, subpart A.

(f) *Stay of standards.* (1) Owners or operators that start a new, reconstructed, or modified affected source prior to November 16, 2007 are not required to comply with the requirements in this paragraph until EPA takes final action to require compliance and publishes a document in the FEDERAL REGISTER .

(i) The definition of "capital expenditure" in § 60.481a of this subpart. While the definition of "capital expenditure" is stayed, owners or operators should use the definition found in § 60.481 of subpart VV of this part.

(ii) [Reserved]

(2) Owners or operators are not required to comply with the requirements in this paragraph until EPA takes final action to require compliance and publishes a document in the FEDERAL REGISTER .

(i) The definition of "process unit" in § 60.481a of this subpart. While the definition of "process unit" is stayed, owners or operators should use the following definition:

Process unit means components assembled to produce, as intermediate or final products, one or more of the chemicals listed in § 60.489 of this part. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

(ii) The method of allocation of shared storage vessels in § 60.482-1a(g) of this subpart.

(iii) The standards for connectors in gas/vapor service and in light liquid service in § 60.482-11a of this subpart.

[72 FR 64883, Nov. 16, 2007, as amended at 73 FR 31375, June 2, 2008]

§ 60.481a Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act (CAA) or in subpart A of part 60, and the following terms shall have the specific meanings given them.

Capital expenditure means, in addition to the definition in 40 CFR 60.2, an expenditure for a physical or operational change to an existing facility that:

(a) Exceeds P, the product of the facility's replacement cost, R, and an adjusted annual asset guideline repair allowance, A, as reflected by the following equation: $P = R \times A$, where:

(1) The adjusted annual asset guideline repair allowance, A, is the product of the percent of the replacement cost, Y, and the applicable basic annual asset guideline repair allowance, B, divided by 100 as reflected by the following equation:

$A = Y \times (B \div 100)$;

(2) The percent Y is determined from the following equation: $Y = 1.0 - 0.575 \log X$, where X is 2006 minus the year of construction; and

(3) The applicable basic annual asset guideline repair allowance, B, is selected from the following table consistent with the applicable subpart:

TABLE FOR DETERMINING APPLICABLE VALUE FOR B

Subpart applicable to facility	Value of B to be used in equation
VVa	12.5
GGGa	7.0

Closed-loop system means an enclosed system that returns process fluid to the process.

Closed-purge system means a system or combination of systems and portable containers to capture purged liquids. Containers for purged liquids must be covered or closed when not being filled or emptied.

Closed vent system means a system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.

Connector means flanged, screwed, or other joined fittings used to connect two pipe lines or a pipe line and a piece of process equipment or that close an opening in a pipe that could be connected to another pipe. Joined fittings welded completely around the circumference of the interface are not considered connectors for the purpose of this regulation.

Control device means an enclosed combustion device, vapor recovery system, or flare.

Distance piece means an open or enclosed casing through which the piston rod travels, separating the compressor cylinder from the crankcase.

Double block and bleed system means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

Duct work means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.

Equipment means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart.

First attempt at repair means to take action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practices.

Fuel gas means gases that are combusted to derive useful work or heat.

Fuel gas system means the offsite and onsite piping and flow and pressure control system that gathers gaseous stream(s) generated by onsite operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in-process combustion equipment, such as furnaces and gas turbines, either singly or in combination.

Hard-piping means pipe or tubing that is manufactured and properly installed using good engineering judgment and standards such as ASME B31.3, Process Piping (available from the American Society of Mechanical Engineers, P.O. Box 2300, Fairfield, NJ 07007-2300).

In gas/vapor service means that the piece of equipment contains process fluid that is in the gaseous state at operating conditions.

In heavy liquid service means that the piece of equipment is not in gas/vapor service or in light liquid service.

In light liquid service means that the piece of equipment contains a liquid that meets the conditions specified in § 60.485a(e).

In-situ sampling systems means nonextractive samplers or in-line samplers.

In vacuum service means that equipment is operating at an internal pressure which is at least 5 kilopascals (kPa) (0.7 psia) below ambient pressure.

In VOC service means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight. (The provisions of § 60.485a(d) specify how to determine that a piece of equipment is not in VOC service.)

Initial calibration value means the concentration measured during the initial calibration at the beginning of each day required in § 60.485a(b)(1), or the most recent calibration if the instrument is recalibrated during the day (i.e., the calibration is adjusted) after a calibration drift assessment.

Liquids dripping means any visible leakage from the seal including spraying, misting, clouding, and ice formation.

Open-ended valve or line means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

Pressure release means the emission of materials resulting from system pressure being greater than set pressure of the pressure relief device.

Process improvement means routine changes made for safety and occupational health requirements, for energy savings, for better utility, for ease of maintenance and operation, for correction of design deficiencies, for bottleneck removal, for changing product requirements, or for environmental control.

Process unit means the components assembled and connected by pipes or ducts to process raw materials and to produce, as intermediate or final products, one or more of the chemicals listed in § 60.489. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product. For the purpose of this subpart, process unit includes any feed, intermediate and final product storage vessels (except as specified in § 60.482-1a(g)), product transfer racks, and connected ducts and piping. A process unit includes all equipment as defined in this subpart.

Process unit shutdown means a work practice or operational procedure that stops production from a process unit or part of a process unit during which it is technically feasible to clear process material from a process unit or part of a process unit consistent with safety constraints and during which repairs can be accomplished. The following are not considered process unit shutdowns:

(1) An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours.

(2) An unscheduled work practice or operational procedure that would stop production from a process unit or part of a process unit for a shorter period of time than would be required to clear the process unit or part of the process unit of materials and start up the unit, and would result in greater emissions than delay of repair of leaking components until the next scheduled process unit shutdown.

(3) The use of spare equipment and technically feasible bypassing of equipment without stopping production.

Quarter means a 3-month period; the first quarter concludes on the last day of the last full month during the 180 days following initial startup.

Repaired means that equipment is adjusted, or otherwise altered, in order to eliminate a leak as defined in the applicable sections of this subpart and, except for leaks identified in accordance with §§ 60.482-2a(b)(2)(ii) and (d)(6)(ii) and (d)(6)(iii), 60.482-3a(f), and 60.482-10a(f)(1)(ii), is re-monitored as specified in § 60.485a(b) to verify that emissions from the equipment are below the applicable leak definition.

Replacement cost means the capital needed to purchase all the depreciable components in a facility.

Sampling connection system means an assembly of equipment within a process unit used during periods of representative operation to take samples of the process fluid. Equipment used to take nonroutine grab samples is not considered a sampling connection system.

Sensor means a device that measures a physical quantity or the change in a physical quantity such as temperature, pressure, flow rate, pH, or liquid level.

Storage vessel means a tank or other vessel that is used to store organic liquids that are used in the process as raw material feedstocks, produced as intermediates or final products, or generated as wastes. Storage vessel does not include vessels permanently attached to motor vehicles, such as trucks, railcars, barges or ships.

Synthetic organic chemicals manufacturing industry means the industry that produces, as intermediates or final products, one or more of the chemicals listed in § 60.489.

Transfer rack means the collection of loading arms and loading hoses, at a single loading rack, that are used to fill tank trucks and/or railcars with organic liquids.

Volatile organic compounds or VOC means, for the purposes of this subpart, any reactive organic compounds as defined in § 60.2 Definitions.

EFFECTIVE DATE NOTE: At 73 FR 31376, June 2, 2008, in § 60.481a, the definitions of “capital expenditure” and “process unit” were stayed until further notice.

§ 60.482-1a Standards: General.

(a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§ 60.482-1a through 60.482-10a or § 60.480a(e) for all equipment within 180 days of initial startup.

(b) Compliance with §§ 60.482-1a to 60.482-10a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in § 60.485a.

(c)(1) An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of §§ 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, and 60.482-10a as provided in § 60.484a.

(2) If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of §§ 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, or 60.482-10a, an owner or operator shall comply with the requirements of that determination.

(d) Equipment that is in vacuum service is excluded from the requirements of §§ 60.482-2a through 60.482-10a if it is identified as required in § 60.486a(e)(5).

(e) Equipment that an owner or operator designates as being in VOC service less than 300 hr/yr is excluded from the requirements of §§ 60.482-2a through 60.482-11a if it is identified as required in § 60.486a(e)(6) and it meets any of the conditions specified in paragraphs (e)(1) through (3) of this section.

(1) The equipment is in VOC service only during startup and shutdown, excluding startup and shutdown between batches of the same campaign for a batch process.

(2) The equipment is in VOC service only during process malfunctions or other emergencies.

(3) The equipment is backup equipment that is in VOC service only when the primary equipment is out of service.

(f)(1) If a dedicated batch process unit operates less than 365 days during a year, an owner or operator may monitor to detect leaks from pumps, valves, and open-ended valves or lines at the frequency specified in the following table instead of monitoring as specified in §§ 60.482-2a, 60.482-7a, and 60.483.2a:

	Equivalent monitoring frequency time in use		
Operating time (percent of hours during year)	**Monthly**	**Quarterly**	**Semiannually**
0 to <25	Quarterly	Annually	Annually.
25 to <50	Quarterly	Semiannually	Annually.
50 to <75	Bimonthly	Three quarters	Semiannually.
75 to 100	Monthly	Quarterly	Semiannually.

(2) Pumps and valves that are shared among two or more batch process units that are subject to this subpart may be monitored at the frequencies specified in paragraph (f)(1) of this section, provided the operating time of all such process units is considered.

(3) The monitoring frequencies specified in paragraph (f)(1) of this section are not requirements for monitoring at specific intervals and can be adjusted to accommodate process operations. An owner or operator may monitor at any time during the specified monitoring period (e.g., month, quarter, year), provided the monitoring is conducted at a reasonable interval after completion of the last monitoring campaign. Reasonable intervals are defined in paragraphs (f)(3)(i) through (iv) of this section.

(i) When monitoring is conducted quarterly, monitoring events must be separated by at least 30 calendar days.

(ii) When monitoring is conducted semiannually (*i.e.* , once every 2 quarters), monitoring events must be separated by at least 60 calendar days.

(iii) When monitoring is conducted in 3 quarters per year, monitoring events must be separated by at least 90 calendar days.

(iv) When monitoring is conducted annually, monitoring events must be separated by at least 120 calendar days.

(g) If the storage vessel is shared with multiple process units, the process unit with the greatest annual amount of stored materials (predominant use) is the process unit the storage vessel is assigned to. If the storage vessel is shared equally among process units, and one of the process units has equipment subject to this subpart, the storage vessel is assigned to that process unit. If the storage vessel is shared equally among process units, none of which have equipment subject to this subpart of this part, the storage vessel is assigned to any process unit subject to subpart VV of this part. If the predominant use of the storage vessel varies from year to year, then the owner or operator must estimate the predominant use initially and reassess every 3 years. The owner or operator must keep records of the information and supporting calculations that show how predominant use is determined. All equipment on the storage vessel must be monitored when in VOC service.

EFFECTIVE DATE NOTE: At 73 FR 31376, June 2, 2008, in § 60.482-1a, paragraph (g) was stayed until further notice.

§ 60.482-2a Standards: Pumps in light liquid service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in § 60.485a(b), except as provided in § 60.482-1a(c) and (f) and paragraphs (d), (e), and (f) of this section. A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except

for a pump that replaces a leaking pump and except as provided in § 60.482-1a(c) and paragraphs (d), (e), and (f) of this section.

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in § 60.482-1a(f).

(b)(1) The instrument reading that defines a leak is specified in paragraphs (b)(1)(i) and (ii) of this section.

(i) 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers;

(ii) 2,000 ppm or greater for all other pumps.

(2) If there are indications of liquids dripping from the pump seal, the owner or operator shall follow the procedure specified in either paragraph (b)(2)(i) or (ii) of this section. This requirement does not apply to a pump that was monitored after a previous weekly inspection and the instrument reading was less than the concentration specified in paragraph (b)(1)(i) or (ii) of this section, whichever is applicable.

(i) Monitor the pump within 5 days as specified in § 60.485a(b). A leak is detected if the instrument reading measured during monitoring indicates a leak as specified in paragraph (b)(1)(i) or (ii) of this section, whichever is applicable. The leak shall be repaired using the procedures in paragraph (c) of this section.

(ii) Designate the visual indications of liquids dripping as a leak, and repair the leak using either the procedures in paragraph (c) of this section or by eliminating the visual indications of liquids dripping.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 60.482-9a.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in paragraphs (c)(2)(i) and (ii) of this section, where practicable.

(i) Tightening the packing gland nuts;

(ii) Ensuring that the seal flush is operating at design pressure and temperature.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this section, provided the requirements specified in paragraphs (d)(1) through (6) of this section are met.

(1) Each dual mechanical seal system is:

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of § 60.482-10a; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4)(i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(ii) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in either paragraph (d)(4)(ii)(A) or (B) of this section prior to the next required inspection.

(A) Monitor the pump within 5 days as specified in § 60.485a(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 2,000 ppm or greater is measured, a leak is detected.

(B) Designate the visual indications of liquids dripping as a leak.

(5)(i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm.

(ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in paragraph (d)(5)(ii) of this section, a leak is detected.

(6)(i) When a leak is detected pursuant to paragraph (d)(4)(ii)(A) of this section, it shall be repaired as specified in paragraph (c) of this section.

(ii) A leak detected pursuant to paragraph (d)(5)(iii) of this section shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.

(iii) A designated leak pursuant to paragraph (d)(4)(ii)(B) of this section shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.

(e) Any pump that is designated, as described in § 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump:

(1) Has no externally actuated shaft penetrating the pump housing;

(2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in § 60.485a(c); and

(3) Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of § 60.482-10a, it is exempt from paragraphs (a) through (e) of this section.

(g) Any pump that is designated, as described in § 60.486a(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:

(1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and

(2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

§ 60.482-3a Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in § 60.482-1a(c) and paragraphs (h), (i), and (j) of this section.

(b) Each compressor seal system as required in paragraph (a) of this section shall be:

(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of § 60.482-10a; or

(3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

(d) Each barrier fluid system as described in paragraph (a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in paragraph (d) of this section shall be checked daily or shall be equipped with an audible alarm.

(2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e)(2) of this section, a leak is detected.

(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 60.482-9a.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of § 60.482-10a, except as provided in paragraph (i) of this section.

(i) Any compressor that is designated, as described in § 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a) through (h) of this section if the compressor:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in § 60.485a(c); and

(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.

(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of § 60.14 or § 60.15 is exempt from paragraphs (a) through (e) and (h) of this section,

provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of paragraphs (a) through (e) and (h) of this section.

§ 60.482-4a Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in § 60.485a(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in § 60.482-9a.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in § 60.485a(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in § 60.482-10a is exempted from the requirements of paragraphs (a) and (b) of this section.

(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in § 60.482-9a.

§ 60.482-5a Standards: Sampling connection systems.

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in § 60.482-1a(c) and paragraph (c) of this section.

(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall comply with the requirements specified in paragraphs (b)(1) through (4) of this section.

(1) Gases displaced during filling of the sample container are not required to be collected or captured.

(2) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied.

(3) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured.

(4) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either paragraph (b)(4)(i), (ii), (iii), or (iv) of this section.

(i) Return the purged process fluid directly to the process line.

(ii) Collect and recycle the purged process fluid to a process.

(iii) Capture and transport all the purged process fluid to a control device that complies with the requirements of § 60.482-10a.

(iv) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(A) A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;

(B) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266;

(C) A facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261;

(D) A waste management unit subject to and operated in compliance with the treatment requirements of 40 CFR 61.348(a), provided all waste management units that collect, store, or transport the purged process fluid to the treatment unit are subject to and operated in compliance with the management requirements of 40 CFR 61.343 through 40 CFR 61.347; or

(E) A device used to burn off-specification used oil for energy recovery in accordance with 40 CFR part 279, subpart G, provided the purged process fluid is not hazardous waste as defined in 40 CFR part 261.

(c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

§ 60.482-6a Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in § 60.482-1a(c) and paragraphs (d) and (e) of this section.

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) of this section at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b), and (c) of this section.

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.

§ 60.482-7a Standards: Valves in gas/vapor service and in light liquid service.

(a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in § 60.485a(b) and shall comply with paragraphs (b) through (e) of this section, except as provided in paragraphs (f), (g), and (h) of this section, § 60.482-1a(c) and (f), and §§ 60.483-1a and 60.483-2a.

(2) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to paragraphs (a)(2)(i) or (ii), except for a valve that replaces a leaking valve and except as provided in paragraphs (f), (g), and (h) of this section, § 60.482-1a(c), and §§ 60.483-1a and 60.483-2a.

(i) Monitor the valve as in paragraph (a)(1) of this section. The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.

(ii) If the existing valves in the process unit are monitored in accordance with § 60.483-1a or § 60.483-2a, count the new valve as leaking when calculating the percentage of valves leaking as described in § 60.483-2a(b)(5). If less than 2.0 percent of the valves are leaking for that process unit, the valve must be monitored for the first time during the next scheduled monitoring event for existing valves in the process unit or within 90 days, whichever comes first.

(b) If an instrument reading of 500 ppm or greater is measured, a leak is detected.

(c)(1)(i) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(ii) As an alternative to monitoring all of the valves in the first month of a quarter, an owner or operator may elect to subdivide the process unit into two or three subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The owner or operator must keep records of the valves assigned to each subgroup.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in § 60.482-9a.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;

(3) Tightening of packing gland nuts;

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in § 60.486a(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) of this section if the valve:

(1) Has no external actuating mechanism in contact with the process fluid,

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in § 60.485a(c), and

(3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(g) Any valve that is designated, as described in § 60.486a(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:

(1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section, and

(2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in § 60.486a(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:

(1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The process unit within which the valve is located either:

(i) Becomes an affected facility through § 60.14 or § 60.15 and was constructed on or before January 5, 1981; or

(ii) Has less than 3.0 percent of its total number of valves designated as difficult-to-monitor by the owner or operator.

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

§ 60.482-8a Standards: Pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service.

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service, the owner or operator shall follow either one of the following procedures:

(1) The owner or operator shall monitor the equipment within 5 days by the method specified in § 60.485a(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.

(2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 60.482-9a.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under §§ 60.482-2a(c)(2) and 60.482-7a(e).

§ 60.482-9a Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit.

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves and connectors will be allowed if:

(1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with § 60.482-10a.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(f) When delay of repair is allowed for a leaking pump, valve, or connector that remains in service, the pump, valve, or connector may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

§ 60.482-10a Standards: Closed vent systems and control devices.

(a) Owners or operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.

(b) Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume (ppmv), whichever is less stringent.

(c) Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 ppmv, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.

(d) Flares used to comply with this subpart shall comply with the requirements of § 60.18.

(e) Owners or operators of control devices used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.

(f) Except as provided in paragraphs (i) through (k) of this section, each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (2) of this section.

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the requirements specified in paragraphs (f)(1)(i) and (ii) of this section:

(i) Conduct an initial inspection according to the procedures in § 60.485a(b); and

(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:

(i) Conduct an initial inspection according to the procedures in § 60.485a(b); and

(ii) Conduct annual inspections according to the procedures in § 60.485a(b).

(g) Leaks, as indicated by an instrument reading greater than 500 ppmv above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (h) of this section.

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

(h) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that

emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(i) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section.

(j) Any parts of the closed vent system that are designated, as described in paragraph (l)(1) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (j)(1) and (2) of this section:

(1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (f)(1)(i) or (f)(2) of this section; and

(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(k) Any parts of the closed vent system that are designated, as described in paragraph (l)(2) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (k)(1) through (3) of this section:

(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) The process unit within which the closed vent system is located becomes an affected facility through §§ 60.14 or 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

(3) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

(l) The owner or operator shall record the information specified in paragraphs (l)(1) through (5) of this section.

(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(3) For each inspection during which a leak is detected, a record of the information specified in § 60.486a(c).

(4) For each inspection conducted in accordance with § 60.485a(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(5) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(m) Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

§ 60.482-11a Standards: Connectors in gas/vapor service and in light liquid service.

(a) The owner or operator shall initially monitor all connectors in the process unit for leaks by the later of either 12 months after the compliance date or 12 months after initial startup. If all connectors in the process unit have been monitored for leaks prior to the compliance date, no initial monitoring is required provided either no process changes have been made since the monitoring or the owner or operator can determine that the results of the monitoring, with or without adjustments, reliably demonstrate compliance despite process changes. If required to monitor because of a process change, the owner or operator is required to monitor only those connectors involved in the process change.

(b) Except as allowed in § 60.482-1a(c), § 60.482-10a, or as specified in paragraph (e) of this section, the owner or operator shall monitor all connectors in gas and vapor and light liquid service as specified in paragraphs (a) and (b)(3) of this section.

(1) The connectors shall be monitored to detect leaks by the method specified in § 60.485a(b) and, as applicable, § 60.485a(c).

(2) If an instrument reading greater than or equal to 500 ppm is measured, a leak is detected.

(3) The owner or operator shall perform monitoring, subsequent to the initial monitoring required in paragraph (a) of this section, as specified in paragraphs (b)(3)(i) through (iii) of this section, and shall comply with the requirements of paragraphs (b)(3)(iv) and (v) of this section. The required period in which monitoring must be conducted shall be determined from paragraphs (b)(3)(i) through (iii) of this section using the monitoring results from the preceding monitoring period. The percent leaking connectors shall be calculated as specified in paragraph (c) of this section.

(i) If the percent leaking connectors in the process unit was greater than or equal to 0.5 percent, then monitor within 12 months (1 year).

(ii) If the percent leaking connectors in the process unit was greater than or equal to 0.25 percent but less than 0.5 percent, then monitor within 4 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors within 2 years of the start of the monitoring period, provided all connectors have been monitored by the end of the 4-year monitoring period.

(iii) If the percent leaking connectors in the process unit was less than 0.25 percent, then monitor as provided in paragraph (b)(3)(iii)(A) of this section and either paragraph (b)(3)(iii)(B) or (b)(3)(iii)(C) of this section, as appropriate.

(A) An owner or operator shall monitor at least 50 percent of the connectors within 4 years of the start of the monitoring period.

(B) If the percent of leaking connectors calculated from the monitoring results in paragraph (b)(3)(iii)(A) of this section is greater than or equal to 0.35 percent of the monitored connectors, the owner or operator shall monitor as soon as practical, but within the next 6 months, all connectors that have not yet been monitored during the monitoring period. At the conclusion of monitoring, a new monitoring period shall be started pursuant to paragraph (b)(3) of this section, based on the percent of leaking connectors within the total monitored connectors.

(C) If the percent of leaking connectors calculated from the monitoring results in paragraph (b)(3)(iii)(A) of this section is less than 0.35 percent of the monitored connectors, the owner or operator shall monitor all connectors that have not yet been monitored within 8 years of the start of the monitoring period.

(iv) If, during the monitoring conducted pursuant to paragraphs (b)(3)(i) through (iii) of this section, a connector is found to be leaking, it shall be re-monitored once within 90 days after repair to confirm that it is not leaking.

(v) The owner or operator shall keep a record of the start date and end date of each monitoring period under this section for each process unit.

(c) For use in determining the monitoring frequency, as specified in paragraphs (a) and (b)(3) of this section, the percent leaking connectors as used in paragraphs (a) and (b)(3) of this section shall be calculated by using the following equation:

$$\%C_L = C_L / C_t * 100$$

Where:

$\%C_L$ = Percent of leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b)(3)(i) through (iii) of this section.

C_L = Number of connectors measured at 500 ppm or greater, by the method specified in § 60.485a(b).

C_t = Total number of monitored connectors in the process unit or affected facility.

(d) When a leak is detected pursuant to paragraphs (a) and (b) of this section, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 60.482-9a. A first attempt at repair as defined in this subpart shall be made no later than 5 calendar days after the leak is detected.

(e) Any connector that is designated, as described in § 60.486a(f)(1), as an unsafe-to-monitor connector is exempt from the requirements of paragraphs (a) and (b) of this section if:

(1) The owner or operator of the connector demonstrates that the connector is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (a) and (b) of this section; and

(2) The owner or operator of the connector has a written plan that requires monitoring of the connector as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (d) of this section if a leak is detected.

(f) *Inaccessible, ceramic, or ceramic-lined connectors* . (1) Any connector that is inaccessible or that is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of paragraphs (a) and (b) of this section, from the leak repair requirements of paragraph (d) of this section, and from the recordkeeping and reporting requirements of §§ 63.1038 and 63.1039. An inaccessible connector is one that meets any of the provisions specified in paragraphs (f)(1)(i) through (vi) of this section, as applicable:

(i) Buried;

(ii) Insulated in a manner that prevents access to the connector by a monitor probe;

(iii) Obstructed by equipment or piping that prevents access to the connector by a monitor probe;

(iv) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold that would allow access to connectors up to 7.6 meters (25 feet) above the ground;

(v) Inaccessible because it would require elevating the monitoring personnel more than 2 meters (7 feet) above a permanent support surface or would require the erection of scaffold; or

(vi) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment.

(2) If any inaccessible, ceramic, or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the visual, audible, olfactory, or other indications of a leak to the atmosphere shall be eliminated as soon as practical.

(g) Except for instrumentation systems and inaccessible, ceramic, or ceramic-lined connectors meeting the provisions of paragraph (f) of this section, identify the connectors subject to the requirements of this subpart. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated.

EFFECTIVE DATE NOTE: At 73 FR 31376, June 2, 2008, § 60.482-11a was stayed until further notice.

§ 60.483-1a Alternative standards for valves—allowable percentage of valves leaking.

(a) An owner or operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

(b) The following requirements shall be met if an owner or operator wishes to comply with an allowable percentage of valves leaking:

(1) An owner or operator must notify the Administrator that the owner or operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in § 60.487a(d).

(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.

(3) If a valve leak is detected, it shall be repaired in accordance with § 60.482-7a(d) and (e).

(c) Performance tests shall be conducted in the following manner:

(1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in § 60.485a(b).

(2) If an instrument reading of 500 ppm or greater is measured, a leak is detected.

(3) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.

(d) Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent, determined as described in § 60.485a(h).

§ 60.483-2a Alternative standards for valves—skip period leak detection and repair.

(a)(1) An owner or operator may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.

(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in § 60.487(d)a.

(b)(1) An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in § 60.482-7a.

(2) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(3) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(4) If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in § 60.482-7a but can again elect to use this section.

(5) The percent of valves leaking shall be determined as described in § 60.485a(h).

(6) An owner or operator must keep a record of the percent of valves found leaking during each leak detection period.

(7) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for a process unit following one of the alternative standards in this section must be monitored in accordance with § 60.482-7a(a)(2)(i) or (ii) before the provisions of this section can be applied to that valve.

§ 60.484a Equivalence of means of emission limitation.

(a) Each owner or operator subject to the provisions of this subpart may apply to the Administrator for determination of equivalence for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in this subpart.

(b) Determination of equivalence to the equipment, design, and operational requirements of this subpart will be evaluated by the following guidelines:

(1) Each owner or operator applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.

(2) The Administrator will compare test data for demonstrating equivalence of the means of emission limitation to test data for the equipment, design, and operational requirements.

(3) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.

(c) Determination of equivalence to the required work practices in this subpart will be evaluated by the following guidelines:

(1) Each owner or operator applying for a determination of equivalence shall be responsible for collecting and verifying test data to demonstrate equivalence of an equivalent means of emission limitation.

(2) For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the required work practice shall be demonstrated.

(3) For each affected facility, for which a determination of equivalence is requested, the emission reduction achieved by the equivalent means of emission limitation shall be demonstrated.

(4) Each owner or operator applying for a determination of equivalence shall commit in writing to work practice(s) that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practice.

(5) The Administrator will compare the demonstrated emission reduction for the equivalent means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4) of this section.

(6) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practice.

(d) An owner or operator may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.

(e)(1) After a request for determination of equivalence is received, the Administrator will publish a notice in the FEDERAL REGISTER and provide the opportunity for public hearing if the Administrator judges that the request may be approved.

(2) After notice and opportunity for public hearing, the Administrator will determine the equivalence of a means of emission limitation and will publish the determination in the FEDERAL REGISTER .

(3) Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design, or operational standard within the meaning of section 111(h)(1) of the CAA.

(f)(1) Manufacturers of equipment used to control equipment leaks of VOC may apply to the Administrator for determination of equivalence for any equivalent means of emission limitation that achieves a reduction in emissions of VOC achieved by the equipment, design, and operational requirements of this subpart.

(2) The Administrator will make an equivalence determination according to the provisions of paragraphs (b), (c), (d), and (e) of this section.

§ 60.485a Test methods and procedures.

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the standards in §§ 60.482-1a through 60.482-11a, 60.483a, and 60.484a as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 of appendix A-7 of this part. The following calibration gases shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration no more than 2,000 ppm greater than the leak definition concentration of the equipment monitored. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 ppm above the concentration specified as a leak, and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 ppm. If only one scale on an instrument will be used during monitoring, the owner or operator need not calibrate the scales that will not be used during that day's monitoring.

(2) A calibration drift assessment shall be performed, at a minimum, at the end of each monitoring day. Check the instrument using the same calibration gas(es) that were used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A-7 of this part, Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. Record the instrument reading for each scale used as specified in § 60.486a(e)(7). Calculate the average algebraic difference between the three meter readings and the most recent calibration value. Divide this algebraic difference by the initial

calibration value and multiply by 100 to express the calibration drift as a percentage. If any calibration drift assessment shows a negative drift of more than 10 percent from the initial calibration value, then all equipment monitored since the last calibration with instrument readings below the appropriate leak definition and above the leak definition multiplied by (100 minus the percent of negative drift/divided by 100) must be re-monitored. If any calibration drift assessment shows a positive drift of more than 10 percent from the initial calibration value, then, at the owner/operator's discretion, all equipment since the last calibration with instrument readings above the appropriate leak definition and below the leak definition multiplied by (100 plus the percent of positive drift/divided by 100) may be re-monitored.

(c) The owner or operator shall determine compliance with the no-detectable-emission standards in §§ 60.482-2a(e), 60.482-3a(i), 60.482-4a, 60.482-7a(f), and 60.482-10a(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 of appendix A-7 of this part shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference—see § 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d)(1) and (2) of this section shall be used to resolve the disagreement.

(e) The owner or operator shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H_2 O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference—see § 60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H_2 O at 68 °F) is equal to or greater than 20 percent by weight.

(3) The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

(g) The owner or operator shall determine compliance with the standards of flares as follows:

(1) Method 22 of appendix A-7 of this part shall be used to determine visible emissions.

(2) A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.

(3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:

$$V_{max} = K_1 + K_2 H_T$$

Where:

V_{max} = Maximum permitted velocity, m/sec (ft/sec).

H_T = Net heating value of the gas being combusted, MJ/scm (Btu/scf).

K_1 = 8.706 m/sec (metric units) = 28.56 ft/sec (English units).

K_2 = 0.7084 m^4 /(MJ-sec) (metric units) = 0.087 ft^4 /(Btu-sec) (English units).

(4) The net heating value (HT) of the gas being combusted in a flare shall be computed using the following equation:

$$H_T = K\sum_{i=1}^{n} C_i H_i$$

Where:

K = Conversion constant, 1.740 × 10^{-7} (g-mole)(MJ)/(ppm-scm-kcal) (metric units) = 4.674 × 10^{-6} [(g-mole)(Btu)/(ppm-scf-kcal)] (English units).

C_i = Concentration of sample component "i," ppm

H_i = net heat of combustion of sample component "i" at 25 °C and 760 mm Hg (77 °F and 14.7 psi), kcal/g-mole.

(5) Method 18 of appendix A-6 of this part or ASTM D6420-99 (2004) (where the target compound(s) are those listed in Section 1.1 of ASTM D6420-99, and the target concentration is between 150 parts per billion by volume and 100 ppmv) and ASTM D2504-67, 77, or 88 (Reapproved 1993) (incorporated by reference-see § 60.17) shall be used to determine the concentration of sample component "i."

(6) ASTM D2382-76 or 88 or D4809-95 (incorporated by reference-see § 60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.

(7) Method 2, 2A, 2C, or 2D of appendix A-7 of this part, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.

(h) The owner or operator shall determine compliance with § 60.483-1a or § 60.483-2a as follows:

(1) The percent of valves leaking shall be determined using the following equation:

$$\%V_L = (V_L / V_T) * 100$$

Where:

$\%V_L$ = Percent leaking valves.

V_L = Number of valves found leaking.

V_T = The sum of the total number of valves monitored.

(2) The total number of valves monitored shall include difficult-to-monitor and unsafe-to-monitor valves only during the monitoring period in which those valves are monitored.

(3) The number of valves leaking shall include valves for which repair has been delayed.

(4) Any new valve that is not monitored within 30 days of being placed in service shall be included in the number of valves leaking and the total number of valves monitored for the monitoring period in which the valve is placed in service.

(5) If the process unit has been subdivided in accordance with § 60.482-7a(c)(1)(ii), the sum of valves found leaking during a monitoring period includes all subgroups.

(6) The total number of valves monitored does not include a valve monitored to verify repair.

§ 60.486a Recordkeeping requirements.

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.

(3) The owner or operator shall record the information specified in paragraphs (a)(3)(i) through (v) of this section for each monitoring event required by §§ 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a.

(i) Monitoring instrument identification.

(ii) Operator identification.

(iii) Equipment identification.

(iv) Date of monitoring.

(v) Instrument reading.

(b) When each leak is detected as specified in §§ 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in § 60.482-7a(c) and no leak has been detected during those 2 months.

(3) The identification on a connector may be removed after it has been monitored as specified in § 60.482-11a(b)(3)(iv) and no leak has been detected during that monitoring.

(4) The identification on equipment, except on a valve or connector, may be removed after it has been repaired.

(c) When each leak is detected as specified in §§ 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak.

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

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

(4) Maximum instrument reading measured by Method 21 of appendix A-7 of this part at the time the leak is successfully repaired or determined to be nonrepairable, except when a pump is repaired by eliminating indications of liquids dripping.

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

(6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

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

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

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

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in § 60.482-10a shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in § 60.482-10a(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(4) Periods when the closed vent systems and control devices required in §§ 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a are not operated as designed, including periods when a flare pilot light does not have a flame.

(5) Dates of startups and shutdowns of the closed vent systems and control devices required in §§ 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a.

(e) The following information pertaining to all equipment subject to the requirements in §§ 60.482-1a to 60.482-11a shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of this subpart.

(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §§ 60.482-2a(e), 60.482-3a(i), and 60.482-7a(f).

(ii) The designation of equipment as subject to the requirements of § 60.482-2a(e), § 60.482-3a(i), or § 60.482-7a(f) shall be signed by the owner or operator. Alternatively, the owner or operator may establish a mechanism with their permitting authority that satisfies this requirement.

(3) A list of equipment identification numbers for pressure relief devices required to comply with § 60.482-4a.

(4)(i) The dates of each compliance test as required in §§ 60.482-2a(e), 60.482-3a(i), 60.482-4a, and 60.482-7a(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(6) A list of identification numbers for equipment that the owner or operator designates as operating in VOC service less than 300 hr/yr in accordance with § 60.482-1a(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.

(7) The date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service.

(8) Records of the information specified in paragraphs (e)(8)(i) through (vi) of this section for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of appendix A-7 of this part and § 60.485a(b).

(i) Date of calibration and initials of operator performing the calibration.

(ii) Calibration gas cylinder identification, certification date, and certified concentration.

(iii) Instrument scale(s) used.

(iv) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with section 10.1 of Method 21 of appendix A-7 of this part.

(v) Results of each calibration drift assessment required by § 60.485a(b)(2) (i.e., instrument reading for calibration at end of monitoring day and the calculated percent difference from the initial calibration value).

(vi) If an owner or operator makes their own calibration gas, a description of the procedure used.

(9) The connector monitoring schedule for each process unit as specified in § 60.482-11a(b)(3)(v).

(10) Records of each release from a pressure relief device subject to § 60.482-4a.

(f) The following information pertaining to all valves subject to the requirements of § 60.482-7a(g) and (h), all pumps subject to the requirements of § 60.482-2a(g), and all connectors subject to the requirements of § 60.482-11a(e) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves, pumps, and connectors that are designated as unsafe-to-monitor, an explanation for each valve, pump, or connector stating why the valve, pump, or connector is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector.

(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) The following information shall be recorded for valves complying with § 60.483-2a:

(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.

(h) The following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in §§ 60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and

(2) Any changes to this criterion and the reasons for the changes.

(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in § 60.480a(d):

(1) An analysis demonstrating the design capacity of the affected facility,

(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

(3) An analysis demonstrating that equipment is not in VOC service.

(j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(k) The provisions of § 60.7(b) and (d) do not apply to affected facilities subject to this subpart.

§ 60.487a Reporting requirements.

(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning 6 months after the initial startup date.

(b) The initial semiannual report to the Administrator shall include the following information:

(1) Process unit identification.

(2) Number of valves subject to the requirements of § 60.482-7a, excluding those valves designated for no detectable emissions under the provisions of § 60.482-7a(f).

(3) Number of pumps subject to the requirements of § 60.482-2a, excluding those pumps designated for no detectable emissions under the provisions of § 60.482-2a(e) and those pumps complying with § 60.482-2a(f).

(4) Number of compressors subject to the requirements of § 60.482-3a, excluding those compressors designated for no detectable emissions under the provisions of § 60.482-3a(i) and those compressors complying with § 60.482-3a(h).

(5) Number of connectors subject to the requirements of § 60.482-11a.

(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in § 60.486a:

(1) Process unit identification.

(2) For each month during the semiannual reporting period,

(i) Number of valves for which leaks were detected as described in § 60.482-7a(b) or § 60.483-2a,

(ii) Number of valves for which leaks were not repaired as required in § 60.482-7a(d)(1),

(iii) Number of pumps for which leaks were detected as described in § 60.482-2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),

(iv) Number of pumps for which leaks were not repaired as required in § 60.482-2a(c)(1) and (d)(6),

(v) Number of compressors for which leaks were detected as described in § 60.482-3a(f),

(vi) Number of compressors for which leaks were not repaired as required in § 60.482-3a(g)(1),

(vii) Number of connectors for which leaks were detected as described in § 60.482-11a(b)

(viii) Number of connectors for which leaks were not repaired as required in § 60.482-11a(d), and

(ix)-(x) [Reserved]

(xi) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to paragraph (b) of this section if changes have occurred since the initial report or subsequent revisions to the initial report.

(d) An owner or operator electing to comply with the provisions of §§ 60.483-1a or 60.483-2a shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.

(e) An owner or operator shall report the results of all performance tests in accordance with § 60.8 of the General Provisions. The provisions of § 60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

(f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a state under section 111(c) of the CAA, approves reporting requirements or an alternative means of compliance surveillance adopted by such state. In that event, affected sources within the state will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of this section, provided that they comply with the requirements established by the state.

§ 60.488a Reconstruction.

For the purposes of this subpart:

(a) The cost of the following frequently replaced components of the facility shall not be considered in calculating either the “fixed capital cost of the new components” or the “fixed capital costs that would be required to construct a comparable new facility” under § 60.15: Pump seals, nuts and bolts, rupture disks, and packings.

(b) Under § 60.15, the “fixed capital cost of new components” includes the fixed capital cost of all depreciable components (except components specified in § 60.488a(a)) which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2-year period following the applicability date for the appropriate subpart. (See the “Applicability and designation of affected facility” section of the appropriate subpart.) For purposes of this paragraph, “commenced” means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.

§ 60.489a List of chemicals produced by affected facilities.

Process units that produce, as intermediates or final products, chemicals listed in § 60.489 are covered under this subpart. The applicability date for process units producing one or more of these chemicals is November 8, 2006.

Attachment D
Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR 60, Subpart IIII]

SOURCE: 71 FR 39172, July 11, 2006, unless otherwise noted.

What This Subpart Covers

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(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.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 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 applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

Emission Standards for Manufacturers

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.

(d) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(3) Their 2013 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(e) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards and other requirements for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(f) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary non-emergency CI ICE identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 1 to 40 CFR 1042.1 identifies 40 CFR part 1042 as being applicable, 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Areas of Alaska not accessible by the Federal Aid Highway System (FAHS); and

(2) Marine offshore installations.

(g) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power, and displacement of the reconstructed stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

(c) [Reserved]

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

(e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;

(3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and

(4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power less than 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI internal combustion engines identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 2 to 40 CFR 1042.101 identifies Tier 3 standards as being applicable, the requirements applicable to Tier 3 engines in 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Areas of Alaska not accessible by the FAHS; and

(2) Marine offshore installations.

(h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

§ 60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§ 60.4201 and 60.4202 during the certified emissions life of the engines.

[76 FR 37968, June 28, 2011]

Emission Standards for Owners and Operators

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart.

Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in § 60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hr (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm);

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) For engines installed on or after January 1, 2016, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $9.0 \cdot n^{-0.20}$ g/KW-hr ($6.7 \cdot n^{-0.20}$ g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and

(iii) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.

(4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

(d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in § 60.4212.

(e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in § 60.4212.

(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engine.

[76 FR 37969, June 28, 2011]

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(c) [Reserved]

(d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder are no longer subject to the requirements of paragraph (a) of this section, and must use fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).

(e) Stationary CI ICE that have a national security exemption under § 60.4200(d) are also exempt from the fuel requirements in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.

(h) In addition to the requirements specified in §§ 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in § 60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

Compliance Requirements

§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in § 60.4201(a) through (c) and § 60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in § 60.4201(d) and (e) and § 60.4202(e) and (f) using the certification procedures required in 40 CFR part 94, subpart C, or 40 CFR part 1042, subpart C, as applicable, and must test their engines as specified in 40 CFR part 94 or 1042, as applicable.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89, 40 CFR part 94 or 40 CFR part 1042 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate, but the words “stationary” must be included instead of “nonroad” or “marine” on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR parts 89, 94, 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.

(e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words “and stationary” after the word “nonroad” or “marine,” as appropriate, to the label.

(f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in § 60.4202 but does not meet all the

emission standards for non-emergency engines in § 60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as “Fire Pump Applications Only”.

(h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §§ 60.4201 or 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§ 60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in § 60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(b) or § 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must comply by purchasing an engine certified to the emission standards in § 60.4204(b), or § 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

(d) If you are an owner or operator and must comply with the emission standards specified in § 60.4204(c) or § 60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in § 60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

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

(iii) 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;

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

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

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in § 60.4213.

(e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(e) or § 60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in § 60.4204(e) or § 60.4205(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in § 60.4212 or § 60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

(f) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the

manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. 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 ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

(2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011]

Testing Requirements for Owners and Operators

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \qquad \text{(Eq. 1)}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in § 60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in § 60.4204(a), § 60.4205(a), or § 60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in § 60.4204(a), § 60.4205(a), or § 60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in § 60.4204(a), § 60.4205(a), or § 60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in § 60.4204(a), § 60.4205(a), or § 60.4205(c) may follow the testing procedures specified in § 60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted according to the requirements in § 60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in § 60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 2)}$$

Where:

C_i = concentration of NO_X or PM at the control device inlet,

C_o = concentration of NO_X or PM at the control device outlet, and

R = percent reduction of NO_X or PM emissions.

(2) You must normalize the NO_X or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \%\ O_2} \qquad \text{(Eq. 3)}$$

Where:

C_{adj} = Calculated NO_X or PM concentration adjusted to 15 percent O_2 .

C_d = Measured concentration of NO_X or PM, uncorrected.

5.9 = 20.9 percent O_2 −15 percent O_2 , the defined O_2 correction value, percent.

$\%O_2$ = Measured O_2 concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(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:

$$F_o = \frac{0.209_{Fd}}{F_c} \qquad \text{(Eq. 4)}$$

Where:

F_o = Fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O_2 , percent/100.

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

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3 /J ($dscf/10^6$ Btu).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2 , as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 5)}$$

Where:

X_{CO2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O_2 −15 percent O_2 , the defined O_2 correction value, percent.

(iii) Calculate the NO_X and PM gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \qquad \text{(Eq. 6)}$$

Where:

C_{adj} = Calculated NO_X or PM concentration adjusted to 15 percent O_2 .

C_d = Measured concentration of NO_X or PM, uncorrected.

$\%CO_2$ = Measured CO_2 concentration, dry basis, percent.

(e) To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{\text{KW-hour}} \qquad \text{(Eq. 7)}$$

Where:

ER = Emission rate in grams per KW-hour.

C_d = Measured NO_X concentration in ppm.

$1.912x10^{-3}$ = Conversion constant for ppm NO_X to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{KW\text{-}hour} \quad (Eq. 8)$$

Where:

ER = Emission rate in grams per KW-hour.

C_{adj} = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

Notification, Reports, and Records for Owners and Operators

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in § 60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

Special Requirements

§ 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

(a) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §§ 60.4202 and 60.4205.

(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in § 60.4207.

(c) Stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the following emission standards:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§ 60.4216 What requirements must I meet for engines used in Alaska?

(a) Prior to December 1, 2010, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder located in areas of Alaska not accessible by the FAHS should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.

(b) Except as indicated in paragraph (c) of this section, manufacturers, owners and operators of stationary CI ICE with a displacement of less than 10 liters per cylinder located in areas of Alaska not accessible by the FAHS may meet the requirements of this subpart by manufacturing and installing engines meeting the requirements of 40 CFR parts 94 or 1042, as appropriate, rather than the otherwise applicable requirements of 40 CFR parts 89 and 1039, as indicated in sections §§ 60.4201(f) and 60.4202(g) of this subpart.

(c) Manufacturers, owners and operators of stationary CI ICE that are located in areas of Alaska not accessible by the FAHS may choose to meet the applicable emission standards for emergency engines in § 60.4202 and § 60.4205, and not those for non-emergency engines in § 60.4201 and § 60.4204, except that for 2014 model year and later non-emergency CI ICE, the owner or operator of any such engine that was not certified as meeting Tier 4 PM standards, must meet the applicable requirements for PM in § 60.4201 and § 60.4204 or install a PM emission control device that achieves PM emission reductions of 85 percent, or 60 percent for engines with a displacement of greater than or equal to 30 liters per cylinder, compared to engine-out emissions.

(d) The provisions of § 60.4207 do not apply to owners and operators of pre-2014 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS.

(e) The provisions of § 60.4208(a) do not apply to owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS until after December 31, 2009.

(f) The provisions of this section and § 60.4207 do not prevent owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS from using fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel. The sulfur content of the used lubricating oil must be less than 200 parts per million. The used lubricating oil must meet the on-specification levels and properties for used oil in 40 CFR 279.11.

[76 FR 37971, June 28, 2011]

§ 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

Owners and operators of stationary CI ICE that do not use diesel fuel may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in § 60.4204 or § 60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

[76 FR 37972, June 28, 2011]

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

Definitions

§ 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of

operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

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

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

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 number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE 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 ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new

stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means the calendar year in which an engine is manufactured (see “date of manufacture”), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see “date of manufacture”), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see “date of manufacture”).

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas 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 internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011]

Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in §§ 60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007-2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC + NO_X	HC	NO_X	CO	PM
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75 (75≤HP<100)			9.2 (6.9)		
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in § 60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model year(s)	NO_X+ NMHC	CO	PM
KW<8 (HP<11)	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

TABLE 3 TO SUBPART IIII OF PART 60—CERTIFICATION REQUIREMENTS FOR STATIONARY FIRE PUMP ENGINES

As stated in § 60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to § 60.4202(d)[1]
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

[1]Manufacturers of fire pump stationary CI ICE with a maximum engine power greater than or equal to 37 kW (50 HP) and less than 450 KW (600 HP) and a rated speed of greater than 2,650 revolutions per minute (rpm) are not required to certify such engines until three model years following the model year indicated in this Table 3 for engines in the applicable engine power category.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011]

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§ 60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NO_X	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011+	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011+	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011+	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+ [1]	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+ [1]	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)

Maximum engine power	Model year(s)	NMHC + NO_X	CO	PM
	2010+ [2]	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ [3]	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ [3]	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008+	6.4 (4.8)		0.20 (0.15)

[1] For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

[2] For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

[3] In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in § 60.4210(f) and the recordkeeping requirements in § 60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

[As stated in § 60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed [1]	Torque (percent) [2]	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

[1] Engine speed: ±2 percent of point.

[2] Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥ 30 Liters per Cylinder

[As stated in § 60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥ 30 liters per cylinder:]

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of ≥ 30 liters per cylinder	a. Reduce NO_X emissions by 90 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_X concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO_X concentration.
		iv. Measure NO_X at the inlet and outlet of the control device	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(d) NO_X concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of NO_X in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		ii. Determine the O_2concentration of the stationary internal combustion engine exhaust at the sampling port location; and,	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurement for NO_Xconcentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurement for NO_Xconcentration.
		iv. Measure NO_Xat the exhaust of the stationary internal combustion engine	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(d) NO_Xconcentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the inlet and outlet of the control device	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

For each	Complying with the requirement to	You must	Using	According to the following requirements
	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2concentration of the stationary internal combustion engine exhaust at the sampling port location; and	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in § 60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1	General applicability of the General Provisions	Yes	
§ 60.2	Definitions	Yes	Additional terms defined in § 60.4219.
§ 60.3	Units and abbreviations	Yes	
§ 60.4	Address	Yes	
§ 60.5	Determination of construction or modification	Yes	
§ 60.6	Review of plans	Yes	
§ 60.7	Notification and Recordkeeping	Yes	Except that § 60.7 only applies as specified in § 60.4214(a).

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.8	Performance tests	Yes	Except that § 60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§ 60.9	Availability of information	Yes	
§ 60.10	State Authority	Yes	
§ 60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§ 60.12	Circumvention	Yes	
§ 60.13	Monitoring requirements	Yes	Except that § 60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§ 60.14	Modification	Yes	
§ 60.15	Reconstruction	Yes	
§ 60.16	Priority list	Yes	
§ 60.17	Incorporations by reference	Yes	
§ 60.18	General control device requirements	No	
§ 60.19	General notification and reporting requirements	Yes	

Attachment E
National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR 60, Subpart ZZZZ]

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.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

§ 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.

(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;

(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;

(vi) Existing residential emergency stationary RICE located at an area source of HAP emissions;

(vii) Existing commercial emergency stationary RICE located at an area source of HAP emissions; or

(viii) Existing institutional emergency stationary RICE located at an area source of HAP emissions.

(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]

§ 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 and operating limitations 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 and operating limitations 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 and operating limitations 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]

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 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 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.

[75 FR 51589, Aug. 20, 2010]

§ 63.6603 What emission limitations and operating limitations 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 1b and Table 2b to this subpart that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.

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

§ 63.6604 What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

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. Existing non-emergency CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or at area sources in areas of Alaska not accessible by the FAHS are exempt from the requirements of this section.

[75 FR 51589, Aug. 20, 2010]

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 and operating limitations 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]

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.

(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.

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

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

Where:

C_i = concentration of CO or formaldehyde at the control device inlet,

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

R = percent reduction of CO or formaldehyde emissions.

(2) You must normalize the carbon monoxide (CO) 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 (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the 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:

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

Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate 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, dsm^3 /J (dscf/10^6 Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{co_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$$

Where:

X_{co2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O_2 −15 percent O_2 , the defined O_2 correction value, percent.

(iii) Calculate the NO_X and SO_2 gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2} \qquad \text{(Eq. 4)}$$

Where:

$\%CO_2$ = Measured CO_2 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]

§ 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 oxygen or CO_2 at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

(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_2 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 (5) 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) 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 landfill or digester gas stationary RICE located at an area source of HAP emissions;

(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 (g)(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 not accessible by the FAHS do not have to meet the requirements of paragraph (g) of this section.

(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 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 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 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 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]

§ 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) You must demonstrate initial compliance with each emission and operating limitation 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.

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 and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation 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) [Reserved]

(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) *Requirements for emergency stationary RICE.* (1) 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, 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 was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

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

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. 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 year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving 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; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

(2) If you own or operate an emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed prior to June 12, 2006, you must operate the engine according to the conditions described in paragraphs (f)(2)(i) through (iii) of this section. If you do not operate the engine according to the requirements in paragraphs (f)(2)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

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

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance.

(iii) You may operate your emergency stationary RICE for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving 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.

[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]

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).

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

§ 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.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010]

§ 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) or (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 engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

(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]

§ 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:

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.

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 or 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_2 .

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 internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. 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.* Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationary RICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under § 63.6640(f). 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.

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_2 .

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_X) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_X , CO, and volatile organic compounds (VOC) into CO_2 , 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_3H_8 .

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_X (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 PPPPP 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]

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.[1]
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2	

[1]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 Spark Ignition 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions and Existing Spark Ignition 4SRB Stationary RICE >500 HP Located at an Area 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 and existing 4SRB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

For each . . .	You must meet the following operating limitation . . .
1. 4SRB stationary RICE 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 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O2 and using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O2 and using NSCR.	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 less than or equal to 1250 °F.

For each . . .	You must meet the following operating limitation . . .
2. 4SRB stationary RICE 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 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O2 and not using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O2 and not using NSCR.	Comply with any operating limitations approved by the Administrator.

[76 FR 12867, Mar. 9, 2011]

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_2. 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_2until 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.[1]
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_2	
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_2	

[1] 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 Compression Ignition 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 Compression Ignition Stationary RICE >500 HP, and Existing 4SLB Stationary RICE >500 HP Located at an Area Source of HAP Emissions**

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 compression ignition stationary RICE 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 compression ignition stationary RICE >500 HP; and existing 4SLB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

For each . . .	**You must meet the following operating limitation . . .**
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit 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 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.[1]
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst	Comply with any operating limitations approved by the Administrator.

[1] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

[75 FR 51593, Aug. 20, 2010, as amended at 76 FR 12867, Mar. 9, 2011]

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:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency stationary CI RICE and black start stationary CI RICE. [1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; [2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	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.[3]
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; [2]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
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_2	
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_2; or	
	b. Reduce CO emissions by 70 percent or more.	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
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_2; or	
	b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE.[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; [2]	
	b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
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; [2]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
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; [2]	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first;	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
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_2	
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_2	
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_2	
12. Non-emergency, non-black start landfill or digester gas-fired stationary RICE 100 ≤ HP ≤ 500	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O_2	

[1] 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.

[2] 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 in Table 2c of this subpart.

[3] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 51593, Aug. 20, 2010]

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; [1]	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.
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
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_2; 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_2; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; [1]	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; 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.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; [1] b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; 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; [1]	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
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; [1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; 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 stationary RICE > 500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 93 percent or more.	
9. 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; [1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
10. Non-emergency, non-black start 4SRB stationary RICE > 500 HP	a. Limit concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd at 15 percent O_2; or	
	b. Reduce formaldehyde emissions by 76 percent or more.	
11. Non-emergency, non-black start landfill or digester gas-fired stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; [1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

[1] 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 in Table 2d of this subpart.

[2] 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.

[75 FR 51595, Aug. 20, 2010]

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:

For each . . .	Complying with the requirement to . . .	You must . . .
1. New or reconstructed 2SLB stationary RICE with a brake horsepower > 500 located at major sources; new or reconstructed 4SLB stationary RICE with a brake horsepower ≥ 250 located at major sources; and new or reconstructed CI stationary RICE with a brake horsepower > 500 located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually.[1]
2. 4SRB stationary RICE with a brake horsepower ≥ 5,000 located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually.[1]
3. Stationary RICE with a brake horsepower > 500 located at major sources and new or reconstructed 4SLB stationary RICE with a brake horsepower 250 ≤ HP ≤ 500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually.[1]
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower > 500 that are not limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower > 500 that are operated more than 24 hours per calendar year that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower > 500 that are limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower > 500 that are operated more than 24 hours per calendar year and are limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 5 years, whichever comes first.

[1] 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.

[75 FR 51596, Aug. 20, 2010]

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:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE	a. Reduce CO emissions	i. Measure the O_2 at the inlet and outlet of the control device; and	(1) Portable CO and O_2 analyzer	(a) Using ASTM D6522-00 (2005) [a] (incorporated by reference, see § 63.14). Measurements to determine O_2 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) Portable CO and O_2 analyzer	(a) Using ASTM D6522-00 (2005) [a] [b] (incorporated by reference, see § 63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O_2, 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_2 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 D6522-00m (2005)	(a) Measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde 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	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. 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, [c] 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_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
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_2concentration 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 (2005)	(a) Measurements to determine O_2concentration must be made at the same time and location as the measurements for formaldehyde 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	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde 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,[c]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_2, 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),[a]Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03	(a) CO Concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour longer runs.

[a] You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM-D6522-00 (2005) may be used to test both CI and SI stationary RICE.

[b] You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

[c] You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[75 FR 51597, Aug. 20, 2010]

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

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:

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
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, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	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.
2. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS	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 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.

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
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, non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce CO emissions and not using oxidation catalyst	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.
4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Limit the concentration of CO, and not using oxidation catalyst	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 iii. You have recorded the approved operating parameters (if any) during the initial performance test.
5. 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, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2or CO_2at 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 iii. The average reduction of CO calculated using § 63.6620 equals or 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.

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Limit the concentration of CO, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2or CO_2at 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, and existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	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; 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, and existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	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; 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.

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
9. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Limit the concentration of formaldehyde and not using NSCR	i. The average formaldehyde concentration determined from the initial performance test 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.
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	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_2, 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.
11. 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	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_2, 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.

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
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. Reduce CO or formaldehyde 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.
13. 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_2, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

[76 FR 12867, Mar. 9, 2011]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

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:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
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; [a]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.

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
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; [a]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, existing non-emergency stationary CI RICE >500 HP, existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		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.[a]
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; [a]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.

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
8. 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 not 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; [a]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.
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <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 landfill or digester gas stationary SI RICE located at an area source of HAP, 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 >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	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.
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using oxidation catalyst or NSCR	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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		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, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR	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 and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using an oxidation catalyst or NSCR	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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		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 and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using an oxidation catalyst or NSCR	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.

[a] 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.

[76 FR 12870, Mar. 9, 2011]

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 ...
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 > 500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE > 500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE > 300 HP located at an area source of HAP; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE > 500 HP located at an area source of HAP and operated more than 24 hours per calendar year; 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	Compliance report	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 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 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)(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. i. Semiannually according to the requirements in § 63.6650(b). 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.

[75 FR 51603, Aug. 20, 2010]

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.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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	Yes.	
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes.	
§ 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.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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 new sources	Yes	Except that § 63.9(d) only applies as specified in § 63.6645.
§ 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.

General provisions citation	Subject of citation	Applies to subpart	Explanation
		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.	
§ 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.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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]

Attachment F
National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities [40 CFR 63, Subpart CCCCCC]

SOURCE: 73 FR 1945, Jan. 10, 2008, unless otherwise noted.

What This Subpart Covers

§ 63.11110 What is the purpose of this subpart?

This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

§ 63.11111 Am I subject to the requirements in this subpart?

(a) The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

(b) If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in § 63.11116.

(c) If your GDF has a monthly throughput of 10,000 gallons of gasoline or more, you must comply with the requirements in § 63.11117.

(d) If your GDF has a monthly throughput of 100,000 gallons of gasoline or more, you must comply with the requirements in § 63.11118.

(e) An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or reconstructed affected sources, as specified in § 63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in § 63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this subpart only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years.

(f) If you are an owner or operator of affected sources, as defined in paragraph (a) of this section, you are not required 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 must still 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 71.3(a) and (b).

(g) 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.

(h) Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source.

(i) If your affected source's throughput ever exceeds an applicable throughput threshold, 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.

(j) The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to § 63.11116 of this subpart.

(k) 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 § 63.11124. 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, and 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.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4181, Jan. 24, 2011]

§ 63.11112 What parts of my affected source does this subpart cover?

(a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in § 63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by 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 § 63.11111 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.

§ 63.11113 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, except as specified in paragraph (d) 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 monthly throughput, as specified in § 63.11111(c) or § 63.11111(d), 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.

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

(1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008.

(2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.

(e) The initial compliance demonstration test required under § 63.11120(a)(1) and (2) must be conducted as specified in paragraphs (e)(1) and (2) of this section.

(1) If you have a new or reconstructed affected source, you must conduct the initial compliance test upon installation of the complete vapor balance system.

(2) If you have an existing affected source, you must conduct the initial compliance test as specified in paragraphs (e)(2)(i) or (e)(2)(ii) of this section.

(i) For vapor balance systems installed on or before December 15, 2009, you must test no later than 180 days after the applicable compliance date specified in paragraphs (b) or (c) of this section.

(ii) For vapor balance systems installed after December 15, 2009, you must test upon installation of the complete vapor balance system.

(f) If your GDF is subject to the control requirements in this subpart only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must comply with the standards in this subpart as specified in paragraphs (f)(1) or (f)(2) of this section.

(1) If your GDF is an existing facility, you must comply by January 24, 2014.

(2) If your GDF is a new or reconstructed facility, you must comply by the dates specified in paragraphs (f)(2)(i) and (ii) of this section.

(i) If you start up your GDF after December 15, 2009, but before January 24, 2011, you must comply no later than January 24, 2011.

(ii) If you start up your GDF after January 24, 2011, you must comply upon startup of your GDF.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4181, Jan. 24, 2011]

Emission Limitations and Management Practices

§ 63.11115 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 § 63.11125(d) and § 63.11126(b).

[76 FR 4182, Jan. 24, 2011]

§ 63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

(a) 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.

(b) You are not required to submit notifications or reports as specified in § 63.11125, § 63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(c) You must comply with the requirements of this subpart by the applicable dates specified in § 63.11113.

(d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

§ 63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.

(a) You must comply with the requirements in section § 63.11116(a).

(b) Except as specified in paragraph (c) of this section, you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in § 63.11132, and as specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section. The applicable distances in paragraphs (b)(1) and (2) 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 (b)(1) or (b)(2) of this section are allowed if the owner or operator can demonstrate that the liquid level in the 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.

(c) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in paragraph (b) of this section, but must comply only with all of the requirements in § 63.11116.

(d) You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(e) You must submit the applicable notifications as required under § 63.11124(a).

(f) You must comply with the requirements of this subpart by the applicable dates contained in § 63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

§ 63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.

(a) You must comply with the requirements in §§ 63.11116(a) and 63.11117(b).

(b) Except as provided in paragraph (c) of this section, you must meet the requirements in either paragraph (b)(1) or paragraph (b)(2) of this section.

(1) Each management practice in Table 1 to this subpart that applies to your GDF.

(2) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(2)(i) and (ii) of this section, you will be deemed in compliance with this subsection.

(i) You operate a vapor balance system at your GDF that meets the requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(c) The emission sources listed in paragraphs (c)(1) through (3) of this section are not required to comply with the control requirements in paragraph (b) of this section, but must comply with the requirements in § 63.11117.

(1) Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008.

(2) Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.

(3) Gasoline storage tanks equipped with floating roofs, or the equivalent.

(d) Cargo tanks unloading at GDF must comply with the management practices in Table 2 to this subpart.

(e) You must comply with the applicable testing requirements contained in § 63.11120.

(f) You must submit the applicable notifications as required under § 63.11124.

(g) You must keep records and submit reports as specified in §§ 63.11125 and 63.11126.

(h) You must comply with the requirements of this subpart by the applicable dates contained in § 63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008]

Testing and Monitoring Requirements

§ 63.11120 What testing and monitoring requirements must I meet?

(a) Each owner or operator, at the time of installation, as specified in § 63.11113(e), of a vapor balance system required under § 63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP-201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see § 63.14).

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

(2) You must demonstrate compliance with the static pressure performance requirement specified in item 1(h) of Table 1 to this subpart for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in paragraphs (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP-201.3,—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see § 63.14).

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

(iii) Bay Area Air Quality Management District Source Test Procedure ST-30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994 (incorporated by reference, *see* § 63.14).

(b) Each owner or operator choosing, under the provisions of § 63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator or delegated authority under paragraph § 63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in paragraphs (b)(1) through (3) of this section.

(1) You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP-201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, see § 63.14).

(2) You must, during the initial performance test required under paragraph (b)(1) of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart.

(3) You must comply with the testing requirements specified in paragraph (a) of this section.

(c) 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.

(d) Owners and operators of gasoline cargo tanks subject to the provisions of Table 2 to this subpart must conduct annual certification testing according to the vapor tightness testing requirements found in § 63.11092(f).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

Notifications, Records, and Reports

§ 63.11124 What notifications must I submit and when?

(a) Each owner or operator subject to the control requirements in § 63.11117 must comply with paragraphs (a)(1) through (3) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in § 63.11117, unless you meet the requirements in paragraph (a)(3) of this section. If your affected source is subject to the control requirements in § 63.11117 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (a)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in § 63.13.

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

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of § 63.11117 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in § 63.13, within 60 days of the applicable compliance date specified in § 63.11113, unless you meet the requirements in paragraph (a)(3) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facilities' monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (a)(1) 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 (a)(1) of this section.

(3) 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 § 63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (a)(1) or paragraph (a)(2) of this section.

(b) Each owner or operator subject to the control requirements in § 63.11118 must comply with paragraphs (b)(1) through (5) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in § 63.11118. If your affected source is subject to the control requirements in § 63.11118 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (b)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in § 63.13.

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

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of § 63.11118 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in § 63.13, in accordance with the schedule specified in § 63.9(h).

The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facility's throughput is determined based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (b)(1) 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 (b)(1) of this section.

(3) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(3)(i) and (ii) of this section, you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (b)(1) or paragraph (b)(2) of this subsection.

(i) You operate a vapor balance system at your gasoline dispensing facility that meets the requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(4) You must submit a Notification of Performance Test, as specified in § 63.9(e), prior to initiating testing required by § 63.11120(a) and (b).

(5) You must submit additional notifications specified in § 63.9, as applicable.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

§ 63.11125 What are my recordkeeping requirements?

(a) Each owner or operator subject to the management practices in § 63.11118 must keep records of all tests performed under § 63.11120(a) and (b).

(b) Records required under paragraph (a) of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit.

(c) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in § 63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either paragraph (c)(1) or paragraph (c)(2) of this section.

(1) The owner or operator must keep all vapor tightness testing records with the cargo tank.

(2) As an alternative to keeping all records with the cargo tank, the owner or operator may comply with the requirements of paragraphs (c)(2)(i) and (ii) of this section.

(i) The owner or operator may keep records of only the most recent vapor tightness test with the cargo tank, and keep records for the previous 4 years at their office or another central location.

(ii) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (*e.g.,* via e-mail or facsimile) to the Administrator's delegated representative during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures.

(d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(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 § 63.11115(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 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

§ 63.11126 What are my reporting requirements?

(a) Each owner or operator subject to the management practices in § 63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under § 63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing.

(b) Each owner or operator of an affected source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year 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 § 63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

[76 FR 4183, Jan. 24, 2011]

Other Requirements and Information

§ 63.11130 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions apply to you.

§ 63.11131 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 contained 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 (3) of this section.

(1) Approval of alternatives to the requirements in §§ 63.11116 through 63.11118 and 63.11120.

(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 recordkeeping and reporting under § 63.10(f), as defined in § 63.90, and as required in this subpart.

§ 63.11132 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), or in subparts A and BBBBBB of this part. For purposes of this subpart, definitions in this section supersede definitions in other parts or subparts.

Dual-point vapor balance system means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

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 or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load.

Gasoline dispensing facility (GDF) means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

Monthly throughput means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

Motor vehicle means any self-propelled vehicle designed for transporting persons or property on a street or highway.

Nonroad engine means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 of this title or section 7521 of this title.

Nonroad vehicle means a vehicle that is powered by a nonroad engine, and that is not a motor vehicle or a vehicle used solely for competition.

Submerged filling means, for the purposes of this subpart, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in § 63.11117(b) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

Vapor balance system means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

Vapor-tight means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

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) of this part.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More[1]

If you own or operate	Then you must
1. A new, reconstructed, or existing GDF subject to § 63.11118	Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).
	(a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
	(b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in § 63.11132.
	(c) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
	(d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
	(e) If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in § 63.11117(b).
	(f) Liquid fill connections for all systems shall be equipped with vapor-tight caps.
	(g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.
	(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation:
	$Pf = 2e^{-500.887/v}$
	Where:
	Pf = Minimum allowable final pressure, inches of water.
	v = Total ullage affected by the test, gallons.
	e = Dimensionless constant equal to approximately 2.718.
	2 = The initial pressure, inches water.
2. A new or reconstructed GDF, or any storage tank(s) constructed after November 9, 2006, at an existing affected facility subject to § 63.11118	Equip your gasoline storage tanks with a dual-point vapor balance system, as defined in § 63.11132, and comply with the requirements of item 1 in this Table.

[1] The management practices specified in this Table are not applicable if you are complying with the requirements in § 63.11118(b)(2), except that if you are complying with the requirements in

§ 63.11118(b)(2)(i)(B), you must operate using management practices at least as stringent as those listed in this Table.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4184, Jan. 24, 2011]

Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

If you own or operate	Then you must
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:
	(i) All hoses in the vapor balance system are properly connected,
	(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,
	(iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight,
	(iv) All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and
	(v) All hatches on the tank truck are closed and securely fastened.
	(vi) The filling of storage tanks at GDF shall be limited to unloading from vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be carried with the cargo tank, as specified in § 63.11125(c).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes, specific requirements given in § 63.11111.
§ 63.1(c)(2)	Title V Permit	Requirements for obtaining a title V permit from the applicable permitting authority	Yes, § 63.11111(f) of subpart CCCCCC 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 § 63.11132.
§ 63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§ 63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, severability	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes, except that these notifications are not required for facilities subject to § 63.11116
§ 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, § 63.11113 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* § 63.11115 for general duty requirement.
63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	Owner or operator must correct malfunctions as soon as possible.	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 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/Visible Emission (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.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.6(h)(7)(ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test	No.
§ 63.6(h)(7)(iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.
§ 63.6(h)(7)(iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to § 63.8(e); COMS are properly maintained and operated according to § 63.8(c) and data quality as § 63.8(d)	No.
§ 63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	No.
§ 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.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 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)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§ 63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§ 63.7(b)(2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
§ 63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§ 63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
63.7(e)(1)	Conditions for Conducting Performance Tests	Performance test must be conducted under representative conditions	No, § 63.11120(c) 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.
§ 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.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes.
§ 63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§ 63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§ 63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§ 63.8(a)(3)	[Reserved]		
§ 63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in § 63.11 apply	Yes.
§ 63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§ 63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	No.
§ 63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	No.
§ 63.8(c)(1)(i)-(iii)	Operation and Maintenance of Continuous Monitoring Systems (CMS)	Must maintain and operate each CMS as specified in § 63.6(e)(1); must keep parts for routine repairs readily available; must develop a written SSM plan for CMS, as specified in § 63.6(e)(3)	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 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	No.
§ 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	No.
§ 63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	No.
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system (CEMS)	No.
§ 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	No.
§ 63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§ 63.9(b)(1)-(2), (4)-(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
§ 63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes.
§ 63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§ 63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§ 63.9(g)	Additional Notifications when Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative	Yes, however, there are no opacity standards.
§ 63.9(h)(1)-(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.
§ 63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.
§ 63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§ 63.10(a)	Recordkeeping/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)	Recordkeeping/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* § 63.11125(d) 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 during SSM	No.
§ 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	No.
§ 63.10(b)(2)(xii)	Records	Records when under waiver	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 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* § 63.11126(b) 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; two-three copies of COMS performance evaluation	No.
§ 63.10(e)(3)(i)-(iii)	Reports	Schedule for reporting excess emissions	No.
§ 63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§ 63.8(c)(7)-(8) and 63.10(c)(5)-(13)	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§ 63.8(c)(7)-(8) and 63.10(c)(5)-(13)	No, § 63.11130(K) specifies excess emission events for this subpart.
§ 63.10(e)(3)(vi)-(viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS; requires all of the information in §§ 63.10(c)(5)-(13) and 63.8(c)(7)-(8)	No.
§ 63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
§ 63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§ 63.11(b)	Flares	Requirements for flares	No.
§ 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 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

Attachment G

National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing [40 CFR 63, Subpart FFFF]

[Downloaded from the eCFR on June 6, 2013]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

Source: 68 FR 63888, Nov. 10, 2003, unless otherwise noted.

What This Subpart Covers

§ 63.2430 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous organic chemical manufacturing. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits, operating limits, and work practice standards.

§ 63.2435 Am I subject to the requirements in this subpart?

(a) You are subject to the requirements in this subpart if you own or operate miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source of hazardous air pollutants (HAP) emissions as defined in section 112(a) of the Clean Air Act (CAA).

(b) An MCPU includes equipment necessary to operate a miscellaneous organic chemical manufacturing process, as defined in § 63.2550, that satisfies all of the conditions specified in paragraphs (b)(1) through (3) of this section. An MCPU also includes any assigned storage tanks and transfer racks; equipment in open systems that is used to convey or store water having the same concentration and flow characteristics as wastewater; and components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used to manufacture any material or family of materials described in paragraphs (b)(1)(i) through (v) of this section.

(1) The MCPU produces material or family of materials that is described in paragraph (b)(1)(i), (ii), (iii), (iv), or (v) of this section.

(i) An organic chemical(s) classified using the 1987 version of SIC code 282, 283, 284, 285, 286, 287, 289, or 386, except as provided in paragraph (c)(5) of this section.

(ii) An organic chemical(s) classified using the 1997 version of NAICS code 325, except as provided in paragraph (c)(5) of this section.

(iii) Quaternary ammonium compounds and ammonium sulfate produced with caprolactam.

(iv) Hydrazine.

(v) Organic solvents classified in any of the SIC or NAICS codes listed in paragraph (b)(1)(i) or (ii) of this section that are recovered using nondedicated solvent recovery operations.

(2) The MCPU processes, uses, or generates any of the organic HAP listed in section 112(b) of the CAA or hydrogen halide and halogen HAP, as defined in § 63.2550.

(3) The MCPU is not an affected source or part of an affected source under another subpart of this part 63, except for process vents from batch operations within a chemical manufacturing process unit (CMPU), as identified in

§ 63.100(j)(4). For this situation, the MCPU is the same as the CMPU as defined in § 63.100, and you are subject only to the requirements for batch process vents in this subpart.

(c) The requirements in this subpart do not apply to the operations specified in paragraphs (c)(1) through (7) of this section.

(1) Research and development facilities, as defined in section 112(c)(7) of the CAA.

(2) The manufacture of ammonium sulfate as a by-product, if the slurry entering the by-product manufacturing process contains 50 parts per million by weight (ppmw) HAP or less or 10 ppmw benzene or less. You must retain information, data, and analysis to document the HAP concentration in the entering slurry in order to claim this exemption.

(3) The affiliated operations located at an affected source under subparts GG (National Emission Standards for Aerospace Manufacturing and Rework Facilities), KK (National Emission Standards for the Printing and Publishing Industry), JJJJ (NESHAP: Paper and Other Web Coating), future MMMM (NESHAP: Surface Coating of Miscellaneous Metal Parts and Products), and SSSS (NESHAP: Surface Coating of Metal Coil) of this part 63. Affiliated operations include, but are not limited to, mixing or dissolving of coating ingredients; coating mixing for viscosity adjustment, color tint or additive blending, or pH adjustment; cleaning of coating lines and coating line parts; handling and storage of coatings and solvent; and conveyance and treatment of wastewater.

(4) Fabricating operations (such as spinning or compressing a solid polymer into its end use); compounding operations (in which blending, melting, and resolidification of a solid polymer product occur for the purpose of incorporating additives, colorants, or stabilizers); and extrusion and drawing operations (converting an already produced solid polymer into a different shape by melting or mixing the polymer and then forcing it or pulling it through an orifice to create an extruded product). An operation is not exempt if it involves processing with HAP solvent or if an intended purpose of the operation is to remove residual HAP monomer.

(5) Production activities described using the 1997 version of NAICS codes 325131, 325181, 325188 (except the requirements do apply to hydrazine), 325314, 325991 (except the requirements do apply to reformulating plastics resins from recycled plastics products), and 325992 (except the requirements do apply to photographic chemicals).

(6) Tall oil recovery systems.

(7) Carbon monoxide production.

(d) If the predominant use of a transfer rack loading arm or storage tank (including storage tanks in series) is associated with a miscellaneous organic chemical manufacturing process, and the loading arm or storage tank is not part of an affected source under a subpart of this part 63, then you must assign the loading arm or storage tank to the MCPU for that miscellaneous organic chemical manufacturing process. If the predominant use cannot be determined, then you may assign the loading arm or storage tank to any MCPU that shares it and is subject to this subpart. If the use varies from year to year, then you must base the determination on the utilization that occurred during the year preceding November 10, 2003 or, if the loading arm or storage tank was not in operation during that year, you must base the use on the expected use for the first 5-year period after startup. You must include the determination in the notification of compliance status report specified in § 63.2520(d). You must redetermine the primary use at least once every 5 years, or any time you implement emissions averaging or pollution prevention after the compliance date.

(e) For nondedicated equipment used to create at least one MCPU, you may elect to develop process unit groups (PUG), determine the primary product of each PUG, and comply with the requirements of the subpart in 40 CFR part 63 that applies to that primary product as specified in § 63.2535(l).

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40331, July 14, 2006]

§ 63.2440 What parts of my plant does this subpart cover?

(a) This subpart applies to each miscellaneous organic chemical manufacturing affected source.

(b) The miscellaneous organic chemical manufacturing affected source is the facilitywide collection of MCPU and heat exchange systems, wastewater, and waste management units that are associated with manufacturing materials described in § 63.2435(b)(1).

(c) A new affected source is described by either paragraph (c)(1) or (2) of this section.

(1) Each affected source defined in paragraph (b) of this section for which you commenced construction or reconstruction after April 4, 2002, and you meet the applicability criteria at the time you commenced construction or reconstruction.

(2) Each dedicated MCPU that has the potential to emit 10 tons per year (tpy) of any one HAP or 25 tpy of combined HAP, and you commenced construction or reconstruction of the MCPU after April 4, 2002. For the purposes of this paragraph, an MCPU is an affected source in the definition of the term “reconstruction” in § 63.2.

(d) An MCPU that is also a CMPU under § 63.100 is reconstructed for the purposes of this subpart if, and only if, the CMPU meets the requirements for reconstruction in § 63.100(l)(2).

Compliance Dates

§ 63.2445 When do I have to comply with this subpart?

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

(1) If you startup your new affected source before November 10, 2003, then you must comply with the requirements for new sources in this subpart no later than November 10, 2003.

(2) If you startup your new affected source after November 10, 2003, then you must comply with the requirements for new sources in this subpart upon startup of your affected source.

(b) If you have an existing source on November 10, 2003, you must comply with the requirements for existing sources in this subpart no later than May 10, 2008.

(c) You must meet the notification requirements in § 63.2515 according to the dates specified in that section and in subpart A of this part 63. Some of the notifications must be submitted before you are required to comply with the emission limits, operating limits, and work practice standards in this subpart.

(d) If you have a Group 2 emission point that becomes a Group 1 emission point after the compliance date for your affected source, you must comply with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.

(e) If, after the compliance date for your affected source, hydrogen halide and halogen HAP emissions from process vents in a process increase to more than 1,000 lb/yr, or HAP metals emissions from a process at a new affected source increase to more than 150 lb/yr, you must comply with the applicable emission limits specified in Table 3 to this subpart and the associated compliance requirements beginning on the date the emissions exceed the applicable threshold. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.

(f) If you have a small control device for process vent or transfer rack emissions that becomes a large control device, as defined in § 63.2550(i), you must comply with monitoring and associated recordkeeping and reporting requirements for large control devices beginning on the date the switch occurs. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 10442, Mar. 1, 2006; 71 FR 40332, July 14, 2006]

Emission Limits, Work Practice Standards, and Compliance Requirements

§ 63.2450 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits and work practice standards in tables 1 through 7 to this subpart at all times, except during periods of startup, shutdown, and malfunction (SSM), and you must meet the requirements specified in §§ 63.2455 through 63.2490 (or the alternative means of compliance in § 63.2495, § 63.2500, or § 63.2505), except as specified in paragraphs (b) through (s) of this section. You must meet the notification, reporting, and recordkeeping requirements specified in §§ 63.2515, 63.2520, and 63.2525.

(b) *Determine halogenated vent streams.* You must determine if an emission stream is a halogenated vent stream, as defined in § 63.2550, by calculating the mass emission rate of halogen atoms in accordance with § 63.115(d)(2)(v). Alternatively, you may elect to designate the emission stream as halogenated.

(c) *Requirements for combined emission streams.* When organic HAP emissions from different emission types (*e.g.,* continuous process vents, batch process vents, storage tanks, transfer operations, and waste management units) are combined, you must comply with the requirements of either paragraph (c)(1) or (2) of this section.

(1) Comply with the applicable requirements of this subpart for each kind of organic HAP emissions in the stream (*e.g.,* the requirements of table 1 to this subpart for continuous process vents and the requirements of table 4 to this subpart for emissions from storage tanks).

(2) Determine the applicable requirements based on the hierarchy presented in paragraphs (c)(2)(i) through (vi) of this section. For a combined stream, the applicable requirements are specified in the highest-listed paragraph in the hierarchy that applies to any of the individual streams that make up the combined stream. For example, if a combined stream consists of emissions from Group 1 batch process vents and any other type of emission stream, then you must comply with the requirements in paragraph (c)(2)(i) of this section for the combined stream; compliance with the requirements in paragraph (c)(2)(i) of this section constitutes compliance for the other emission streams in the combined stream. Two exceptions are that you must comply with the requirements in table 3 to this subpart and § 63.2465 for all process vents with hydrogen halide and halogen HAP emissions, and recordkeeping requirements for Group 2 applicability or compliance are still required (*e.g.,* the requirement in § 63.2525(f) to track the number of batches produced and calculate rolling annual emissions for processes with Group 2 batch process vents).

(i) The requirements of table 2 to this subpart and § 63.2460 for Group 1 batch process vents, including applicable monitoring, recordkeeping, and reporting.

(ii) The requirements of table 1 to this subpart and § 63.2455 for continuous process vents that are routed to a control device, as defined in § 63.981, including applicable monitoring, recordkeeping, and reporting.

(iii) The requirements of table 5 to this subpart and § 63.2475 for transfer operations, including applicable monitoring, recordkeeping, and reporting.

(iv) The requirements of table 7 to this subpart and § 63.2485 for emissions from waste management units that are used to manage and treat Group 1 wastewater streams and residuals from Group 1 wastewater streams, including applicable monitoring, recordkeeping, and reporting.

(v) The requirements of table 4 to this subpart and § 63.2470 for control of emissions from storage tanks, including applicable monitoring, recordkeeping, and reporting.

(vi) The requirements of table 1 to this subpart and § 63.2455 for continuous process vents after a recovery device including applicable monitoring, recordkeeping, and reporting.

(d) [Reserved]

(e) *Requirements for control devices.* (1) Except when complying with § 63.2485, if you reduce organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, you must meet the requirements of § 63.982(c) and the requirements referenced therein.

(2) Except when complying with § 63.2485, if you reduce organic HAP emissions by venting emissions through a closed-vent system to a flare, you must meet the requirements of § 63.982(b) and the requirements referenced therein.

(3) If you use a halogen reduction device to reduce hydrogen halide and halogen HAP emissions from halogenated vent streams, you must meet the requirements of § 63.994 and the requirements referenced therein. If you use a halogen reduction device before a combustion device, you must determine the halogen atom emission rate prior to the combustion device according to the procedures in § 63.115(d)(2)(v).

(f) *Requirements for flare compliance assessments.* (1) As part of a flare compliance assessment required in § 63.987(b), you have the option of demonstrating compliance with the requirements of § 63.11(b) by complying with the requirements in either § 63.11(b)(6)(i) or § 63.987(b)(3)(ii).

(2) If you elect to meet the requirements in § 63.11(b)(6)(i), you must keep flare compliance assessment records as specified in paragraphs (f)(2)(i) and (ii) of this section.

(i) Keep records as specified in § 63.998(a)(1)(i), except that a record of the heat content determination is not required.

(ii) Keep records of the flare diameter, hydrogen content, exit velocity, and maximum permitted velocity. Include these records in the flare compliance report required in § 63.999(a)(2).

(g) *Requirements for performance tests.* The requirements specified in paragraphs (g)(1) through (5) of this section apply instead of or in addition to the requirements specified in subpart SS of this part 63.

(1) Conduct gas molecular weight analysis using Method 3, 3A, or 3B in appendix A to part 60 of this chapter.

(2) Measure moisture content of the stack gas using Method 4 in appendix A to part 60 of this chapter.

(3) If the uncontrolled or inlet gas stream to the control device contains carbon disulfide, you must conduct emissions testing according to paragraph (g)(3)(i) or (ii) of this section.

(i) If you elect to comply with the percent reduction emission limits in tables 1 through 7 to this subpart, and carbon disulfide is the principal organic HAP component (*i.e.,* greater than 50 percent of the HAP in the stream by volume), then you must use Method 18, or Method 15 (40 CFR part 60, appendix A) to measure carbon disulfide at the inlet and outlet of the control device. Use the percent reduction in carbon disulfide as a surrogate for the percent reduction in total organic HAP emissions.

(ii) If you elect to comply with the outlet total organic compound (TOC) concentration emission limits in tables 1 through 7 to this subpart, and the uncontrolled or inlet gas stream to the control device contains greater than 10 percent (volume concentration) carbon disulfide, you must use Method 18 or Method 15 to separately determine the carbon disulfide concentration. Calculate the total HAP or TOC emissions by totaling the carbon disulfide emissions measured using Method 18 or 15 and the other HAP emissions measured using Method 18 or 25A.

(4) As an alternative to using Method 18, Method 25/25A, or Method 26/26A of 40 CFR part 60, appendix A, to comply with any of the emission limits specified in tables 1 through 7 to this subpart, you may use Method 320 of 40 CFR part 60, appendix A. When using Method 320, you must follow the analyte spiking procedures of section 13 of Method 320, unless you demonstrate that the complete spiking procedure has been conducted at a similar source.

(5) Section 63.997(c)(1) does not apply. For the purposes of this subpart, results of all initial compliance demonstrations must be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in § 63.2520(d)(1).

(h) *Design evaluation.* To determine the percent reduction of a small control device that is used to comply with an emission limit specified in table 1, 2, 3, or 5 to this subpart, you may elect to conduct a design evaluation as specified in § 63.1257(a)(1) instead of a performance test as specified in subpart SS of this part 63. You must establish the value(s) and basis for the operating limits as part of the design evaluation. For continuous process vents, the design

evaluation must be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions. For transfer racks, the design evaluation must demonstrate that the control device achieves the required control efficiency during the reasonably expected maximum transfer loading rate.

(i) *Outlet concentration correction for combustion devices.* When § 63.997(e)(2)(iii)(C) requires you to correct the measured concentration at the outlet of a combustion device to 3 percent oxygen if you add supplemental combustion air, the requirements in either paragraph (i)(1) or (2) of this section apply for the purposes of this subpart.

(1) You must correct the concentration in the gas stream at the outlet of the combustion device to 3 percent oxygen if you add supplemental gases, as defined in § 63.2550, to the vent stream, or;

(2) You must correct the measured concentration for supplemental gases using Equation 1 of § 63.2460; you may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas.

(j) *Continuous emissions monitoring systems.* Each continuous emissions monitoring system (CEMS) must be installed, operated, and maintained according to the requirements in § 63.8 and paragraphs (j)(1) through (5) of this section.

(1) Each CEMS must be installed, operated, and maintained according to the applicable Performance Specification of 40 CFR part 60, appendix B, and according to paragraph (j)(2) of this section, except as specified in paragraph (j)(1)(i) of this section. For any CEMS meeting Performance Specification 8, you must also comply with appendix F, procedure 1 of 40 CFR part 60.

(i) If you wish to use a CEMS other than an Fourier Transform Infrared Spectroscopy (FTIR) meeting the requirements of Performance Specification 15 to measure hydrogen halide and halogen HAP before we promulgate a Performance Specification for such CEMS, you must prepare a monitoring plan and submit it for approval in accordance with the procedures specified in § 63.8.

(ii) [Reserved]

(2) You must determine the calibration gases and reporting units for TOC CEMS in accordance with paragraph (j)(2)(i), (ii), or (iii) of this section.

(i) For CEMS meeting Performance Specification 9 or 15 requirements, determine the target analyte(s) for calibration using either process knowledge of the control device inlet stream or the screening procedures of Method 18 on the control device inlet stream.

(ii) For CEMS meeting Performance Specification 8 used to monitor performance of a combustion device, calibrate the instrument on the predominant organic HAP and report the results as carbon (C1), and use Method 25A or any approved alternative as the reference method for the relative accuracy tests.

(iii) For CEMS meeting Performance Specification 8 used to monitor performance of a noncombustion device, determine the predominant organic HAP using either process knowledge or the screening procedures of Method 18 on the control device inlet stream, calibrate the monitor on the predominant organic HAP, and report the results as C_1 . Use Method 18, ASTM D6420-99, or any approved alternative as the reference method for the relative accuracy tests, and report the results as C_1 .

(3) You must conduct a performance evaluation of each CEMS according to the requirements in 40 CFR 63.8 and according to the applicable Performance Specification of 40 CFR part 60, appendix B, except that the schedule in § 63.8(e)(4) does not apply, and the results of the performance evaluation must be included in the notification of compliance status report.

(4) The CEMS data must be reduced to operating day or operating block averages computed using valid data consistent with the data availability requirements specified in § 63.999(c)(6)(i)(B) through (D), except monitoring data also are sufficient to constitute a valid hour of data if measured values are available for at least two of the 15-minute periods during an hour when calibration, quality assurance, or maintenance activities are being performed. An

operating block is a period of time from the beginning to end of batch operations within a process. Operating block averages may be used only for batch process vent data.

(5) If you add supplemental gases, you must correct the measured concentrations in accordance with paragraph (i) of this section and § 63.2460(c)(6).

(k) *Continuous parameter monitoring.* The provisions in paragraphs (k)(1) through (6) of this section apply in addition to the requirements for continuous parameter monitoring system (CPMS) in subpart SS of this part 63.

(1) You must record the results of each calibration check and all maintenance performed on the CPMS as specified in § 63.998(c)(1)(ii)(A).

(2) When subpart SS of this part 63 uses the term “a range” or “operating range” of a monitored parameter, it means an “operating limit” for a monitored parameter for the purposes of this subpart.

(3) As an alternative to continuously measuring and recording pH as specified in §§ 63.994(c)(1)(i) and 63.998(a)(2)(ii)(D), you may elect to continuously monitor and record the caustic strength of the effluent. For halogen scrubbers used to control only batch process vents you may elect to monitor and record either the pH or the caustic strength of the scrubber effluent at least once per day.

(4) As an alternative to the inlet and outlet temperature monitoring requirements for catalytic incinerators as specified in § 63.988(c)(2) and the related recordkeeping requirements specified in § 63.998(a)(2)(ii)(B)(*2*) and (c)(2)(ii), you may elect to comply with the requirements specified in paragraphs (k)(4)(i) through (iv) of this section.

(i) Monitor and record the inlet temperature as specified in subpart SS of this part 63.

(ii) Check the activity level of the catalyst at least every 12 months and take any necessary corrective action, such as replacing the catalyst to ensure that the catalyst is performing as designed.

(iii) Maintain records of the annual checks of catalyst activity levels and the subsequent corrective actions.

(iv) Recording the downstream temperature and temperature difference across the catalyst bed as specified in § 63.998(a)(2)(ii)(B)(*2*) and (b)(2)(ii) is not required.

(5) For absorbers that control organic compounds and use water as the scrubbing fluid, you must conduct monitoring and recordkeeping as specified in paragraphs (k)(5)(i) through (iii) of this section instead of the monitoring and recordkeeping requirements specified in §§ 63.990(c)(1), 63.993(c)(1), and 63.998(a)(2)(ii)(C).

(i) You must use a flow meter capable of providing a continuous record of the absorber influent liquid flow.

(ii) You must determine gas stream flow using one of the procedures specified in § 63.994(c)(1)(ii)(A) through (D).

(iii) You must record the absorber liquid-to-gas ratio averaged over the time period of any performance test.

(6) For a control device with total inlet HAP emissions less than 1 tpy, you must establish an operating limit(s) for a parameter(s) that you will measure and record at least once per averaging period (i.e., daily or block) to verify that the control device is operating properly. You may elect to measure the same parameter(s) that is required for control devices that control inlet HAP emissions equal to or greater than 1 tpy. If the parameter will not be measured continuously, you must request approval of your proposed procedure in the precompliance report. You must identify the operating limit(s) and the measurement frequency, and you must provide rationale to support how these measurements demonstrate the control device is operating properly.

(l) *Startup, shutdown, and malfunction.* Sections 63.152(f)(7)(ii) through (iv) and 63.998(b)(2)(iii) and (b)(6)(i)(A), which apply to the exclusion of monitoring data collected during periods of SSM from daily averages, do not apply for the purposes of this subpart.

(m) *Reporting.* (1) When §§ 63.2455 through 63.2490 reference other subparts in this part 63 that use the term "periodic report," it means "compliance report" for the purposes of this subpart. The compliance report must include the information specified in § 63.2520(e), as well as the information specified in referenced subparts.

(2) When there are conflicts between this subpart and referenced subparts for the due dates of reports required by this subpart, reports must be submitted according to the due dates presented in this subpart.

(3) Excused excursions, as defined in subparts G and SS of this part 63, are not allowed.

(n) [Reserved]

(o) You may not use a flare to control halogenated vent streams or hydrogen halide and halogen HAP emissions.

(p) Opening a safety device, as defined in § 63.2550, is allowed at any time conditions require it to avoid unsafe conditions.

(q) If an emission stream contains energetics or organic peroxides that, for safety reasons, cannot meet an applicable emission limit specified in Tables 1 through 7 to this subpart, then you must submit documentation in your precompliance report explaining why an undue safety hazard would be created if the air emission controls were installed, and you must describe the procedures that you will implement to minimize HAP emissions from these vent streams.

(r) *Surge control vessels and bottoms receivers.* For each surge control vessel or bottoms receiver that meets the capacity and vapor pressure thresholds for a Group 1 storage tank, you must meet emission limits and work practice standards specified in Table 4 to this subpart.

(s) For the purposes of determining Group status for continuous process vents, batch process vents, and storage tanks in §§ 63.2455, 63.2460, and 63.2470, hydrazine is to be considered an organic HAP.

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38559, July 1, 2005; 71 FR 40332, July 14, 2006]

§ 63.2455 What requirements must I meet for continuous process vents?

(a) You must meet each emission limit in Table 1 to this subpart that applies to your continuous process vents, and you must meet each applicable requirement specified in paragraphs (b) through (c) of this section.

(b) For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in § 63.115(d), except as specified in paragraphs (b)(1) through (3) of this section.

(1) You are not required to determine the Group status or the TRE index value for any continuous process vent that is combined with Group 1 batch process vents before a control device or recovery device because the requirements of § 63.2450(c)(2)(i) apply to the combined stream.

(2) When a TRE index value of 4.0 is referred to in § 63.115(d), TRE index values of 5.0 for existing affected sources and 8.0 for new and reconstructed affected sources apply for the purposes of this subpart.

(3) When § 63.115(d) refers to "emission reductions specified in § 63.113(a)," the reductions specified in Table 1 to this subpart apply for the purposes of this subpart.

(c) If you use a recovery device to maintain the TRE above a specified threshold, you must meet the requirements of § 63.982(e) and the requirements referenced therein, except as specified in § 63.2450 and paragraph (c)(1) of this section.

(1) When § 63.993 uses the phrase "the TRE index value is between the level specified in a referencing subpart and 4.0," the phrase "the TRE index value is >1.9 but ≤5.0" applies for an existing affected source, and the phrase "the

TRE index value is >5.0 but ≤8.0" applies for a new and reconstructed affected source, for the purposes of this subpart.

(2) [Reserved]

§ 63.2460 What requirements must I meet for batch process vents?

(a) You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in paragraphs (b) and (c) of this section.

(b) *Group status.* If a process has batch process vents, as defined in § 63.2550, you must determine the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process using the procedures specified in § 63.1257(d)(2)(i) and (ii), except as specified in paragraphs (b)(1) through (7) of this section.

(1) To calculate emissions caused by the heating of a vessel without a process condenser to a temperature lower than the boiling point, you must use the procedures in § 63.1257(d)(2)(i)(C)(*3*).

(2) To calculate emissions from depressurization of a vessel without a process condenser, you must use the procedures in § 63.1257(d)(2)(i)(D)(*10*).

(3) To calculate emissions from vacuum systems for the purposes of this subpart, the receiving vessel is part of the vacuum system, and terms used in Equation 33 to 40 CFR part 63, subpart GGG, are defined as follows:

P_{system} = absolute pressure of the receiving vessel;

P_i = partial pressure of the HAP determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver;

P_j = partial pressure of condensables (including HAP) determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver;

MW_{HAP} = molecular weight of the HAP determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver.

(4) To calculate uncontrolled emissions when a vessel is equipped with a process condenser, you must use the procedures in § 63.1257(d)(3)(i)(B), except as specified in paragraphs (b)(4)(i) through (vii) of this section.

(i) You must determine the flowrate of gas (or volume of gas), partial pressures of condensables, temperature (T), and HAP molecular weight (MW_{HAP}) at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver.

(ii) You must assume that all of the components contained in the condenser exit vent stream are in equilibrium with the same components in the exit condensate stream (except for noncondensables).

(iii) You must perform a material balance for each component.

(iv) For the emissions from gas evolution, the term for time, t, must be used in Equation 12 to 40 CFR part 63, subpart GGG.

(v) Emissions from empty vessel purging shall be calculated using Equation 36 to 40 CFR part 63, subpart GGG and the exit temperature and exit pressure conditions of the condenser or the conditions of the dedicated receiver.

(vi) You must conduct an engineering assessment as specified in § 63.1257(d)(2)(ii) for each emission episode that is not due to vapor displacement, purging, heating, depressurization, vacuum operations, gas evolution, air drying, or empty vessel purging. The requirements of paragraphs (b)(3) through (4) of this section shall apply.

(vii) You may elect to conduct an engineering assessment if you can demonstrate to the Administrator that the methods in § 63.1257(d)(3)(i)(B) are not appropriate.

(5) You may elect to designate the batch process vents within a process as Group 1 and not calculate uncontrolled emissions under either of the situations in paragraph (b)(5)(i), (ii), or (iii) of this section.

(i) If you comply with the alternative standard specified in § 63.2505.

(ii) If all Group 1 batch process vents within a process are controlled; you conduct the performance test under hypothetical worst case conditions, as defined in § 63.1257(b)(8)(i)(B); and the emission profile is based on capture and control system limitations as specified in § 63.1257(b)(8)(ii)(C).

(iii) If you comply with an emission limit using a flare that meets the requirements specified in § 63.987.

(6) You may change from Group 2 to Group 1 in accordance with either paragraph (b)(6)(i) or (ii) of this section. You must comply with the requirements of this section and submit the test report in the next Compliance report.

(i) You may switch at any time after operating as Group 2 for at least 1 year so that you can show compliance with the 10,000 pounds per year (lb/yr) threshold for Group 2 batch process vents for at least 365 days before the switch. You may elect to start keeping records of emissions from Group 2 batch process vents before the compliance date. Report a switch based on this provision in your next compliance report in accordance with § 63.2520(e)(10)(i).

(ii) If the conditions in paragraph (b)(6)(i) of this section are not applicable, you must provide a 60-day advance notice in accordance with § 63.2520(e)(10)(ii) before switching.

(7) As an alternative to determining the uncontrolled organic HAP emissions as specified in § 63.1257(d)(2)(i) and (ii), you may elect to demonstrate that non-reactive organic HAP are the only HAP used in the process and non-reactive HAP usage in the process is less than 10,000 lb/yr. You must provide data and supporting rationale in your notification of compliance status report explaining why the non-reactive organic HAP usage will be less than 10,000 lb/yr. You must keep records of the non-reactive organic HAP usage as specified in § 63.2525(e)(2) and include information in compliance reports as specified in § 63.2520(e)(5)(iv).

(c) Exceptions to the requirements in subparts SS and WW of this part 63 are specified in paragraphs (c)(1) through (9) of this section.

(1) *Process condensers.* Process condensers, as defined in § 63.2550(i), are not considered to be control devices for batch process vents. You must determine whether a condenser is a control device for a batch process vent or a process condenser from which the uncontrolled HAP emissions are evaluated as part of the initial compliance demonstration for each MCPU and report the results with supporting rationale in your notification of compliance status report.

(2) *Initial compliance.* (i) To demonstrate initial compliance with a percent reduction emission limit in Table 2 to this subpart FFFF, you must compare the sums of the controlled and uncontrolled emissions for the applicable Group 1 batch process vents within the process, and show that the specified reduction is met. This requirement does not apply if you comply with the emission limits of Table 2 to this subpart FFFF by using a flare that meets the requirements of § 63.987.

(ii) When you conduct a performance test or design evaluation for a non-flare control device used to control emissions from batch process vents, you must establish emission profiles and conduct the test under worst-case conditions according to § 63.1257(b)(8) instead of under normal operating conditions as specified in § 63.7(e)(1). The requirements in § 63.997(e)(1)(i) and (iii) also do not apply for performance tests conducted to determine compliance with the emission limits for batch process vents. For purposes of this subpart FFFF, references in § 63.997(b)(1) to “methods specified in § 63.997(e)” include the methods specified in § 63.1257(b)(8).

(iii) As an alternative to conducting a performance test or design evaluation to demonstrate initial compliance with a percent reduction requirement for a condenser, you may determine controlled emissions using the procedures specified in § 63.1257(d)(3)(i)(B) and paragraphs (b)(3) through (4) of this section.

(iv) When § 63.1257(d)(3)(i)(B)(*7*) specifies that condenser-controlled emissions from an air dryer must be calculated using Equation 11 of 40 CFR part 63, subpart GGG, with “V equal to the air flow rate,” it means “V equal to the dryer outlet gas flow rate,” for the purposes of this subpart. Alternatively, you may use Equation 12 of 40 CFR part 63, subpart GGG, with V equal to the dryer inlet air flow rate. Account for time as appropriate in either equation.

(v) If a process condenser is used for any boiling operations, you must demonstrate that it is properly operated according to the procedures specified in § 63.1257(d)(2)(i)(C)(*4*)(*ii*) and (d)(3)(iii)(B), and the demonstration must occur only during the boiling operation. The reference in § 63.1257(d)(3)(iii)(B) to the alternative standard in § 63.1254(c) means § 63.2505 for the purposes of this subpart. As an alternative to measuring the exhaust gas temperature, as required by § 63.1257(d)(3)(iii)(B), you may elect to measure the liquid temperature in the receiver.

(vi) You must conduct a subsequent performance test or compliance demonstration equivalent to an initial compliance demonstration within 180 days of a change in the worst-case conditions.

(3) *Establishing operating limits.* You must establish operating limits under the conditions required for your initial compliance demonstration, except you may elect to establish operating limit(s) for conditions other than those under which a performance test was conducted as specified in paragraph (c)(3)(i) of this section and, if applicable, paragraph (c)(3)(ii) of this section.

(i) The operating limits may be based on the results of the performance test and supplementary information such as engineering assessments and manufacturer's recommendations. These limits may be established for conditions as unique as individual emission episodes for a batch process. You must provide rationale in the precompliance report for the specific level for each operating limit, including any data and calculations used to develop the limit and a description of why the limit indicates proper operation of the control device. The procedures provided in this paragraph (c)(3)(i) have not been approved by the Administrator and determination of the operating limit using these procedures is subject to review and approval by the Administrator.

(ii) If you elect to establish separate monitoring levels for different emission episodes within a batch process, you must maintain records in your daily schedule or log of processes indicating each point at which you change from one operating limit to another, even if the duration of the monitoring for an operating limit is less than 15 minutes. You must maintain a daily schedule or log of processes according to § 63.2525(c).

(4) *Averaging periods.* As an alternative to the requirement for daily averages in § 63.998(b)(3), you may determine averages for operating blocks. An operating block is a period of time that is equal to the time from the beginning to end of batch process operations within a process.

(5) [Reserved]

(6) *Outlet concentration correction for supplemental gases.* If you use a control device other than a combustion device to comply with a TOC, organic HAP, or hydrogen halide and halogen HAP outlet concentration emission limit for batch process vents, you must correct the actual concentration for supplemental gases using Equation 1 of this section; you may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas.

$$C_a = C_m \left(\frac{Q_s + Q_a}{Q_a} \right) \qquad (Eq.\ 1)$$

Where:

C_a = corrected outlet TOC, organic HAP, or hydrogen halide and halogen HAP concentration, dry basis, ppmv;

C_m = actual TOC, organic HAP, or hydrogen halide and halogen HAP concentration measured at control device outlet, dry basis, ppmv;

Q_a = total volumetric flowrate of all gas streams vented to the control device, except supplemental gases;

Q_s = total volumetric flowrate of supplemental gases.

(7) If flow to a control device could be intermittent, you must install, calibrate, and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow. Periods of no flow may not be used in daily or block averages, and it may not be used in fulfilling a minimum data availability requirement.

(8) *Terminology.* When the term “storage vessel” is used in subpart WW of this part 63, the term “process tank,” as defined in § 63.2550(i), applies for the purposes of this section.

(9) *Requirements for a biofilter.* If you use a biofilter to meet either the 95 percent reduction requirement or outlet concentration requirement specified in Table 2 to this subpart, you must meet the requirements specified in paragraphs (c)(9)(i) through (iv) of this section.

(i) *Operational requirements.* The biofilter must be operated at all times when emissions are vented to it.

(ii) *Performance tests.* To demonstrate initial compliance, you must conduct a performance test according to the procedures in § 63.997 and paragraphs (c)(9)(ii)(A) through (D) of this section. The design evaluation option for small control devices is not applicable if you use a biofilter.

(A) Keep up-to-date, readily accessible continuous records of either the biofilter bed temperature averaged over the full period of the performance test or the outlet total organic HAP or TOC concentration averaged over the full period of the performance test. Include these data in your notification of compliance status report as required by § 63.999(b)(3)(ii).

(B) Record either the percent reduction of total organic HAP achieved by the biofilter determined as specified in § 63.997(e)(2)(iv) or the concentration of TOC or total organic HAP determined as specified in § 63.997(e)(2)(iii) at the outlet of the biofilter, as applicable.

(C) If you monitor the biofilter bed temperature, you may elect to use multiple thermocouples in representative locations throughout the biofilter bed and calculate the average biofilter bed temperature across these thermocouples prior to reducing the temperature data to 15 minute (or shorter) averages for purposes of establishing operating limits for the biofilter. If you use multiple thermocouples, include your rationale for their site selection in your notification of compliance status report.

(D) Submit a performance test report as specified in § 63.999(a)(2)(i) and (ii). Include the records from paragraph (c)(9)(ii)(B) of this section in your performance test report.

(iii) *Monitoring requirements.* Use either a biofilter bed temperature monitoring device (or multiple devices) capable of providing a continuous record or an organic monitoring device capable of providing a continuous record. Keep records of temperature or other parameter monitoring results as specified in § 63.998(b) and (c), as applicable. General requirements for monitoring are contained in § 63.996. If you monitor temperature, the operating temperature range must be based on only the temperatures measured during the performance test; these data may not be supplemented by engineering assessments or manufacturer's recommendations as otherwise allowed in § 63.999(b)(3)(ii)(A). If you establish the operating range (minimum and maximum temperatures) using data from previous performance tests in accordance with § 63.996(c)(6), replacement of the biofilter media with the same type of media is not considered a process change under § 63.997(b)(1). You may expand your biofilter bed temperature operating range by conducting a repeat performance test that demonstrates compliance with the 95 percent reduction requirement or outlet concentration limit, as applicable.

(iv) *Repeat performance tests.* You must conduct a repeat performance test using the applicable methods specified in § 63.997 within 2 years following the previous performance test and within 150 days after each replacement of any portion of the biofilter bed media with a different type of media or each replacement of more than 50 percent (by volume) of the biofilter bed media with the same type of media.

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38559, July 1, 2005; 71 FR 40333, July 14, 2006]

§ 63.2465 What requirements must I meet for process vents that emit hydrogen halide and halogen HAP or HAP metals?

(a) You must meet each emission limit in Table 3 to this subpart that applies to you, and you must meet each applicable requirement in paragraphs (b) through (d) of this section.

(b) If any process vents within a process emit hydrogen halide and halogen HAP, you must determine and sum the uncontrolled hydrogen halide and halogen HAP emissions from each of the process vents within the process using the procedures specified in § 63.1257(d)(2)(i) and/or (ii), as appropriate. When § 63.1257(d)(2)(ii)(E) requires documentation to be submitted in the precompliance report, it means the notification of compliance status report for the purposes of this paragraph.

(c) If collective uncontrolled hydrogen halide and halogen HAP emissions from the process vents within a process are greater than or equal to 1,000 pounds per year (lb/yr), you must comply with § 63.994 and the requirements referenced therein, except as specified in paragraphs (c)(1) through (3) of this section.

(1) When § 63.994(b)(1) requires a performance test, you may elect to conduct a design evaluation in accordance with § 63.1257(a)(1).

(2) When § 63.994(b)(1) refers to “a combustion device followed by a halogen scrubber or other halogen reduction device,” it means any combination of control devices used to meet the emission limits specified in Table 3 to this subpart.

(3) Section 63.994(b)(2) does not apply for the purposes of this section.

(d) To demonstrate compliance with the emission limit in Table 3 to this subpart for HAP metals at a new source, you must comply with paragraphs (d)(1) through (3) of this section.

(1) Determine the mass emission rate of HAP metals based on process knowledge, engineering assessment, or test data.

(2) Conduct an initial performance test of each control device that is used to comply with the emission limit for HAP metals specified in Table 3 to this subpart. Conduct the performance test according to the procedures in § 63.997. Use Method 29 of appendix A of 40 CFR part 60 to determine the HAP metals at the inlet and outlet of each control device, or use Method 5 of appendix A of 40 CFR part 60 to determine the total particulate matter (PM) at the inlet and outlet of each control device. You have demonstrated initial compliance if the overall reduction of either HAP metals or total PM from the process is greater than or equal to 97 percent by weight.

(3) Comply with the monitoring requirements specified in § 63.1366(b)(1)(xi) for each fabric filter used to control HAP metals.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40334, July 14, 2006]

§ 63.2470 What requirements must I meet for storage tanks?

(a) You must meet each emission limit in Table 4 to this subpart that applies to your storage tanks, and you must meet each applicable requirement specified in paragraphs (b) through (e) of this section.

(b) [Reserved]

(c) *Exceptions to subparts SS and WW of this part 63.* (1) If you conduct a performance test or design evaluation for a control device used to control emissions only from storage tanks, you must establish operating limits, conduct monitoring, and keep records using the same procedures as required in subpart SS of this part 63 for control devices used to reduce emissions from process vents instead of the procedures specified in §§ 63.985(c), 63.998(d)(2)(i), and 63.999(b)(2).

(2) When the term “storage vessel” is used in subparts SS and WW of this part 63, the term “storage tank,” as defined in § 63.2550 applies for the purposes of this subpart.

(d) *Planned routine maintenance.* The emission limits in Table 4 to this subpart for control devices used to control emissions from storage tanks do not apply during periods of planned routine maintenance. Periods of planned routine maintenance of each control device, during which the control device does not meet the emission limit specified in Table 4 to this subpart, must not exceed 240 hours per year (hr/yr). You may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed, it must indicate that no material will be added to the storage tank between the time the 240-hr limit is exceeded and the control device is again operational, and it must be submitted at least 60 days before the 240-hr limit will be exceeded.

(e) *Vapor balancing alternative.* As an alternative to the emission limits specified in Table 4 to this subpart, you may elect to implement vapor balancing in accordance with § 63.1253(f), except as specified in paragraphs (e)(1) through (3) of this section.

(1) When § 63.1253(f)(6)(i) refers to a 90 percent reduction, 95 percent applies for the purposes of this subpart.

(2) To comply with § 63.1253(f)(6)(i), the owner or operator of an offsite cleaning or reloading facility must comply with §§ 63.2445 through 63.2550 instead of complying with § 63.1253(f)(7)(ii), except as specified in paragraph (e)(2)(i) or (ii) of this section.

(i) The reporting requirements in § 63.2520 do not apply to the owner or operator of the offsite cleaning or reloading facility.

(ii) As an alternative to complying with the monitoring, recordkeeping, and reporting provisions in §§ 63.2445 through 63.2550, the owner or operator of an offsite cleaning or reloading facility may comply as specified in § 63.2535(a)(2) with any other subpart of this part 63 which has monitoring, recordkeeping, and reporting provisions as specified in § 63.2535(a)(2).

(3) You may elect to set a pressure relief device to a value less than the 2.5 pounds per square inch gage pressure (psig) required in § 63.1253(f)(5) if you provide rationale in your notification of compliance status report explaining why the alternative value is sufficient to prevent breathing losses at all times.

(4) You may comply with the vapor balancing alternative in § 63.1253(f) when your storage tank is filled from a barge. All requirements for tank trucks and railcars specified in § 63.1253(f) also apply to barges, except as specified in § 63.2470(e)(4)(i).

(i) When § 63.1253(f)(2) refers to pressure testing certifications, the requirements in 40 CFR 61.304(f) apply for barges.

(ii) [Reserved]

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38559, July 1, 2005; 71 FR 40335, July 14, 2006]

§ 63.2475 What requirements must I meet for transfer racks?

(a) You must comply with each emission limit and work practice standard in table 5 to this subpart that applies to your transfer racks, and you must meet each applicable requirement in paragraphs (b) and (c) of this section.

(b) When the term “high throughput transfer rack” is used in subpart SS of this part 63, the term “Group 1 transfer rack,” as defined in § 63.2550, applies for the purposes of this subpart.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40335, July 14, 2006]

§ 63.2480 What requirements must I meet for equipment leaks?

(a) You must meet each requirement in table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section.

(b) If you comply with either subpart H or subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in subpart H or subpart UU of this part.

(1) The requirements for pressure testing in § 63.179(b) or § 63.1036(b) may be applied to all processes, not just batch processes.

(2) For the purposes of this subpart, pressure testing for leaks in accordance with § 63.179(b) or § 63.1036(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

(3) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under § 63.1022(b)(1) or § 63.181(b)(1)(i).

(4) For connectors in gas/vapor and light liquid service at an existing source, you may elect to comply with the requirements in § 63.169 or § 63.1029 for connectors in heavy liquid service, including all associated recordkeeping and reporting requirements, rather than the requirements of § 63.174 or § 63.1027.

(5) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 parts per million (ppm) or greater as an alternative to the values specified in § 63.1026(b)(2)(i) through (iii) or § 63.163(b)(2).

(c) If you comply with 40 CFR part 65, subpart F, you may elect to comply with the provisions in paragraphs (c)(1) through (9) of this section as an alternative to the referenced provisions in 40 CFR part 65, subpart F.

(1) The requirements for pressure testing in § 65.117(b) may be applied to all processes, not just batch processes.

(2) For the purposes of this subpart, pressure testing for leaks in accordance with § 65.117(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

(3) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under § 65.103(b)(1).

(4) You may elect to comply with the monitoring and repair requirements specified in § 65.108(e)(3) as an alternative to the requirements specified in § 65.108(a) through (d) for any connectors at your affected source.

(5) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 ppm or greater as an alternative to the values specified in § 65.107(b)(2)(i) through (iii).

(6) When 40 CFR part 65, subpart F refers to the implementation date specified in § 65.1(f), it means the compliance date specified in § 63.2445.

(7) When §§ 65.105(f) and 65.117(d)(3) refer to § 65.4, it means § 63.2525.

(8) When § 65.120(a) refers to § 65.5(d), it means § 63.2515.

(9) When § 65.120(b) refers to § 65.5(e), it means § 63.2520.

(d) The provisions of this section do not apply to bench-scale processes, regardless of whether the processes are located at the same plant site as a process subject to the provisions of this subpart.

[71 FR 40335, July 14, 2006]

§ 63.2485 What requirements must I meet for wastewater streams and liquid streams in open systems within an MCPU?

(a) You must meet each requirement in table 7 to this subpart that applies to your wastewater streams and liquid streams in open systems within an MCPU, except as specified in paragraphs (b) through (o) of this section.

(b) *Wastewater HAP.* Where § 63.105 and §§ 63.132 through 63.148 refer to compounds in table 9 of subpart G of this part 63, the compounds in tables 8 and 9 to this subpart apply for the purposes of this subpart.

(c) *Group 1 wastewater.* Section 63.132(c)(1) (i) and (ii) do not apply. For the purposes of this subpart, a process wastewater stream is Group 1 for compounds in tables 8 and 9 to this subpart if any of the conditions specified in paragraphs (c) (1) through (3) of this section are met.

(1) The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in table 8 to this subpart is greater than or equal to 200 lb/yr.

(2) The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min.

(3) The combined total annual average concentration of compounds in tables 8 and 9 to this subpart is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to this subpart is greater than or equal to 1 tpy.

(d) *Wastewater tank requirements.* (1) When §§ 63.133 and 63.147 reference floating roof requirements in §§ 63.119 and 63.120, the corresponding requirements in subpart WW of this part 63 may be applied for the purposes of this subpart.

(2) When § 63.133(a) refers to table 10 of subpart G of this part 63, the maximum true vapor pressure in the table shall be limited to the HAP listed in tables 8 and 9 of this subpart FFFF.

(3) For the purposes of this subpart, the requirements of § 63.133(a)(2) are satisfied by operating and maintaining a fixed roof if you demonstrate that the total soluble and partially soluble HAP emissions from the wastewater tank are no more than 5 percent higher than the emissions would be if the contents of the wastewater tank were not heated, treated by an exothermic reaction, or sparged.

(4) The emission limits specified in §§ 63.133(b)(2) and 63.139 for control devices used to control emissions from wastewater tanks do not apply during periods of planned routine maintenance of the control device(s) of no more than 240 hr/yr. You may request an extension to a total of 360 hr/yr in accordance with the procedures specified in § 63.2470(d).

(e) *Individual drain systems.* The provisions of § 63.136(e)(3) apply except as specified in paragraph (e)(1) of this section.

(1) A sewer line connected to drains that are in compliance with § 63.136(e)(1) may be vented to the atmosphere, provided that the sewer line entrance to the first downstream junction box is water sealed and the sewer line vent pipe is designed as specified in § 63.136(e)(2)(ii)(A).

(2) [Reserved]

(f) *Closed-vent system requirements.* When § 63.148(k) refers to closed vent systems that are subject to the requirements of § 63.172, the requirements of either § 63.172 or § 63.1034 apply for the purposes of this subpart.

(g) *Halogenated vent stream requirements.* For each halogenated vent stream from a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream that is vented through a closed-vent system to a combustion device to reduce organic HAP emissions, you must meet the same emission limits as specified for batch process vents in item 2 of table 2 to this subpart.

(h) *Alternative test methods.* (1) As an alternative to the test methods specified in § 63.144(b)(5)(i), you may use Method 8260 or 8270 as specified in § 63.1257(b)(10)(iii).

(2) As an alternative to using the methods specified in § 63.144(b)(5)(i), you may conduct wastewater analyses using Method 1666 or 1671 of 40 CFR part 136 and comply with the sampling protocol requirements specified in § 63.144(b)(5)(ii). The validation requirements specified in § 63.144(b)(5)(iii) do not apply if you use Method 1666 or 1671 of 40 CFR part 136.

(3) As an alternative to using Method 18 of 40 CFR part 60, as specified in §§ 63.139(c)(1)(ii) and 63.145(i)(2), you may elect to use Method 25A of 40 CFR part 60 as specified in § 63.997.

(i) *Offsite management and treatment option.* (1) If you ship wastewater to an offsite treatment facility that meets the requirements of § 63.138(h), you may elect to document in your notification of compliance status report that the wastewater will be treated as hazardous waste at a facility that meets the requirements of § 63.138(h) as an alternative to having the offsite facility submit the certification specified in § 63.132(g)(2).

(2) As an alternative to the management and treatment options specified in § 63.132(g)(2), any affected wastewater stream (or residual removed from an affected wastewater stream) with a total annual average concentration of compounds in Table 8 to this subpart less than 50 ppmw may be transferred offsite in accordance with paragraphs (i)(2) (i) and (ii) of this section.

(i) The transferee (or you) must demonstrate that less than 5 percent of the HAP in Table 9 to this subpart is emitted from the waste management units up to the activated sludge unit.

(ii) The transferee must treat the wastewater stream or residual in a biological treatment unit in accordance with §§ 63.138 and 63.145 and the requirements referenced therein.

(j) You must determine the annual average concentration and annual average flowrate for wastewater streams for each MCPU. The procedures for flexible operation units specified in § 63.144 (b) and (c) do not apply for the purposes of this subpart.

(k) The requirement to correct outlet concentrations from combustion devices to 3 percent oxygen in §§ 63.139(c)(1)(ii) and 63.146(i)(6) applies only if supplemental gases are combined with a vent stream from a Group 1 wastewater stream. If emissions are controlled with a vapor recovery system as specified in § 63.139(c)(2), you must correct for supplemental gases as specified in § 63.2460(c)(6).

(l) *Requirements for liquid streams in open systems.* (1) References in § 63.149 to § 63.100(b) mean § 63.2435(b) for the purposes of this subpart.

(2) When § 63.149(e) refers to 40 CFR 63.100(l) (1) or (2), § 63.2445(a) applies for the purposes of this subpart.

(3) When § 63.149 uses the term “chemical manufacturing process unit,” the term “MCPU” applies for the purposes of this subpart.

(4) When § 63.149(e)(1) refers to characteristics of water that contain compounds in Table 9 to 40 CFR part 63, subpart G, the characteristics specified in paragraphs (c) (1) through (3) of this section apply for the purposes of this subpart.

(5) When § 63.149(e)(2) refers to characteristics of water that contain compounds in Table 9 to 40 CFR part 63, subpart G, the characteristics specified in paragraph (c)(2) of this section apply for the purposes of this subpart.

(m) When § 63.132(f) refers to "a concentration of greater than 10,000 ppmw of table 9 compounds," the phrase "a concentration of greater than 30,000 ppmw of total partially soluble HAP (PSHAP) and soluble HAP (SHAP) or greater than 10,000 ppmw of PSHAP" shall apply for the purposes of this subpart.

(n) *Alternative requirements for wastewater that is Group 1 for soluble HAP only.* The option specified in this paragraph (n) applies to wastewater that is Group 1 for soluble HAP in accordance with paragraph (c)(3) of this section and is discharged to biological treatment. Except as provided in paragraph (n)(4) of this section, this option does not apply to wastewater that is Group 1 for partially soluble HAP in accordance with paragraph (c)(1), (c)(2), or (c)(4) of this section. For wastewater that is Group 1 for SHAP, you need not comply with §§ 63.133 through 63.137 for any equalization unit, neutralization unit, and/or clarifier prior to the activated sludge unit, and you need not comply with the venting requirements in § 63.136(e)(2)(ii)(A) for lift stations with a volume larger than 10,000 gal, provided you comply with the requirements specified in paragraphs (n)(1) through (3) of this section and all otherwise applicable requirements specified in table 7 to this subpart. For this option, the treatment requirements in § 63.138 and the performance testing requirements in § 63.145 do not apply to the biological treatment unit, except as specified in paragraphs (n)(2)(i) through (iv) of this section.

(1) Wastewater must be hard-piped between the equalization unit, clarifier, and activated sludge unit. This requirement does not apply to the transfer between any of these types of units that are part of the same structure and one unit overflows into the next.

(2) Calculate the destruction efficiency of the biological treatment unit using Equation 1 of this section in accordance with the procedures described in paragraphs (n)(2)(i) through (vi) of this section. You have demonstrated initial compliance if E is greater than or equal to 90 percent.

$$E = \frac{(QMW_a - QMG_e - QMG_n - QMG_c)(F_{bio})}{QMW_a} \times 100 \qquad \text{(Eq. 1)}$$

Where:

E = destruction efficiency of total PSHAP and SHAP for the biological treatment unit including the equalization unit, neutralization unit, and/or clarifier, percent;

QMW_a = mass flow rate of total PSHAP and SHAP compounds entering the equalization unit (or whichever of the three types of units is first), kilograms per hour (kg/hr);

QMG_e = mass flow rate of total PSHAP and SHAP compounds emitted from the equalization unit, kg/hr;

QMG_n = mass flow rate of total PSHAP and SHAP compounds emitted from the neutralization unit, kg/hr;

QMG_c = mass flow rate of total PSHAP and SHAP compounds emitted from the clarifier, kg/hr

F_{bio} = site-specific fraction of PSHAP and SHAP compounds biodegraded in the biological treatment unit.

(i) Include all PSHAP and SHAP compounds in both Group 1 and Group 2 wastewater streams from all MCPU, except you may exclude any compounds that meet the criteria specified in § 63.145(a)(6)(ii) or (iii).

(ii) Conduct the demonstration under representative process unit and treatment unit operating conditions in accordance with § 63.145(a)(3) and (4).

(iii) Determine PSHAP and SHAP concentrations and the total wastewater flow rate at the inlet to the equalization unit in accordance with § 63.145(f)(1) and (2). References in § 63.145(f)(1) and (2) to required mass removal and actual mass removal do not apply for the purposes of this section.

(iv) Determine F_{bio} for the activated sludge unit as specified in § 63.145(h), except as specified in paragraph (n)(2)(iv)(A) or paragraph (n)(2)(iv)(B) of this section.

(A) If the biological treatment process meets both of the requirements specified in § 63.145(h)(1)(i) and (ii), you may elect to replace the F_{bio} term in Equation 1 of this section with the numeral "1."

(B) You may elect to assume f_{bio} is zero for any compounds on List 2 of table 36 in subpart G.

(v) Determine QMG_e , QMG_n , and QMG_c using EPA's WATER9 model or the most recent update to this model, and conduct testing or use other procedures to validate the modeling results.

(vi) Submit the data and results of your demonstration, including both a description of and the results of your WATER9 modeling validation procedures, in your notification of compliance status report as specified in § 63.2520(d)(2)(ii).

(3) As an alternative to the venting requirements in § 63.136(e)(2)(ii)(A), a lift station with a volume larger than 10,000 gal may have openings necessary for proper venting of the lift station. The size and other design characteristics of these openings may be established based on manufacturer recommendations or engineering judgment for venting under normal operating conditions. You must describe the design of such openings and your supporting calculations and other rationale in your notification of compliance status report.

(4) For any wastewater streams that are Group 1 for both PSHAP and SHAP, you may elect to meet the requirements specified in table 7 to this subpart for the PSHAP and then comply with paragraphs (n)(1) through (3) of this section for the SHAP in the wastewater system. You may determine the SHAP mass removal rate, in kg/hr, in treatment units that are used to meet the requirements for PSHAP and add this amount to both the numerator and denominator in Equation 1 of this section.

(o) *Compliance records.* For each CPMS used to monitor a nonflare control device for wastewater emissions, you must keep records as specified in § 63.998(c)(1) in addition to the records required in § 63.147(d).

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38559, July 1, 2005; 71 FR 40335, July 14, 2006]

§ 63.2490 What requirements must I meet for heat exchange systems?

(a) You must comply with each requirement in Table 10 to this subpart that applies to your heat exchange systems, except as specified in paragraphs (b) and (c) of this section.

(b) The phrase "a chemical manufacturing process unit meeting the conditions of § 63.100 (b)(1) through (b)(3) of this section" in § 63.104(a) means "an MCPU meeting the conditions of § 63.2435" for the purposes of this subpart.

(c) The reference to § 63.100(c) in § 63.104(a) does not apply for the purposes of this subpart.

Alternative Means of Compliance

§ 63.2495 How do I comply with the pollution prevention standard?

(a) You may elect to comply with the pollution prevention alternative requirements specified in paragraphs (a) (1) and (2) of this section in lieu of the emission limitations and work practice standards contained in Tables 1 through 7 to this subpart for any MCPU for which initial startup occurred before April 4, 2002.

(1) You must reduce the production-indexed HAP consumption factor (HAP factor) by at least 65 percent from a 3-year average baseline beginning no earlier than the 1994 through 1996 calendar years. For any reduction in the HAP factor that you achieve by reducing HAP that are also volatile organic compounds (VOC), you must demonstrate an equivalent reduction in the production-indexed VOC consumption factor (VOC factor) on a mass basis. For any reduction in the HAP factor that you achieve by reducing a HAP that is not a VOC, you may not increase the VOC factor.

(2) Any MCPU for which you seek to comply by using the pollution prevention alternative must begin with the same starting material(s) and end with the same product(s). You may not comply by eliminating any steps of a process by

transferring the step offsite (to another manufacturing location). You may also not merge a solvent recovery step conducted offsite to onsite and as part of an existing process as a method of reducing consumption.

(3) You may comply with the requirements of paragraph (a)(1) of this section for a series of processes, including situations where multiple processes are merged, if you demonstrate to the satisfaction of the Administrator that the multiple processes were merged after the baseline period into an existing process or processes.

(b) *Exclusions.* (1) You must comply with the emission limitations and work practice standards contained in tables 1 through 7 of this subpart for all HAP that are generated in the MCPU and that are not included in consumption, as defined in § 63.2550. If any vent stream routed to the combustion control is a halogenated vent stream, as defined in § 63.2550, then hydrogen halides that are generated as a result of combustion control must be controlled according to the requirements of § 63.994 and the requirements referenced therein.

(2) You may not merge nondedicated formulation or nondedicated solvent recovery processes with any other processes.

(c) *Initial compliance procedures.* To demonstrate initial compliance with paragraph (a) of this section, you must prepare a demonstration summary in accordance with paragraph (c) (1) of this section and calculate baseline and target annual HAP and VOC factors in accordance with paragraphs (c) (2) and (3) of this section.

(1) *Demonstration plan.* You must prepare a pollution prevention demonstration plan that contains, at a minimum, the information in paragraphs (c)(1) (i) through (iii) of this section for each MCPU for which you comply with paragraph (a) of this section.

(i) Descriptions of the methodologies and forms used to measure and record consumption of HAP and VOC compounds.

(ii) Descriptions of the methodologies and forms used to measure and record production of the product(s).

(iii) Supporting documentation for the descriptions provided in accordance with paragraphs (c)(1) (i) and (ii) of this section including, but not limited to, samples of operator log sheets and daily, monthly, and/or annual inventories of materials and products. You must describe how this documentation will be used to calculate the annual factors required in paragraph (d) of this section.

(2) *Baseline factors.* You must calculate baseline HAP and VOC factors by dividing the consumption of total HAP and total VOC by the production rate, per process, for the first 3-year period in which the process was operational, beginning no earlier than the period consisting of the 1994 through 1996 calendar years.

(3) *Target annual factors.* You must calculate target annual HAP and VOC factors. The target annual HAP factor must be equal to 35 percent of the baseline HAP factor. The target annual VOC factor must be lower than the baseline VOC factor by an amount equivalent to the reduction in any HAP that is also a VOC, on a mass basis. The target annual VOC factor may be the same as the baseline VOC factor if the only HAP you reduce is not a VOC.

(d) *Continuous compliance requirements.* You must calculate annual rolling average values of the HAP and VOC factors (annual factors) in accordance with the procedures specified in paragraphs (d) (1) through (3) of this section. To show continuous compliance, the annual factors must be equal to or less than the target annual factors calculated according to paragraph (c)(3) of this section.

(1) To calculate the annual factors, you must divide the consumption of both total HAP and total VOC by the production rate, per process, for 12-month periods at the frequency specified in either paragraph (d) (2) or (3) of this section, as applicable.

(2) For continuous processes, you must calculate the annual factors every 30 days for the 12-month period preceding the 30th day (i.e., annual rolling average calculated every 30 days). A process with both batch and continuous operations is considered a continuous process for the purposes of this section.

(3) For batch processes, you must calculate the annual factors every 10 batches for the 12-month period preceding the 10th batch (*i.e.,* annual rolling average calculated every 10 batches), except as specified in paragraphs (d)(3) (i) and (ii) of this section.

(i) If you produce more than 10 batches during a month, you must calculate the annual factors at least once during that month.

(ii) If you produce less than 10 batches in a 12-month period, you must calculate the annual factors for the number of batches in the 12-month period since the previous calculations.

(e) *Records.* You must keep records of HAP and VOC consumption, production, and the rolling annual HAP and VOC factors for each MCPU for which you are complying with paragraph (a) of this section.

(f) *Reporting.* (1) You must include the pollution prevention demonstration plan in the precompliance report required by § 63.2520(c).

(2) You must identify all days when the annual factors were above the target factors in the compliance reports.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40336, July 14, 2006]

§ 63.2500 How do I comply with emissions averaging?

(a) For an existing source, you may elect to comply with the percent reduction emission limitations in Tables 1, 2, 4, 5, and 7 to this subpart by complying with the emissions averaging provisions specified in § 63.150, except as specified in paragraphs (b) through (f) of this section.

(b) The batch process vents in an MCPU collectively are considered one individual emission point for the purposes of emissions averaging, except that only individual batch process vents must be excluded to meet the requirements of § 63.150(d)(5).

(c) References in § 63.150 to §§ 63.112 through 63.130 mean the corresponding requirements in §§ 63.2450 through 63.2490, including applicable monitoring, recordkeeping, and reporting.

(d) References to “periodic reports” in § 63.150 mean “compliance report” for the purposes of this subpart.

(e) For batch process vents, estimate uncontrolled emissions for a standard batch using the procedures in § 63.1257(d)(2)(i) and (ii) instead of the procedures in § 63.150(g)(2). Multiply the calculated emissions per batch by the number of batches per month when calculating the monthly emissions for use in calculating debits and credits.

(f) References to “storage vessels” in § 63.150 mean “storage tank” as defined in § 63.2550 for the purposes of this subpart.

§ 63.2505 How do I comply with the alternative standard?

As an alternative to complying with the emission limits and work practice standards for process vents and storage tanks in Tables 1 through 4 to this subpart and the requirements in §§ 63.2455 through 63.2470, you may comply with the emission limits in paragraph (a) of this section and demonstrate compliance in accordance with the requirements in paragraph (b) of this section.

(a) *Emission limits and work practice standards.* (1) You must route vent streams through a closed-vent system to a control device that reduces HAP emissions as specified in either paragraph (a)(1)(i) or (ii) of this section.

(i) If you use a combustion control device, it must reduce HAP emissions as specified in paragraphs (a)(1)(i)(A), (B), and (C) of this section.

(A) To an outlet TOC concentration of 20 parts per million by volume (ppmv) or less.

(B) To an outlet concentration of hydrogen halide and halogen HAP of 20 ppmv or less.

(C) As an alternative to paragraph (a)(1)(i)(B) of this section, if you control halogenated vent streams emitted from a combustion device followed by a scrubber, reduce the hydrogen halide and halogen HAP generated in the combustion device by greater than or equal to 95 percent by weight in the scrubber.

(ii) If you use a noncombustion control device(s), it must reduce HAP emissions to an outlet total organic HAP concentration of 50 ppmv or less, and an outlet concentration of hydrogen halide and halogen HAP of 50 ppmv or less.

(2) Any Group 1 process vents within a process that are not controlled according to this alternative standard must be controlled according to the emission limits in tables 1 through 3 to this subpart.

(b) *Compliance requirements.* To demonstrate compliance with paragraph (a) of this section, you must meet the requirements of § 63.1258(b)(5) beginning no later than the initial compliance date specified in § 63.2445, except as specified in paragraphs (b)(1) through (9) of this section.

(1) You must comply with the requirements in § 63.983 and the requirements referenced therein for closed-vent systems.

(2) When § 63.1258(b)(5)(i) refers to §§ 63.1253(d) and 63.1254(c), the requirements in paragraph (a) of this section apply for the purposes of this subpart FFFF.

(3) When § 63.1258(b)(5)(i)(B) refers to “HCl,” it means “total hydrogen halide and halogen HAP” for the purposes of this subpart FFFF.

(4) When § 63.1258(b)(5)(ii) refers to § 63.1257(a)(3), it means § 63.2450(j)(5) for the purposes of this subpart FFFF.

(5) You must submit the results of any determination of the target analytes of predominant HAP in the notification of compliance status report.

(6) If you elect to comply with the requirement to reduce hydrogen halide and halogen HAP by greater than or equal to 95 percent by weight in paragraph (a)(1)(i)(C) of this section, you must meet the requirements in paragraphs (b)(6)(i) and (ii) of this section.

(i) Demonstrate initial compliance with the 95 percent reduction by conducting a performance test and setting a site-specific operating limit(s) for the scrubber in accordance with § 63.994 and the requirements referenced therein. You must submit the results of the initial compliance demonstration in the notification of compliance status report.

(ii) Install, operate, and maintain CPMS for the scrubber as specified in §§ 63.994(c) and 63.2450(k), instead of as specified in § 63.1258(b)(5)(i)(C).

(7) If flow to the scrubber could be intermittent, you must install, calibrate, and operate a flow indicator as specified in § 63.2460(c)(7).

(8) Use the operating day as the averaging period for CEMS data and scrubber parameter monitoring data.

(9) The requirements in paragraph (a) of this section do not apply to emissions from storage tanks during periods of planned routine maintenance of the control device that do not exceed 240 hr/yr. You may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr in accordance with the procedures specified in § 63.2470(d). You must comply with the recordkeeping and reporting specified in §§ 63.998(d)(2)(ii) and 63.999(c)(4) for periods of planned routine maintenance.

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38559, July 1, 2005]

Notification, Reports, and Records

§ 63.2515 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.

(b) *Initial notification.* As specified in § 63.9(b)(2), if you startup your affected source before November 10, 2003, you must submit an initial notification not later than 120 calendar days after November 10, 2003.

(2) As specified in § 63.9(b)(3), if you startup your new affected source on or after November 10, 2003, you must submit an initial notification not later than 120 calendar days after you become subject to this subpart.

(c) *Notification of performance test.* If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in § 63.7(b)(1). For any performance test required as part of the initial compliance procedures for batch process vents in table 2 to this subpart, you must also submit the test plan required by § 63.7(c) and the emission profile with the notification of the performance test.

§ 63.2520 What reports must I submit and when?

(a) You must submit each report in Table 11 to 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 11 to this subpart and according to paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.2445 and ending on June 30 or December 31, whichever date is the first date following the end of the first 6 months after the compliance date that is specified for your affected source in § 63.2445.

(2) The first compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the first reporting period specified in paragraph (b)(1) of this section.

(3) 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) Each subsequent compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 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 (4) of this section.

(c) *Precompliance report.* You must submit a precompliance report to request approval for any of the items in paragraphs (c)(1) through (7) of this section. We will either approve or disapprove the report within 90 days after we receive it. If we disapprove the report, you must still be in compliance with the emission limitations and work practice standards in this subpart by the compliance date. To change any of the information submitted in the report, you must notify us 60 days before the planned change is to be implemented.

(1) Requests for approval to set operating limits for parameters other than those specified in §§ 63.2455 through 63.2485 and referenced therein. Alternatively, you may make these requests according to § 63.8(f).

(2) Descriptions of daily or per batch demonstrations to verify that control devices subject to § 63.2460(c)(5) are operating as designed.

(3) A description of the test conditions, data, calculations, and other information used to establish operating limits according to § 63.2460(c)(3).

(4) Data and rationale used to support an engineering assessment to calculate uncontrolled emissions in accordance with § 63.1257(d)(2)(ii). This requirement does not apply to calculations of hydrogen halide and halogen HAP emissions as specified in § 63.2465(b), to determinations that the total HAP concentration is less than 50 ppmv, or if you use previous test data to establish the uncontrolled emissions.

(5) The pollution prevention demonstration plan required in § 63.2495(c)(1), if you are complying with the pollution prevention alternative.

(6) Documentation of the practices that you will implement to minimize HAP emissions from streams that contain energetics and organic peroxides, and rationale for why meeting the emission limit specified in tables 1 through 7 to this subpart would create an undue safety hazard.

(7) For fabric filters that are monitored with bag leak detectors, an operation and maintenance plan that describes proper operation and maintenance procedures, and a corrective action plan that describes corrective actions to be taken, and the timing of those actions, when the PM concentration exceeds the set point and activates the alarm.

(d) *Notification of compliance status report.* You must submit a notification of compliance status report according to the schedule in paragraph (d)(1) of this section, and the notification of compliance status report must contain the information specified in paragraph (d)(2) of this section.

(1) You must submit the notification of compliance status report no later than 150 days after the applicable compliance date specified in § 63.2445.

(2) The notification of compliance status report must include the information in paragraphs (d)(2)(i) through (ix) of this section.

(i) The results of any applicability determinations, emission calculations, or analyses used to identify and quantify HAP usage or HAP emissions from the affected source.

(ii) The results of emissions profiles, performance tests, engineering analyses, design evaluations, flare compliance assessments, inspections and repairs, and calculations used to demonstrate initial compliance according to §§ 63.2455 through 63.2485. For performance tests, results must include descriptions of sampling and analysis procedures and quality assurance procedures.

(iii) Descriptions of monitoring devices, monitoring frequencies, and the operating limits established during the initial compliance demonstrations, including data and calculations to support the levels you establish.

(iv) All operating scenarios.

(v) Descriptions of worst-case operating and/or testing conditions for control devices.

(vi) Identification of parts of the affected source subject to overlapping requirements described in § 63.2535 and the authority under which you will comply.

(vii) The information specified in § 63.1039(a)(1) through (3) for each process subject to the work practice standards for equipment leaks in Table 6 to this subpart.

(viii) Identify storage tanks for which you are complying with the vapor balancing alternative in § 63.2470(e).

(ix) Records as specified in § 63.2535(l)(1) through (3) of process units used to create a PUG and calculations of the initial primary product of the PUG.

(e) *Compliance report.* The compliance report must contain the information specified in paragraphs (e)(1) through (10) 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) For each SSM during which excess emissions occur, the compliance report must include records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP, and include a brief description of each malfunction.

(5) The compliance report must contain the information on deviations, as defined in § 63.2550, according to paragraphs (e)(5)(i), (ii), (iii), and (iv) of this section.

(i) If there are no deviations from any emission limit, operating limit or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(ii) For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply with the emission limit or work practice standard in this subpart, you must include the information in paragraphs (e)(5)(ii)(A) through (C) of this section. This includes periods of SSM.

(A) The total operating time of the affected source during the reporting period.

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

(C) Operating logs of processes with batch vents from batch operations for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks.

(iii) For each deviation from an emission limit or operating limit occurring at an affected source where you are using a CMS to comply with an emission limit in this subpart, you must include the information in paragraphs (e)(5)(iii)(A) through (L) of this section. This includes periods of SSM.

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

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

(C) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(D) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total operating time of the affected source during that reporting period.

(E) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(F) 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 affected source during that reporting period.

(G) An identification of each HAP that is known to be in the emission stream.

(H) A brief description of the process units.

(I) A brief description of the CMS.

(J) The date of the latest CMS certification or audit.

(K) Operating logs of processes with batch vents from batch operations for each day(s) during which the deviation occurred.

(L) The operating day or operating block average values of monitored parameters for each day(s) during which the deviation occurred.

(iv) If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive HAP is the only HAP and usage is less than 10,000 lb/yr, the total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, or total uncontrolled hydrogen halide and halogen HAP emissions from all batch process vents and continuous process vents in a process are less than 1,000 lb/yr, include the records associated with each calculation required by § 63.2525(e) that exceeds an applicable HAP usage or emissions threshold.

(6) If you use a CEMS, and there were no periods during which it was out-of-control as specified in § 63.8(c)(7), include a statement that there were no periods during which the CEMS was out-of-control during the reporting period.

(7) Include each new operating scenario which has been operated since the time period covered by the last compliance report and has not been submitted in the notification of compliance status report or a previous compliance report. For each new operating scenario, you must provide verification that the operating conditions for any associated control or treatment device have not been exceeded and that any required calculations and engineering analyses have been performed. For the purposes of this paragraph, a revised operating scenario for an existing process is considered to be a new operating scenario.

(8) Records of process units added to a PUG as specified in § 63.2525(i)(4) and records of primary product redeterminations as specified in § 63.2525(i)(5).

(9) Applicable records and information for periodic reports as specified in referenced subparts F, G, H, SS, UU, WW, and GGG of this part and subpart F of 40 CFR part 65.

(10) *Notification of process change.* (i) Except as specified in paragraph (e)(10)(ii) of this section, whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. The notification must include all of the information in paragraphs (e)(10)(i)(A) through (C) of this section.

(A) A description of the process change.

(B) Revisions to any of the information reported in the original notification of compliance status report under paragraph (d) of this section.

(C) Information required by the notification of compliance status report under paragraph (d) of this section for changes involving the addition of processes or equipment at the affected source.

(ii) You must submit a report 60 days before the scheduled implementation date of any of the changes identified in paragraph (e)(10)(ii)(A), (B), or (C) of this section.

(A) Any change to the information contained in the precompliance report.

(B) A change in the status of a control device from small to large.

(C) A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in § 63.2460(b)(6)(i).

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38560, July 1, 2005; 71 FR 40336, July 14, 2006]

§ 63.2525 What records must I keep?

You must keep the records specified in paragraphs (a) through (k) of this section.

(a) Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.

(b) Records of each operating scenario as specified in paragraphs (b)(1) through (8) of this section.

(1) A description of the process and the type of process equipment used.

(2) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in § 63.2505; wastewater point of determination (POD); storage tanks; and transfer racks.

(3) The applicable control requirements of this subpart, including the level of required control, and for vents, the level of control for each vent.

(4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device.

(5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s).

(6) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process.

(7) Calculations and engineering analyses required to demonstrate compliance.

(8) For reporting purposes, a change to any of these elements not previously reported, except for paragraph (b)(5) of this section, constitutes a new operating scenario.

(c) A schedule or log of operating scenarios for processes with batch vents from batch operations updated each time a different operating scenario is put into effect.

(d) The information specified in paragraphs (d)(1) and (2) of this section for Group 1 batch process vents in compliance with a percent reduction emission limit in Table 2 to this subpart if some of the vents are controlled to less the percent reduction requirement.

(1) Records of whether each batch operated was considered a standard batch.

(2) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

(e) The information specified in paragraph (e)(2), (3), or (4) of this section, as applicable, for each process with Group 2 batch process vents or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. No records are required for situations described in paragraph (e)(1) of this section.

(1) No records are required if you documented in your notification of compliance status report that the MCPU meets any of the situations described in paragraph (e)(1)(i), (ii), or (iii) of this section.

(i) The MCPU does not process, use, or generate HAP.

(ii) You control the Group 2 batch process vents using a flare that meets the requirements of § 63.987.

(iii) You control the Group 2 batch process vents using a control device for which your determination of worst case for initial compliance includes the contribution of all Group 2 batch process vents.

(2) If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive organic HAP is the only HAP and usage is less than 10,000 lb/yr, as specified in § 63.2460(b)(7), you must keep records of the amount of HAP material used, and calculate the daily rolling annual sum of the amount used no less frequently than monthly. If a record indicates usage exceeds 10,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only usage if the usage during the year is less than 10,000 lb.

(3) If you documented in your notification of compliance status report that total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, then you must keep records of the number of batches operated and calculate a daily rolling annual sum of batches operated no less frequently than monthly. If the number of batches operated results in organic HAP emissions that exceed 1,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only the number of batches if the number of batches operated during the year results in less than 1,000 lb of organic HAP emissions.

(4) If you meet none of the conditions specified in paragraphs (e)(1) through (3) of this section, you must keep records of the information specified in paragraphs (e)(4)(i) through (iv) of this section.

(i) A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

(ii) A record of whether each batch operated was considered a standard batch.

(iii) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

(iv) Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

(f) A record of each time a safety device is opened to avoid unsafe conditions in accordance with § 63.2450(s).

(g) Records of the results of each CPMS calibration check and the maintenance performed, as specified in § 63.2450(k)(1).

(h) For each CEMS, you must keep records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(i) For each PUG, you must keep records specified in paragraphs (i)(1) through (5) of this section.

(1) Descriptions of the MCPU and other process units in the initial PUG required by § 63.2535(l)(1)(v).

(2) Rationale for including each MCPU and other process unit in the initial PUG (*i.e.,* identify the overlapping equipment between process units) required by § 63.2535(l)(1)(v).

(3) Calculations used to determine the primary product for the initial PUG required by § 63.2535(l)(2)(iv).

(4) Descriptions of process units added to the PUG after the creation date and rationale for including the additional process units in the PUG as required by § 63.2535(l)(1)(v).

(5) The calculation of each primary product redetermination required by § 63.2535(l)(2)(iv).

(j) In the SSMP required by § 63.6(e)(3), you are not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.

(k) For each bag leak detector used to monitor PM HAP emissions from a fabric filter, maintain records of any bag leak detection alarm, including the date and time, with a brief explanation of the cause of the alarm and the corrective action taken.

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38560, July 1, 2005; 71 FR 40337, July 14, 2006]

Other Requirements and Information

§ 63.2535 What compliance options do I have if part of my plant is subject to both this subpart and another subpart?

For any equipment, emission stream, or wastewater stream subject to the provisions of both this subpart and another rule, you may elect to comply only with the provisions as specified in paragraphs (a) through (l) of this section. You also must identify the subject equipment, emission stream, or wastewater stream, and the provisions with which you will comply, in your notification of compliance status report required by § 63.2520(d).

(a) *Compliance with other subparts of this part 63.* (1) If you have an MCPU that includes a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63, you must comply with the emission limits; operating limits; work practice standards; and the compliance, monitoring, reporting, and recordkeeping requirements for batch process vents in this subpart, and you must continue to comply with the requirements in subparts F, G, and H of this part 63 that are applicable to the CMPU and associated equipment.

(2) After the compliance dates specified in § 63.2445, at an offsite reloading or cleaning facility subject to § 63.1253(f), as referenced from § 63.2470(e), compliance with the monitoring, recordkeeping, and reporting provisions of any other subpart of this part 63 constitutes compliance with the monitoring, recordkeeping, and reporting provisions of § 63.1253(f)(7)(ii) or § 63.1253(f)(7)(iii). You must identify in your notification of compliance status report required by § 63.2520(d) the subpart of this part 63 with which the owner or operator of the offsite reloading or cleaning facility complies.

(b) *Compliance with 40 CFR parts 264 and 265, subparts AA, BB, and/or CC.* (1) After the compliance dates specified in § 63.2445, if a control device that you use to comply with this subpart is also subject to monitoring, recordkeeping, and reporting requirements in 40 CFR part 264, subpart AA, BB, or CC; or the monitoring and recordkeeping requirements in 40 CFR part 265, subpart AA, BB, or CC; and you comply with the periodic reporting requirements under 40 CFR part 264, subpart AA, BB, or CC that would apply to the device if your facility had final-permitted status, you may elect to comply either with the monitoring, recordkeeping, and reporting requirements of this subpart; or with the monitoring and recordkeeping requirements in 40 CFR part 264 or 265 and the reporting requirements in 40 CFR part 264, as described in this paragraph (b)(1), which constitute compliance with the monitoring, recordkeeping, and reporting requirements of this subpart. If you elect to comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR parts 264 and/or 265, you must report the information described in § 63.2520(e).

(2) After the compliance dates specified in § 63.2445, if you have an affected source with equipment that is also subject to 40 CFR part 264, subpart BB, or to 40 CFR part 265, subpart BB, then compliance with the recordkeeping and reporting requirements of 40 CFR parts 264 and/or 265 may be used to comply with the recordkeeping and reporting requirements of this subpart, to the extent that the requirements of 40 CFR parts 264 and/or 265 duplicate the requirements of this subpart.

(c) *Compliance with 40 CFR part 60, subpart Kb and 40 CFR part 61, subpart Y.* After the compliance dates specified in § 63.2445, you are in compliance with the provisions of this subpart FFFF for any storage tank that is assigned to

an MCPU and that is both controlled with a floating roof and in compliance with the provisions of either 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y. You are in compliance with this subpart FFFF if you have a storage tank with a fixed roof, closed-vent system, and control device in compliance with the provisions of either 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, except that you must comply with the monitoring, recordkeeping, and reporting requirements in this subpart FFFF. Alternatively, if a storage tank assigned to an MCPU is subject to control under 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, you may elect to comply only with the requirements for Group 1 storage tanks in this subpart FFFF.

(d) *Compliance with subpart I, GGG, or MMM of this part 63.* After the compliance dates specified in § 63.2445, if you have an affected source with equipment subject to subpart I, GGG, or MMM of this part 63, you may elect to comply with the provisions of subpart H, GGG, or MMM of this part 63, respectively, for all such equipment.

(e) *Compliance with subpart GGG of this part 63 for wastewater.* After the compliance dates specified in § 63.2445, if you have an affected source subject to this subpart and you have an affected source that generates wastewater streams that meet the applicability thresholds specified in § 63.1256, you may elect to comply with the provisions of this subpart FFFF for all such wastewater streams.

(f) *Compliance with subpart MMM of this part 63 for wastewater.* After the compliance dates specified in § 63.2445, if you have an affected source subject to this subpart, and you have an affected source that generates wastewater streams that meet the applicability thresholds specified in § 63.1362(d), you may elect to comply with the provisions of this subpart FFFF for all such wastewater streams (except that the 99 percent reduction requirement for streams subject to § 63.1362(d)(10) still applies).

(g) *Compliance with other regulations for wastewater.* After the compliance dates specified in § 63.2445, if you have a Group 1 wastewater stream that is also subject to provisions in 40 CFR parts 260 through 272, you may elect to determine whether this subpart or 40 CFR parts 260 through 272 contain the more stringent control requirements (*e.g.,* design, operation, and inspection requirements for waste management units; numerical treatment standards; etc.) and the more stringent testing, monitoring, recordkeeping, and reporting requirements. Compliance with provisions of 40 CFR parts 260 through 272 that are determined to be more stringent than the requirements of this subpart constitute compliance with this subpart. For example, provisions of 40 CFR parts 260 through 272 for treatment units that meet the conditions specified in § 63.138(h) constitute compliance with this subpart. You must identify in the notification of compliance status report required by § 63.2520(d) the information and procedures that you used to make any stringency determinations.

(h) *Compliance with 40 CFR part 60, subpart DDD, III, NNN, or RRR.* After the compliance dates specified in § 63.2445, if you have an MCPU that contains equipment subject to the provisions of this subpart that are also subject to the provisions of 40 CFR part 60, subpart DDD, III, NNN, or RRR, you may elect to apply this subpart to all such equipment in the MCPU. If an MCPU subject to the provisions of this subpart has equipment to which this subpart does not apply but which is subject to a standard in 40 CFR part 60, subpart DDD, III, NNN, or RRR, you may elect to comply with the requirements for Group 1 process vents in this subpart for such equipment. If you elect any of these methods of compliance, you must consider all total organic compounds, minus methane and ethane, in such equipment for purposes of compliance with this subpart, as if they were organic HAP. Compliance with the provisions of this subpart, in the manner described in this paragraph (h), will constitute compliance with 40 CFR part 60, subpart DDD, III, NNN, or RRR, as applicable.

(i) *Compliance with 40 CFR part 61, subpart BB.* (1) After the compliance dates specified in § 63.2445, a Group 1 transfer rack, as defined in § 63.2550, that is also subject to the provisions of 40 CFR part 61, subpart BB, you are required to comply only with the provisions of this subpart.

(2) After the compliance dates specified in § 63.2445, a Group 2 transfer rack, as defined in § 63.2550, that is also subject to the provisions of 40 CFR part 61, subpart BB, is required to comply with the provisions of either paragraph (l)(2)(i) or (ii) of this section.

(i) If the transfer rack is subject to the control requirements specified in § 61.302 of 40 CFR part 61, subpart BB, then you may elect to comply with either the requirements of 40 CFR part 61, subpart BB, or the requirements for Group 1 transfer racks under this subpart FFFF.

(ii) If the transfer rack is subject only to reporting and recordkeeping requirements under 40 CFR part 61, subpart BB, then you are required to comply only with the reporting and recordkeeping requirements specified in this subpart for

Group 2 transfer racks, and you are exempt from the reporting and recordkeeping requirements in 40 CFR part 61, subpart BB.

(j) *Compliance with 40 CFR part 61, subpart FF.* After the compliance date specified in § 63.2445, for a Group 1 or Group 2 wastewater stream that is also subject to the provisions of 40 CFR 61.342(c) through (h), and is not exempt under 40 CFR 61.342(c)(2) or (3), you may elect to comply only with the requirements for Group 1 wastewater streams in this subpart FFFF. If a Group 2 wastewater stream is exempted from 40 CFR 61.342(c)(1) under 40 CFR 61.342(c)(2) or (3), then you are required to comply only with the reporting and recordkeeping requirements specified in this subpart for Group 2 wastewater streams, and you are exempt from the requirements in 40 CFR part 61, subpart FF.

(k) *Compliance with 40 CFR part 60, subpart VV, and 40 CFR part 61, subpart V.* After the compliance date specified in § 63.2445, if you have an affected source with equipment that is also subject to the requirements of 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, you may elect to apply this subpart to all such equipment. After the compliance date specified in § 63.2445, if you have an affected source with equipment to which this subpart does not apply, but which is subject to the requirements of 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, you may elect to apply this subpart to all such equipment. If you elect either of these methods of compliance, you must consider all total organic compounds, minus methane and ethane, in such equipment for purposes of compliance with this subpart, as if they were organic HAP. Compliance with the provisions of this subpart, in the manner described in this paragraph (k), will constitute compliance with 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V, as applicable.

(l) *Applicability of process units included in a process unit group.* You may elect to develop and comply with the requirements for PUG in accordance with paragraphs (l)(1) through (3) of this section.

(1) *Procedures to create process unit groups.* Develop and document changes in a PUG in accordance with the procedures specified in paragraphs (l)(1)(i) through (v) of this section.

(i) Initially, identify an MCPU that is created from nondedicated equipment that will operate on or after November 10, 2003 and identify all processing equipment that is part of this MCPU, based on descriptions in operating scenarios.

(ii) Add to the group any other nondedicated MCPU and other nondedicated process units expected to be operated in the 5 years after the date specified in paragraph (l)(1)(i) of this section, provided they satisfy the criteria specified in paragraphs (l)(1)(ii)(A) through (C) of this section. Also identify all of the processing equipment used for each process unit based on information from operating scenarios and other applicable documentation.

(A) Each process unit that is added to a group must have some processing equipment that is also part of one or more process units in the group.

(B) No process unit may be part of more than one PUG.

(C) The processing equipment used to satisfy the requirement of paragraph (l)(1)(ii)(A) of this section may not be a storage tank or control device.

(iii) The initial PUG consists of all of the processing equipment for the process units identified in paragraphs (l)(1)(i) and (ii) of this section. As an alternative to the procedures specified in paragraphs (l)(1)(i) and (ii) of this section, you may use a PUG that was developed in accordance with § 63.1360(h) as your initial PUG.

(iv) Add process units developed in the future in accordance with the conditions specified in paragraphs (l)(1)(ii)(A) and (B) of this section.

(v) Maintain records that describe the process units in the initial PUG, the procedure used to create the PUG, and subsequent changes to each PUG as specified in § 63.2525(i). Submit the records in reports as specified in § 63.2520(d)(2)(ix) and (e)(8).

(2) *Determine primary product.* You must determine the primary product of each PUG created in paragraph (l)(1) of this section according to the procedures specified in paragraphs (l)(2)(i) through (iv) of this section.

(i) The primary product is the type of product (*e.g.,* organic chemicals subject to § 63.2435(b)(1), pharmaceutical products subject to § 63.1250, or pesticide active ingredients subject to § 63.1360) expected to be produced for the greatest operating time in the 5-year period specified in paragraph (l)(1)(ii) of this section.

(ii) If the PUG produces multiple types of products equally based on operating time, then the primary product is the type of product with the greatest production on a mass basis over the 5-year period specified in paragraph (l)(1)(ii) of this section.

(iii) At a minimum, you must redetermine the primary product of the PUG following the procedure specified in paragraphs (l)(2)(i) and (ii) of this section every 5 years.

(iv) You must record the calculation of the initial primary product determination as specified in § 63.2525(i)(3) and report the results in the notification of compliance status report as specified in § 63.2520(d)(8)(ix). You must record the calculation of each redetermination of the primary product as specified in § 63.2525(i)(5) and report the calculation in a compliance report submitted no later than the report covering the period for the end of the 5th year after cessation of production of the previous primary product, as specified in § 63.2520(e)(8).

(3) *Compliance requirements.* (i) If the primary product of the PUG is determined according to paragraph (l)(2) of this section to be material described in § 63.2435(b)(1), then you must comply with this subpart for each MCPU in the PUG. You may also elect to comply with this subpart for all other process units in the PUG, which constitutes compliance with other part 63 rules.

(ii) If the primary product of the PUG is determined according to paragraph (l)(2) of this section to be material not described in § 63.2435(b)(1), then you must comply with paragraph (l)(3)(ii)(A), (B), or (C) of this section, as applicable.

(A) If the primary product is subject to subpart GGG of this part 63, then comply with the requirements of subpart GGG for each MCPU in the PUG.

(B) If the primary product is subject to subpart MMM of this part 63, then comply with the requirements of subpart MMM for each MCPU in the PUG.

(C) If the primary product is subject to any subpart in this part 63 other than subpart GGG or subpart MMM, then comply with the requirements of this subpart for each MCPU in the PUG.

(iii) The requirements for new and reconstructed sources in the alternative subpart apply to all MCPU in the PUG if and only if the affected source under the alternative subpart meets the requirements for construction or reconstruction.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40337, July 14, 2006]

§ 63.2540 What parts of the General Provisions apply to me?

Table 12 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

§ 63.2545 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (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 also has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if 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 paragraphs (b)(1) through (4) of this section are retained by the Administrator of U.S. EPA and are not delegated to the State, local, or tribal agency.

(1) Approval of alternatives to the non-opacity emission limits and work practice standards in § 63.2450(a) 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.

§ 63.2550 What definitions apply to this subpart?

(a) For an affected source complying with the requirements in subpart SS of this part 63, the terms used in this subpart and in subpart SS of this part 63 have the meaning given them in § 63.981, except as specified in §§ 63.2450(k)(2) and (m), 63.2470(c)(2), 63.2475(b), and paragraph (i) of this section.

(b) For an affected source complying with the requirements in 40 CFR part 65, subpart F, the terms used in this subpart and in 40 CFR part 65, subpart F have the meaning given to them in § 65.2.

(c) For an affected source complying with the requirements in subpart UU of this part 63, the terms used in this subpart and in subpart UU of this part 63 have the meaning given them in § 63.1020.

(d) For an affected source complying with the requirements in subpart WW of this part 63, the terms used in this subpart and subpart WW of this part 63 have the meaning given them in § 63.1061, except as specified in §§ 63.2450(m), 63.2470(c)(2), and paragraph (i) of this section.

(e) For an affected source complying with the requirements in §§ 63.132 through 63.149, the terms used in this subpart and §§ 63.132 through 63.149 have the meaning given them in §§ 63.101 and 63.111, except as specified in § 63.2450(m) and paragraph (i) of this section.

(f) For an affected source complying with the requirements in §§ 63.104 and 63.105, the terms used in this subpart and in §§ 63.104 and 63.105 of this subpart have the meaning given them in § 63.101, except as specified in §§ 63.2450(m), 63.2490(b), and paragraph (i) of this section.

(g) For an affected source complying with requirements in §§ 63.1253, 63.1257, and 63.1258, the terms used in this subpart and in §§ 63.1253, 63.1257, and 63.1258 have the meaning given them in § 63.1251, except as specified in § 63.2450(m) and paragraph (i) of this section.

(h) For an affected source complying with the requirements in 40 CFR part 65, subpart F, the terms used in this subpart and in 40 CFR part 65, subpart F, have the meaning given them in 40 CFR 65.2.

(i) All other terms used in this subpart are defined in the Clean Air Act (CAA), in 40 CFR 63.2, and in this paragraph (i). If a term is defined in § 63.2, § 63.101, § 63.111, § 63.981, § 63.1020, § 63.1061, § 63.1251, or § 65.2 and in this paragraph (i), the definition in this paragraph (i) applies for the purposes of this subpart.

Ancillary activities means boilers and incinerators (not used to comply with the emission limits in Tables 1 through 7 to this subpart), chillers and refrigeration systems, and other equipment and activities that are not directly involved (*i.e.,* they operate within a closed system and materials are not combined with process fluids) in the processing of raw materials or the manufacturing of a product or isolated intermediate.

Batch operation means a noncontinuous operation involving intermittent or discontinuous feed into equipment, and, in general, involves the emptying of the equipment after the operation ceases and prior to beginning a new operation. Addition of raw material and withdrawal of product do not occur simultaneously in a batch operation.

Batch process vent means a vent from a unit operation or vents from multiple unit operations within a process that are manifolded together into a common header, through which a HAP-containing gas stream is, or has the potential to be, released to the atmosphere. Examples of batch process vents include, but are not limited to, vents on

condensers used for product recovery, reactors, filters, centrifuges, and process tanks. The following are not batch process vents for the purposes of this subpart:

(1) Continuous process vents;

(2) Bottoms receivers;

(3) Surge control vessels;

(4) Gaseous streams routed to a fuel gas system(s);

(5) Vents on storage tanks, wastewater emission sources, or pieces of equipment subject to the emission limits and work practice standards in Tables 4, 6, and 7 to this subpart;

(6) Drums, pails, and totes;

(7) Flexible elephant trunk systems that draw ambient air (*i.e.,* the system is not ducted, piped, or otherwise connected to the unit operations) away from operators when vessels are opened; and

(8) Emission streams from emission episodes that are undiluted and uncontrolled containing less than 50 ppmv HAP are not part of any batch process vent. A vent from a unit operation, or a vent from multiple unit operations that are manifolded together, from which total uncontrolled HAP emissions are less than 200 lb/yr is not a batch process vent; emissions for all emission episodes associated with the unit operation(s) must be included in the determination of the total mass emitted. The HAP concentration or mass emission rate may be determined using any of the following: process knowledge that no HAP are present in the emission stream; an engineering assessment as discussed in § 63.1257(d)(2)(ii), except that you do not need to demonstrate that the equations in § 63.1257(d)(2)(i) do not apply, and the precompliance reporting requirements specified in § 63.1257(d)(2)(ii)(E) do not apply for the purposes of this demonstration; equations specified in § 63.1257(d)(2)(i), as applicable; test data using Method 18 of 40 CFR part 60, appendix A; or any other test method that has been validated according to the procedures in Method 301 of appendix A of this part.

Biofilter means an enclosed control system such as a tank or series of tanks with a fixed roof that contact emissions with a solid media (such as bark) and use microbiological activity to transform organic pollutants in a process vent stream to innocuous compounds such as carbon dioxide, water, and inorganic salts. Wastewater treatment processes such as aeration lagoons or activated sludge systems are not considered to be biofilters.

Bottoms receiver means a tank that collects bottoms from continuous distillation before the stream is sent for storage or for further downstream processing.

Construction means the onsite fabrication, erection, or installation of an affected source or MCPU. Addition of new equipment to an MCPU subject to existing source standards does not constitute construction, but it may constitute reconstruction of the affected source or MCPU if it satisfies the definition of reconstruction in § 63.2.

Consumption means the quantity of all HAP raw materials entering a process in excess of the theoretical amount used as reactant, assuming 100 percent stoichiometric conversion. The raw materials include reactants, solvents, and any other additives. If a HAP is generated in the process as well as added as a raw material, consumption includes the quantity generated in the process.

Continuous operation means any operation that is not a batch operation.

Continuous process vent means the point of discharge to the atmosphere (or the point of entry into a control device, if any) of a gas stream if the gas stream has the characteristics specified in § 63.107(b) through (h), or meets the criteria specified in § 63.107(i), except:

(1) The reference in § 63.107(e) to a chemical manufacturing process unit that meets the criteria of § 63.100(b) means an MCPU that meets the criteria of § 63.2435(b);

(2) The reference in § 63.107(h)(4) to § 63.113 means Table 1 to this subpart;

(3) The references in § 63.107(h)(7) to §§ 63.119 and 63.126 mean tables 4 and 5 to this subpart; and

(4) For the purposes of § 63.2455, all references to the characteristics of a process vent (*e.g.,* flowrate, total HAP concentration, or TRE index value) mean the characteristics of the gas stream.

(5) The reference to "total organic HAP" in § 63.107(d) means "total HAP" for the purposes of this subpart FFFF.

(6) The references to an "air oxidation reactor, distillation unit, or reactor" in § 63.107 mean any continuous operation for the purposes of this subpart.

(7) A separate determination is required for the emissions from each MCPU, even if emission streams from two or more MCPU are combined prior to discharge to the atmosphere or to a control device.

Dedicated MCPU means an MCPU that consists of equipment that is used exclusively for one process, except that storage tanks assigned to the process according to the procedures in § 63.2435(d) also may be shared by other processes.

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 limit, operating limit, or work practice standard; or

(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 limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission point means each continuous process vent, batch process vent, storage tank, transfer rack, and wastewater stream.

Energetics means propellants, explosives, and pyrotechnics and include materials listed at 49 CFR 172.101 as Hazard Class I Hazardous Materials, Divisions 1.1 through 1.6.

Equipment means each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in organic HAP service; and any control devices or systems used to comply with Table 6 to this subpart.

Excess emissions means emissions greater than those allowed by the emission limit.

Family of materials means a grouping of materials with the same basic composition or the same basic end use or functionality produced using the same basic feedstocks with essentially identical HAP emission profiles (primary constituent and relative magnitude on a pound per product basis) and manufacturing equipment configuration. Examples of families of materials include multiple grades of the same product or different variations of a product (*e.g.,* blue, black, and red resins).

Group 1 batch process vent means each of the batch process vents in a process for which the collective uncontrolled organic HAP emissions from all of the batch process vents are greater than or equal to 10,000 lb/yr at an existing source or greater than or equal to 3,000 lb/yr at a new source.

Group 2 batch process vent means each batch process vent that does not meet the definition of Group 1 batch process vent.

Group 1 continuous process vent means a continuous process vent for which the flow rate is greater than or equal to 0.005 standard cubic meter per minute, and the total resource effectiveness index value, calculated according to § 63.2455(b), is less than or equal to 1.9 at an existing source and less than or equal to 5.0 at a new source.

Group 2 continuous process vent means a continuous process vent that does not meet the definition of a Group 1 continuous process vent.

Group 1 storage tank means a storage tank with a capacity greater than or equal to 10,000 gal storing material that has a maximum true vapor pressure of total HAP greater than or equal to 6.9 kilopascals at an existing source or greater than or equal to 0.69 kilopascals at a new source.

Group 2 storage tank means a storage tank that does not meet the definition of a Group 1 storage tank.

Group 1 transfer rack means a transfer rack that loads more than 0.65 million liters/year of liquids that contain organic HAP with a rack-weighted average partial pressure, as defined in § 63.111, greater than or equal to 1.5 pound per square inch absolute.

Group 2 transfer rack means a transfer rack that does not meet the definition of a Group 1 transfer rack.

Group 1 wastewater stream means a wastewater stream consisting of process wastewater at an existing or new source that meets the criteria for Group 1 status in § 63.2485(c) for compounds in Tables 8 and 9 to this subpart and/or a wastewater stream consisting of process wastewater at a new source that meets the criteria for Group 1 status in § 63.132(d) for compounds in Table 8 to subpart G of this part 63.

Group 2 wastewater stream means any process wastewater stream that does not meet the definition of a Group 1 wastewater stream.

Halogen atoms mean chlorine and fluorine.

Halogenated vent stream means a vent stream determined to have a mass emission rate of halogen atoms contained in organic compounds of 0.45 kilograms per hour or greater determined by the procedures presented in § 63.115(d)(2)(v).

HAP metals means the metal portion of antimony compounds, arsenic compounds, beryllium compounds, cadmium compounds, chromium compounds, cobalt compounds, lead compounds, manganese compounds, mercury compounds, nickel compounds, and selenium compounds.

Hydrogen halide and halogen HAP means hydrogen chloride, hydrogen fluoride, and chlorine.

In organic HAP service means that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP as determined according to the provisions of § 63.180(d). The provisions of § 63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.

Isolated intermediate means a product of a process that is stored before subsequent processing. An isolated intermediate is usually a product of a chemical synthesis, fermentation, or biological extraction process. Storage of an isolated intermediate marks the end of a process. Storage occurs at any time the intermediate is placed in equipment used solely for storage. The storage equipment is part of the MCPU that produces the isolated intermediate and is not assigned as specified in § 63.2435(d).

Large control device means a control device that controls total HAP emissions of greater than or equal to 10 tpy, before control.

Maintenance wastewater means wastewater generated by the draining of process fluid from components in the MCPU into an individual drain system in preparation for or during maintenance activities. Maintenance wastewater can be generated during planned and unplanned shutdowns and during periods not associated with a shutdown. Examples of activities that can generate maintenance wastewater include descaling of heat exchanger tubing bundles, cleaning of distillation column traps, draining of pumps into an individual drain system, and draining of

portions of the MCPU for repair. Wastewater from routine cleaning operations occurring as part of batch operations is not considered maintenance wastewater.

Maximum true vapor pressure has the meaning given in § 63.111, except that it applies to all HAP rather than only organic HAP.

Miscellaneous organic chemical manufacturing process means all equipment which collectively function to produce a product or isolated intermediate that are materials described in § 63.2435(b). For the purposes of this subpart, process includes any, all or a combination of reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which are used to produce a product or isolated intermediate. A process is also defined by the following:

(1) Routine cleaning operations conducted as part of batch operations are considered part of the process;

(2) Each nondedicated solvent recovery operation is considered a single process;

(3) Each nondedicated formulation operation is considered a single process that is used to formulate numerous materials and/or products;

(4) Quality assurance/quality control laboratories are not considered part of any process; and

(5) Ancillary activities are not considered a process or part of any process.

(6) The end of a process that produces a solid material is either up to and including the dryer or extruder, or for a polymer production process without a dryer or extruder, it is up to and including the extruder, die plate, or solid-state reactor, except in two cases. If the dryer, extruder, die plate, or solid-state reactor is followed by an operation that is designed and operated to remove HAP solvent or residual HAP monomer from the solid, then the solvent removal operation is the last step in the process. If the dried solid is diluted or mixed with a HAP-based solvent, then the solvent removal operation is the last step in the process.

Nondedicated solvent recovery operation means a distillation unit or other purification equipment that receives used solvent from more than one MCPU.

Nonstandard batch means a batch process that is operated outside of the range of operating conditions that are documented in an existing operating scenario but is still a reasonably anticipated event. For example, a nonstandard batch occurs when additional processing or processing at different operating conditions must be conducted to produce a product that is normally produced under the conditions described by the standard batch. A nonstandard batch may be necessary as a result of a malfunction, but it is not itself a malfunction.

On-site or on site means, with respect to records required to be maintained by this subpart or required by another subpart referenced by this subpart, that records are stored at a location within a major source which encompasses the affected source. On-site includes, but is not limited to, storage at the affected source or MCPU to which the records pertain, or storage in central files elsewhere at the major source.

Operating scenario means, for the purposes of reporting and recordkeeping, any specific operation of an MCPU as described by records specified in § 63.2525(b).

Organic group means structures that contain primarily carbon, hydrogen, and oxygen atoms.

Organic peroxides means organic compounds containing the bivalent -o-o-structure which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

Point of determination means each point where process wastewater exits the MCPU or control device.

NOTE TO DEFINITION FOR POINT OF DETERMINATION: The regulation allows determination of the characteristics of a wastewater stream: At the point of determination; or downstream of the point of determination if corrections are made for changes in flow rate and annual average concentration of soluble HAP and partially soluble HAP compounds as determined according to procedures in § 63.144 of subpart G in this part 63. Such changes include losses by air emissions; reduction of annual average concentration or changes in flow rate by mixing with other water or wastewater streams; and reduction in flow rate or annual average concentration by treating or otherwise handling the wastewater stream to remove or destroy HAP.

Predominant HAP means as used in calibrating an analyzer, the single organic HAP that constitutes the largest percentage of the total organic HAP in the analyzed gas stream, by volume.

Process condenser means a condenser whose primary purpose is to recover material as an integral part of an MCPU. All condensers recovering condensate from an MCPU at or above the boiling point or all condensers in line prior to a vacuum source are considered process condensers. Typically, a primary condenser or condensers in series are considered to be integral to the MCPU if they are capable of and normally used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse or for sale for fuel value, use, or reuse. This definition does not apply to a condenser that is used to remove materials that would hinder performance of a downstream recovery device as follows:

(1) To remove water vapor that would cause icing in a downstream condenser, or

(2) To remove water vapor that would negatively affect the adsorption capacity of carbon in a downstream carbon adsorber, or

(3) To remove high molecular weight organic compounds or other organic compounds that would be difficult to remove during regeneration of a downstream carbon adsorber.

Process tank means a tank or vessel that is used within a process to collect material discharged from a feedstock storage tank or equipment within the process before the material is transferred to other equipment within the process or a product storage tank. A process tank has emissions that are related to the characteristics of the batch cycle, and it does not accumulate product over multiple batches. Surge control vessels and bottoms receivers are not process tanks.

Production-indexed HAP consumption factor (HAP factor) means the result of dividing the annual consumption of total HAP by the annual production rate, per process.

Production-indexed VOC consumption factor (VOC factor) means the result of dividing the annual consumption of total VOC by the annual production rate, per process.

Quaternary ammonium compounds means a type of organic nitrogen compound in which the molecular structure includes a central nitrogen atom joined to four organic groups as well as an acid radical of some sort.

Recovery device means an individual unit of equipment used for the purpose of recovering chemicals from process vent streams and from wastewater streams for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse. For the purposes of meeting requirements in table 2 to this subpart, the recovery device must not be a process condenser and must recover chemicals to be reused in a process on site. Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units. To be a recovery device for a wastewater stream, a decanter and any other equipment based on the operating principle of gravity separation must receive only multi-phase liquid streams.

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

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purposes of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust

the pressure in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

Shutdown means the cessation of operation of a continuous operation for any purpose. Shutdown also means the cessation of a batch operation, or any related individual piece of equipment required or used to comply with this subpart, if the steps taken to cease operation differ from those described in a standard batch or nonstandard batch. Shutdown also applies to emptying and degassing storage vessels. Shutdown does not apply to cessation of batch operations at the end of a campaign or between batches within a campaign when the steps taken are routine operations.

Small control device means a control device that controls total HAP emissions of less than 10 tpy, before control.

Standard batch means a batch process operated within a range of operating conditions that are documented in an operating scenario. Emissions from a standard batch are based on the operating conditions that result in highest emissions. The standard batch defines the uncontrolled and controlled emissions for each emission episode defined under the operating scenario.

Startup means the setting in operation of a continuous operation for any purpose; the first time a new or reconstructed batch operation begins production; for new equipment added, including equipment required or used to comply with this subpart, the first time the equipment is put into operation; or for the introduction of a new product/process, the first time the product or process is run in equipment. For batch operations, startup applies to the first time the equipment is put into operation at the start of a campaign to produce a product that has been produced in the past if the steps taken to begin production differ from those specified in a standard batch or nonstandard batch. Startup does not apply when the equipment is put into operation as part of a batch within a campaign when the steps taken are routine operations.

Storage tank means a tank or other vessel that is used to store liquids that contain organic HAP and/or hydrogen halide and halogen HAP and that has been assigned to an MCPU according to the procedures in § 63.2435(d). The following are not considered storage tanks for the purposes of this subpart:

(1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;

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

(3) Vessels storing organic liquids that contain HAP only as impurities;

(4) Wastewater storage tanks;

(5) Bottoms receivers;

(6) Surge control vessels; and

(7) Process tanks.

Supplemental gases means the air that is added to a vent stream after the vent stream leaves the unit operation. Air that is part of the vent stream as a result of the nature of the unit operation is not considered supplemental gases. Air required to operate combustion device burner(s) is not considered supplemental gases.

Surge control vessel means feed drums, recycle drums, and intermediate vessels as part of any continuous operation. Surge control vessels are used within an MCPU when in-process storage, mixing, or management of flowrates or volumes is needed to introduce material into continuous operations.

Total organic compounds or (TOC) means the total gaseous organic compounds (minus methane and ethane) in a vent stream.

Transfer rack means the collection of loading arms and loading hoses, at a single loading rack, that are assigned to an MCPU according to the procedures specified in § 63.2435(d) and are used to fill tank trucks and/or rail cars with organic liquids that contain one or more of the organic HAP listed in section 112(b) of the CAA of this subpart. Transfer rack includes the associated pumps, meters, shutoff valves, relief valves, and other piping and valves.

Unit operation means those processing steps that occur within distinct equipment that are used, among other things, to prepare reactants, facilitate reactions, separate and purify products, and recycle materials. Equipment used for these purposes includes, but is not limited to, reactors, distillation columns, extraction columns, absorbers, decanters, dryers, condensers, and filtration equipment.

Waste management unit means the equipment, structure(s), and/or device(s) used to convey, store, treat, or dispose of wastewater streams or residuals. Examples of waste management units include wastewater tanks, air flotation units, surface impoundments, containers, oil-water or organic-water separators, individual drain systems, biological wastewater treatment units, waste incinerators, and organic removal devices such as steam and air stripper units, and thin film evaporation units. If such equipment is being operated as a recovery device, then it is part of a miscellaneous organic chemical manufacturing process and is not a waste management unit.

Wastewater means water that is discarded from an MCPU or control device through a POD and that contains either: an annual average concentration of compounds in tables 8 and 9 to this subpart of at least 5 ppmw and has an annual average flowrate of 0.02 liters per minute or greater; or an annual average concentration of compounds in tables 8 and 9 to this subpart of at least 10,000 ppmw at any flowrate. Wastewater means process wastewater or maintenance wastewater. The following are not considered wastewater for the purposes of this subpart:

(1) Stormwater from segregated sewers;

(2) Water from fire-fighting and deluge systems, including testing of such systems;

(3) Spills;

(4) Water from safety showers;

(5) Samples of a size not greater than reasonably necessary for the method of analysis that is used;

(6) Equipment leaks;

(7) Wastewater drips from procedures such as disconnecting hoses after cleaning lines; and

(8) Noncontact cooling water.

Wastewater stream means a stream that contains only wastewater as defined in this paragraph (i).

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38560, July 1, 2005; 71 FR 40338, July 14, 2006]

Table 1 to Subpart FFFF of Part 63—Emission Limits and Work Practice Standards for Continuous Process Vents

As required in § 63.2455, you must meet each emission limit and work practice standard in the following table that applies to your continuous process vents:

For each . . .	For which . . .	Then you must . . .
1. Group 1 continuous process vent	a. Not applicable	i. Reduce emissions of total organic HAP by ≥98 percent by weight or to an outlet process concentration ≤20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except a flare); or
		ii. Reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare; or
		iii. Use a recovery device to maintain the TRE above 1.9 for an existing source or above 5.0 for a new source.
2. Halogenated Group 1 continuous process vent stream	a. You use a combustion control device to control organic HAP emissions	i. Use a halogen reduction device after the combustion device to reduce emissions of hydrogen halide and halogen HAP by ≥99 percent by weight, or to ≤0.45 kg/hr, or to ≤20 ppmv; or ii. Use a halogen reduction device before the combustion device to reduce the halogen atom mass emission rate to ≤0.45 kg/hr or to a concentration ≤20 ppmv.
3. Group 2 continuous process vent at an existing source	You use a recovery device to maintain the TRE level >1.9 but ≤5.0	Comply with the requirements in § 63.993 and the requirements referenced therein.
4. Group 2 continuous process vent at a new source	You use a recovery device to maintain the TRE level >5.0 but ≤8.0	Comply with the requirements in § 63.993 and the requirements referenced therein.

Table 2 to Subpart FFFF of Part 63—Emission Limits and Work Practice Standards for Batch Process Vents

As required in § 63.2460, you must meet each emission limit and work practice standard in the following table that applies to your batch process vents:

For each . . .	Then you must . . .	And you must . . .
1. Process with Group 1 batch process vents	a. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥98 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of control devices (except a flare); or	Not applicable.
	b. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥95 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of recovery devices or a biofilter, except you may elect to comply with the requirements of subpart WW of this part for any process tank; or	Not applicable.
	c. Reduce uncontrolled organic HAP emissions from one or more batch process vents within the process by venting through a closed-vent system to a flare or by venting through one or more closed-vent systems to any combination of control devices (excluding a flare) that reduce organic HAP to an outlet concentration ≤20 ppmv as TOC or total organic HAP.	For all other batch process vents within the process, reduce collective organic HAP emissions as specified in item 1.a and/or item 1.b of this table.

For each . . .	Then you must . . .	And you must . . .
2. Halogenated Group 1 batch process vent for which you use a combustion device to control organic HAP emissions	a. Use a halogen reduction device after the combustion control device; or	i. Reduce overall emissions of hydrogen halide and halogen HAP by ≥99 percent; or ii. Reduce overall emissions of hydrogen halide and halogen HAP to ≤0.45 kg/hr; or iii. Reduce overall emissions of hydrogen halide and halogen HAP to a concentration ≤20 ppmv.
	b. Use a halogen reduction device before the combustion control device	Reduce the halogen atom mass emission rate to ≤0.45 kg/hr or to a concentration ≤20 ppmv.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40339, July 14, 2006]

Table 3 to Subpart FFFF of Part 63—Emission Limits for Hydrogen Halide and Halogen HAP Emissions or HAP Metals Emissions From Process Vents

As required in § 63.2465, you must meet each emission limit in the following table that applies to your process vents that contain hydrogen halide and halogen HAP emissions or PM HAP emissions:

For each . . .	You must . . .
1. Process with uncontrolled hydrogen halide and halogen HAP emissions from process vents ≥1,000 lb/yr	a. Reduce collective hydrogen halide and halogen HAP emissions by ≥99 percent by weight or to an outlet concentration ≤20 ppmv by venting through one or more closed-vent systems to any combination of control devices, or
	b. Reduce the halogen atom mass emission rate from the sum of all batch process vents and each individual continuous process vent to ≤0.45 kg/hr by venting through one or more closed-vent systems to a halogen reduction device.
2. Process at a new source with uncontrolled emissions from process vents ≥150 lb/yr of HAP metals	Reduce overall emissions of HAP metals by ≥97 percent by weight.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40340, July 14, 2006]

Table 4 to Subpart FFFF of Part 63—Emission Limits for Storage Tanks

As required in § 63.2470, you must meet each emission limit in the following table that applies to your storage tanks:

For each . . .	For which . . .	Then you must . . .
1. Group 1 storage tank	a. The maximum true vapor pressure of total HAP at the storage temperature is ≥76.6 kilopascals	i. Reduce total HAP emissions by ≥95 percent by weight or to ≤20 ppmv of TOC or organic HAP and ≤20 ppmv of hydrogen halide and halogen HAP by venting emissions through a closed vent system to any combination of control devices (excluding a flare); or
		ii. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare; or
		iii. Reduce total HAP emissions by venting emissions to a fuel gas system or process in accordance with § 63.982(d) and the requirements referenced therein.

For each . . .	For which . . .	Then you must . . .
	b. The maximum true vapor pressure of total HAP at the storage temperature is <76.6 kilopascals	i. Comply with the requirements of subpart WW of this part, except as specified in § 63.2470; or
		ii. Reduce total HAP emissions by ≥95 percent by weight or to ≤20 ppmv of TOC or organic HAP and ≤20 ppmv of hydrogen halide and halogen HAP by venting emissions through a closed vent system to any combination of control devices (excluding a flare); or
		iii. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare; or
		iv. Reduce total HAP emissions by venting emissions to a fuel gas system or process in accordance with § 63.982(d) and the requirements referenced therein.
2. Halogenated vent stream from a Group 1 storage tank	You use a combustion control device to control organic HAP emissions	Meet one of the emission limit options specified in Item 2.a.i or ii. in Table 1 to this subpart.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40340, July 14, 2006]

Table 5 to Subpart FFFF of Part 63—Emission Limits and Work Practice Standards for Transfer Racks

As required in § 63.2475, you must meet each emission limit and work practice standard in the following table that applies to your transfer racks:

For each . . .	You must . . .
1. Group 1 transfer rack	a. Reduce emissions of total organic HAP by ≥98 percent by weight or to an outlet concentration ≤20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except a flare); or
	b. Reduce emissions of total organic HAP by venting emissions through a closed-vent system to a flare; or
	c. Reduce emissions of total organic HAP by venting emissions to a fuel gas system or process in accordance with § 63.982(d) and the requirements referenced therein; or
	d. Use a vapor balancing system designed and operated to collect organic HAP vapors displaced from tank trucks and railcars during loading and route the collected HAP vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected by a common header.
2. Halogenated Group 1 transfer rack vent stream for which you use a combustion device to control organic HAP emissions	a. Use a halogen reduction device after the combustion device to reduce emissions of hydrogen halide and halogen HAP by ≥99 percent by weight, to ≤0.45 kg/hr, or to ≤20 ppmv; or b. Use a halogen reduction device before the combustion device to reduce the halogen atom mass emission rate to ≤0.45 kg/hr or to a concentration ≤20 ppmv.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40341, July 14, 2006]

Table 6 to Subpart FFFF of Part 63—Requirements for Equipment Leaks

As required in § 63.2480, you must meet each requirement in the following table that applies to your equipment leaks:

For all . . .	And that is part of . . .	You must . . .
1. Equipment that is in organic HAP service	a. Comply with the requirements of subpart UU of this part 63 and the requirements referenced therein, except as specified in § 63.2480(b) and (d); or	
	b. Comply with the requirements of subpart H of this part 63 and the requirements referenced therein, except as specified in § 63.2480(b) and (d); or	
	c. Comply with the requirements of 40 CFR part 65, subpart F and the requirements referenced therein, except as specified in § 63.2480(c) and (d).	
2. Equipment that is in organic HAP service at a new source	a. Any MCPU	i. Comply with the requirements of subpart UU of this part 63 and the requirements referenced therein; or ii. Comply with the requirements of 40 CFR part 65, subpart F.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40341, July 14, 2006]

Table 7 to Subpart FFFF of Part 63—Requirements for Wastewater Streams and Liquid Streams in Open Systems Within an MCPU

As required in § 63.2485, you must meet each requirement in the following table that applies to your wastewater streams and liquid streams in open systems within an MCPU:

For each . . .	You must . . .
1. Process wastewater stream	Comply with the requirements in §§ 63.132 through 63.148 and the requirements referenced therein, except as specified in § 63.2485.
2. Maintenance wastewater stream	Comply with the requirements in § 63.105 and the requirements referenced therein, except as specified in § 63.2485.
3. Liquid streams in an open system within an MCPU	Comply with the requirements in § 63.149 and the requirements referenced therein, except as specified in § 63.2485.

Table 8 to Subpart FFFF of Part 63—Partially Soluble Hazardous Air Pollutants

As specified in § 63.2485, the partially soluble HAP in wastewater that are subject to management and treatment requirements in this subpart FFFF are listed in the following table:

Chemical name . . .	CAS No.
1. 1,1,1-Trichloroethane (methyl chloroform)	71556
2. 1,1,2,2-Tetrachloroethane	79345
3. 1,1,2-Trichloroethane	79005
4. 1,1-Dichloroethylene (vinylidene chloride)	75354
5. 1,2-Dibromoethane	106934
6. 1,2-Dichloroethane (ethylene dichloride)	107062
7. 1,2-Dichloropropane	78875
8. 1,3-Dichloropropene	542756

Chemical name . . .	CAS No.
9. 2,4,5-Trichlorophenol	95954
10. 1,4-Dichlorobenzene	106467
11. 2-Nitropropane	79469
12. 4-Methyl-2-pentanone (MIBK)	108101
13. Acetaldehyde	75070
14. Acrolein	107028
15. Acrylonitrile	107131
16. Allyl chloride	107051
17. Benzene	71432
18. Benzyl chloride	100447
19. Biphenyl	92524
20. Bromoform (tribromomethane)	75252
21. Bromomethane	74839
22. Butadiene	106990
23. Carbon disulfide	75150
24. Chlorobenzene	108907
25. Chloroethane (ethyl chloride)	75003
26. Chloroform	67663
27. Chloromethane	74873
28. Chloroprene	126998
29. Cumene	98828
30. Dichloroethyl ether	111444
31. Dinitrophenol	51285
32. Epichlorohydrin	106898
33. Ethyl acrylate	140885
34. Ethylbenzene	100414
35. Ethylene oxide	75218
36. Ethylidene dichloride	75343
37. Hexachlorobenzene	118741
38. Hexachlorobutadiene	87683
39. Hexachloroethane	67721
40. Methyl methacrylate	80626
41. Methyl-t-butyl ether	1634044
42. Methylene chloride	75092
43. N-hexane	110543
44. N,N-dimethylaniline	121697
45. Naphthalene	91203
46. Phosgene	75445
47. Propionaldehyde	123386
48. Propylene oxide	75569
49. Styrene	100425
50. Tetrachloroethylene (perchloroethylene)	127184
51. Tetrachloromethane (carbon tetrachloride)	56235
52. Toluene	108883

Chemical name . . .	CAS No.
53. Trichlorobenzene (1,2,4-)	120821
54. Trichloroethylene	79016
55. Trimethylpentane	540841
56. Vinyl acetate	108054
57. Vinyl chloride	75014
58. Xylene (m)	108383
59. Xylene (o)	95476
60. Xylene (p)	106423

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38560, July 1, 2005; 71 FR 40341, July 14, 2006]

Table 9 to Subpart FFFF of Part 63—Soluble Hazardous Air Pollutants

As specified in § 63.2485, the soluble HAP in wastewater that are subject to management and treatment requirements of this subpart FFFF are listed in the following table:

Chemical name . . .	CAS No.
1. Acetonitrile	75058
2. Acetophenone	98862
3. Diethyl sulfate	64675
4. Dimethyl hydrazine (1,1)	57147
5. Dimethyl sulfate	77781
6. Dinitrotoluene (2,4)	121142
7. Dioxane (1,4)	123911
8. Ethylene glycol dimethyl ether	110714
9. Ethylene glycol monobutyl ether acetate	112072
10. Ethylene glycol monomethyl ether acetate	110496
11. Isophorone	78591
12. Methanol	67561
13. Nitrobenzene	98953
14. Toluidine (o-)	95534
15. Triethylamine	121448

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38561, July 1, 2005]

Table 10 to Subpart FFFF of Part 63—Work Practice Standards for Heat Exchange Systems

As required in § 63.2490, you must meet each requirement in the following table that applies to your heat exchange systems:

For each . . .	You must . . .
Heat exchange system, as defined in § 63.101	Comply with the requirements of § 63.104 and the requirements referenced therein, except as specified in § 63.2490.

Table 11 to Subpart FFFF of Part 63—Requirements for Reports

As required in § 63.2520(a) and (b), you must submit each report that applies to you on the schedule shown in the following table:

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Precompliance report	The information specified in § 63.2520(c)	At least 6 months prior to the compliance date; or for new sources, with the application for approval of construction or reconstruction.
2. Notification of compliance status report	The information specified in § 63.2520(d)	No later than 150 days after the compliance date specified in § 63.2445.
3. Compliance report	The information specified in § 63.2520(e)	Semiannually according to the requirements in § 63.2520(b).

Table 12 to Subpart FFFF of Part 63—Applicability of General Provisions to Subpart FFFF

As specified in § 63.2540, the parts of the General Provisions that apply to you are shown in the following table:

Citation	Subject	Explanation
§ 63.1	Applicability	Yes.
§ 63.2	Definitions	Yes.
§ 63.3	Units and Abbreviations	Yes.
§ 63.4	Prohibited Activities	Yes.
§ 63.5	Construction/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	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	Yes
§ 63.6(d)	[Reserved]	
§ 63.6(e)(1)-(2)	Operation & Maintenance	Yes.
§ 63.6(e)(3)(i), (ii), and (v) through (viii)	Startup, Shutdown, Malfunction Plan (SSMP)	Yes, except information regarding Group 2 emission points and equipment leaks is not required in the SSMP, as specified in § 63.2525(j).
§ 63.6(e)(3)(iii) and (iv)	Recordkeeping and Reporting During SSM	No, § 63.998(d)(3) and 63.998(c)(1)(ii)(D) through (G) specify the recordkeeping requirement for SSM events, and § 63.2520(e)(4) specifies reporting requirements.
§ 63.6(e)(3)(ix)	SSMP incorporation into title V permit	Yes.
§ 63.6(f)(1)	Compliance Except During SSM	Yes.
§ 63.6(f)(2)-(3)	Methods for Determining Compliance	Yes.
§ 63.6(g)(1)-(3)	Alternative Standard	Yes.

Citation	Subject	Explanation
§ 63.6(h)	Opacity/Visible Emission (VE) Standards	Only for flares for which Method 22 observations are required as part of a flare compliance assessment.
§ 63.6(i)(1)-(14)	Compliance Extension	Yes.
§ 63.6(j)	Presidential Compliance Exemption	Yes.
§ 63.7(a)(1)-(2)	Performance Test Dates	Yes, except substitute 150 days for 180 days.
§ 63.7(a)(3)	Section 114 Authority	Yes, and this paragraph also applies to flare compliance assessments as specified under § 63.997(b)(2).
§ 63.7(b)(1)	Notification of Performance Test	Yes.
§ 63.7(b)(2)	Notification of Rescheduling	Yes.
§ 63.7(c)	Quality Assurance/Test Plan	Yes, except the test plan must be submitted with the notification of the performance test if the control device controls batch process vents.
§ 63.7(d)	Testing Facilities	Yes.
§ 63.7(e)(1)	Conditions for Conducting Performance Tests	Yes, except that performance tests for batch process vents must be conducted under worst-case conditions as specified in § 63.2460.
§ 63.7(e)(2)	Conditions for Conducting Performance Tests	Yes.
§ 63.7(e)(3)	Test Run Duration	Yes.
§ 63.7(f)	Alternative Test Method	Yes.
§ 63.7(g)	Performance Test Data Analysis	Yes.
§ 63.7(h)	Waiver of Tests	Yes.
§ 63.8(a)(1)	Applicability of Monitoring Requirements	Yes.
§ 63.8(a)(2)	Performance Specifications	Yes.
§ 63.8(a)(3)	[Reserved]	
§ 63.8(a)(4)	Monitoring with Flares	Yes.
§ 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	Yes.
§ 63.8(c)(1)(ii)	SSM not in SSMP	Yes.
§ 63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	Yes.
§ 63.8(c)(2)-(3)	Monitoring System Installation	Yes.
§ 63.8(c)(4)	CMS Requirements	Only for CEMS. Requirements for CPMS are specified in referenced subparts G and SS of part 63. Requirements for COMS do not apply because subpart FFFF does not require continuous opacity monitoring systems (COMS).
§ 63.8(c)(4)(i)	COMS Measurement and Recording Frequency	No; subpart FFFF does not require COMS.
§ 63.8(c)(4)(ii)	CEMS Measurement and Recording Frequency	Yes.
§ 63.8(c)(5)	COMS Minimum Procedures	No. Subpart FFFF does not contain opacity or VE limits.

Citation	Subject	Explanation
§ 63.8(c)(6)	CMS Requirements	Only for CEMS; requirements for CPMS are specified in referenced subparts G and SS of this part 63. Requirements for COMS do not apply because subpart FFFF does not require COMS.
§ 63.8(c)(7)-(8)	CMS Requirements	Only for CEMS. Requirements for CPMS are specified in referenced subparts G and SS of part 63. Requirements for COMS do not apply because subpart FFFF does not require COMS.
§ 63.8(d)	CMS Quality Control	Only for CEMS.
§ 63.8(e)	CMS Performance Evaluation	Only for CEMS. Section 63.8(e)(5)(ii) does not apply because subpart FFFF does not require COMS.
§ 63.8(f)(1)-(5)	Alternative Monitoring Method	Yes, except you may also request approval using the precompliance report.
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	Only applicable when using CEMS to demonstrate compliance, including the alternative standard in § 63.2505.
§ 63.8(g)(1)-(4)	Data Reduction	Only when using CEMS, including for the alternative standard in § 63.2505, except that the requirements for COMS do not apply because subpart FFFF has no opacity or VE limits, and § 63.8(g)(2) does not apply because data reduction requirements for CEMS are specified in § 63.2450(j).
§ 63.8(g)(5)	Data Reduction	No. Requirements for CEMS are specified in § 63.2450(j). Requirements for CPMS are specified in referenced subparts G and SS of this part 63.
§ 63.9(a)	Notification Requirements	Yes.
§ 63.9(b)(1)-(5)	Initial Notifications	Yes.
§ 63.9(c)	Request for Compliance Extension	Yes.
§ 63.9(d)	Notification of Special Compliance Requirements for New Source	Yes.
§ 63.9(e)	Notification of Performance Test	Yes.
§ 63.9(f)	Notification of VE/Opacity Test	No. Subpart FFFF does not contain opacity or VE limits.
§ 63.9(g)	Additional Notifications When Using CMS	Only for CEMS. Section 63.9(g)(2) does not apply because subpart FFFF does not require COMS.
63.9(h)(1)-(6)	Notification of Compliance Status	Yes, except subpart FFFF has no opacity or VE limits, and 63.9(h)(2)(i)(A) through (G) and (ii) do not apply because 63.2520(d) specifies the required contents and due date of the notification of compliance status report.
§ 63.9(i)	Adjustment of Submittal Deadlines	Yes.
§ 63.9(j)	Change in Previous Information	No, § 63.2520(e) specifies reporting requirements for process changes.
§ 63.10(a)	Recordkeeping/Reporting	Yes.
§ 63.10(b)(1)	Recordkeeping/Reporting	Yes.
§ 63.10(b)(2)(i)-(ii), (iv), (v)	Records related to SSM	No, §§ 63.998(d)(3) and 63.998(c)(1)(ii)(D) through (G) specify recordkeeping requirements for periods of SSM.
§ 63.10(b)(2)(iii)	Records related to maintenance of air pollution control equipment	Yes.
§ 63.10(b)(2)(vi), (x), and (xi)	CMS Records	Only for CEMS; requirements for CPMS are specified in referenced subparts G and SS of this part 63.
§ 63.10(b)(2)(vii)-(ix)	Records	Yes.
§ 63.10(b)(2)(xii)	Records	Yes.

Citation	Subject	Explanation
§ 63.10(b)(2)(xiii)	Records	Only for CEMS.
§ 63.10(b)(2)(xiv)	Records	Yes.
§ 63.10(b)(3)	Records	Yes.
§ 63.10(c)(1)-(6),(9)-(15)	Records	Only for CEMS. Recordkeeping requirements for CPMS are specified in referenced subparts G and SS of this part 63.
§ 63.10(c)(7)-(8)	Records	No. Recordkeeping requirements are specified in § 63.2525.
§ 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 FFFF does not contain opacity or VE limits.
§ 63.10(d)(4)	Progress Reports	Yes.
§ 63.10(d)(5)(i)	Periodic Startup, Shutdown, and Malfunction Reports	No, § 63.2520(e)(4) and (5) specify the SSM reporting requirements.
§ 63.10(d)(5)(ii)	Immediate SSM Reports	No.
§ 63.10(e)(1)	Additional CEMS Reports	Yes.
§ 63.10(e)(2)(i)	Additional CMS Reports	Only for CEMS.
§ 63.10(e)(2)(ii)	Additional COMS Reports	No. Subpart FFFF does not require COMS.
§ 63.10(e)(3)	Reports	No. Reporting requirements are specified in § 63.2520.
§ 63.10(e)(3)(i)-(iii)	Reports	No. Reporting requirements are specified in § 63.2520.
§ 63.10(e)(3)(iv)-(v)	Excess Emissions Reports	No. Reporting requirements are specified in § 63.2520.
§ 63.10(e)(3)(iv)-(v)	Excess Emissions Reports	No. Reporting requirements are specified in § 63.2520.
§ 63.10(e)(3)(vi)-(viii)	Excess Emissions Report and Summary Report	No. Reporting requirements are specified in § 63.2520.
§ 63.10(e)(4)	Reporting COMS data	No. Subpart FFFF does not contain opacity or VE limits.
§ 63.10(f)	Waiver for Recordkeeping/Reporting	Yes.
§ 63.11	Control device requirements for flares and work practice requirements for equipment leaks	Yes.
§ 63.12	Delegation	Yes.
§ 63.13	Addresses	Yes.
§ 63.14	Incorporation by Reference	Yes.
§ 63.15	Availability of Information	Yes.

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38561, July 1, 2005; 71 FR 20463, Apr. 20, 2006; 71 FR 40341, July 14, 2006; 73 FR 72816, Dec. 22, 2008]

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Significant Source Modification and Part 70 Operating Permit Renewal

Source Description and Location

Source Name:	Aventine Renewable Energy - Mt. Vernon LLC
Source Location:	7201 Port Road, Mount Vernon, Indiana 47620
County:	Posey
SIC Code:	2869
Significant Source Modification No.:	129-31693-00051
Permit Renewal No.:	T129-31281-00051
Permit Reviewer:	Joshua Levering

On July 17, 2013, the Office of Air Quality (OAQ) had a notice published in The Mount Vernon Democrat, Mount Vernon, Indiana, stating that Aventine Renewable Energy - Mt. Vernon LLC had applied for a Significant Source Modification and Part 70 Operating Permit Renewal to operate a stationary ethanol production plant and clarify as-built emission units that differentiated from the as-permitted emission units. The notice also stated that OAQ proposed to issue a Significant Source Modification and Part 70 Operating Permit Renewal for this operation and provided information on how the public could review the proposed permits and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

On July 30, 2013, David Boggs submitted comments to IDEM, OAQ on the draft Significant Source Modification and Part 70 Operating Permit Renewal.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

IDEM should clarify that the scope of the Aventine Renewable Energy - Mt. Vernon LLC affected source includes more than the emission units described in the descriptive box at the beginning of Section E.7. Commenter suggests the following language:

"As set forth in 40 CFR 63, Subpart FFFF, the affected source is the facility wide collection of miscellaneous organic chemical manufacturing process units (MCPU), heat exchange systems, wastewater, and waste management units that are associated with manufacturing ethanol. The affected source includes the following emission units:"

Response to Comment 1:

As reflected by the language in 40 CFR 63.2435(b), a miscellaneous organic chemical manufacturing process units (MCPU) includes the necessary equipment to operate a miscellaneous organic chemical manufacturing process, as defined in 40 CFR 63.2550, that satisfies all of the conditions specified in paragraphs (b)(1) through (3) of this section. An MCPU

also includes any assigned storage tanks and transfer racks; equipment in open systems that is used to convey or store water having the same concentration and flow characteristics as wastewater; and components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used to manufacture any material or family of materials described in paragraphs (b)(1)(i) through (v) of this section.

Therefore, IDEM does not agree with the need for specifying such units when this is explicitly listed in the requirements of 40 CFR 63, Subpart FFFF. No changes were made as a result of this comment.

Comment 2:

IDEM should clarify the applicability of 40 CFR 63, Subpart FFFF requirements set forth in Section E.7. These specific conditions in Section E.7 should be updated.

Response to Comment 2:

IDEM agrees with the recommended changes, and the permit has been revised as follows:

E.7.1 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.~~11130~~**2540**, 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, except as otherwise specified in 40 CFR Part 63, Subpart CCCCCC.

E.7.2 National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing [40 CFR 63, Subpart FFFF]

Pursuant to 40 CFR Part 63, Subpart FFFF, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (included as Attachment G), as specified as follows:

(1) 40 CFR 63.2430
(2) 40 CFR 63.2435 (a), (b)(1)(i), **(b)(2),** (b)(3), (d), (e)
(3) 40 CFR 63.2440 (a), (b), (c)(1)
(4) 40 CFR 63.2445 (a)(2), (c), (f)
(5) 40 CFR 63.2450 (a), (b), (c)(1), (c)(2)(i-iii), (e)(1-2), (f), (g)(1), (g)(2), (g)(4), (g)(5), (h), (i), (k)(1-3), **(k)(5),** (l), (m), (p), (r), (s)
(6) 40 CFR 63.2455 (a), (b)(1-3)
(7) 40 CFR 63.2460 (a), (b)**(1-7)**~~(1-3), (b)(5), (b)(6), (b)(7)~~
(8) 40 CFR 63.2470 (a), (c), (e),
(9) 40 CFR 63.2475 (a), (b)
(10) 40 CFR 63.2480 (a)
~~(11) 40 CFR 63.2500 (b), (c), (d), (e), (f)~~
(11) 40 CFR 63.2485
(12) 40 CFR 63.2505 (a)**(1)**(i)(A), (b)~~(2)~~
(13) 40 CFR 63.2515 (a), (b)(2), (c)
(14) 40 CFR 63.2520 (a), (b), (c), (d), (e)
(15) 40 CFR 63.2525 (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k)
(16) 40 CFR 63.2535 (a), (c)
(17) 40 CFR 63.2540
(18) 40 CFR 63.2545
(19) 40 CFR 63.2550

(20) 40 CFR 63~~.25~~**, Subpart FFFF**
Table 1, 2, 4, 5, 6, **7, 8, 9,** 11, 12

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IDEM Contact

(a) Questions regarding this proposed Significant Source Modification and Part 70 Operating Permit Renewal can be directed to Joshua Levering 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) 234-6543 or toll free at 1-800-451-6027 extension 4-6543.

(b) A copy of the permit 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

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Significant Source Modification and a
Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	Aventine Renewable Energy - Mt. Vernon LLC
Source Location:	7201 Port Road, Mount Vernon, Indiana, 47620
County:	Posey
SIC Code:	2869
Significant Source Modification No.:	129-31693-00051
Permit Renewal No.:	T129-31281-00051
Permit Reviewer:	Joshua Levering

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Aventine Renewable Energy - Mt. Vernon LLC relating to the operation of a stationary ethanol production plant. On December 19, 2011, Aventine Renewable Energy - Mt. Vernon LLC submitted an application to the OAQ requesting to renew its operating permit. Aventine Renewable Energy - Mt. Vernon LLC was issued an initial Part 70 Operating Permit T129-24836-00051 on September 20, 2007.

Source Definition

The Aventine ethanol plant (plant number 129-00051), the Consolidated Grain & Barge's (CGB) grain elevator (plant number 129-00014), and the Consolidated Terminals and Logistics (CTL) plant (plant number 129-00054) are all located at the Port of Indiana Maritime Center. In a prior permitting action IDEM, OAQ determined that the Aventine plant and the CGB grain elevator plant were one major source. After construction of the Aventine plant the relationship between those two plants changed from what the sources had planned. CGB has requested a review of the previous source determination. IDEM, OAQ has examined whether these three plants, or any combination of them, should be considered one "major source" as 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 the other; and,

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

The CGB grain elevator is owned by Consolidated Grain and Barge Company. The CTL plant is owned by Consolidated Terminals and Logistics Company, which is a wholly owned subsidiary of Consolidated Grain and Barge Company. Therefore the CGB grain elevator and the CTL plant have common ownership, meeting the first element of the major source definition.

The Aventine ethanol plant is owned by Aventine Renewable Energy Holdings, Inc. Aventine Renewable Energy Holdings, Inc. and Consolidated Grain and Barge Company are unrelated corporations. They do not have common directors on their board of directors and they do not have any corporate officers in common. There is no common ownership between the Aventine plant and the other two plants.

IDEM's Nonrule Policy Document Air-005 applies to the definition of "major source" in 326 IAC 2-7-1(22). IDEM's Nonrule Policy Document Air-005 sets out two independent tests to determine if common control exists when there is no common ownership. The first test, the auxiliary activity test, determines whether one source performs an auxiliary activity which directly serves the purpose of the primary activity and whether the owner or operator of the primary activity has a major role in the day-to-day operations of the auxiliary activity. An auxiliary activity directly serves the purpose of a primary activity by supplying a necessary raw material to the primary activity or performing an integral part of the production process for the primary activity.

Day-to-day control of the auxiliary activity by the primary activity may be evidenced by several factors, including:

- Is a majority of the output of the auxiliary activity provided to the primary activity?
- Can the auxiliary activity contract to provide it products/services to a third-party without the consent of the primary activity?
- Can the primary activity assume control of the auxiliary activity under certain circumstances?
- Is the auxiliary activity required to complete periodic reports to the primary activity?

If one or a combination of these questions is answered affirmatively, common control may exist.

The CGB grain elevator provides a necessary raw material, grain, to the Aventine plant. From June 1, 2011 to May 31, 2012 the CGB grain elevator sold approximately 32% of its total grain output to Aventine. This is less than a majority of the CGB grain elevator's output. It should be noted that other Consolidated Grain and Barge plants, such as Lyle Station (20 miles away) and three CGB plants in Illinois, also provide grain to the Aventine plant. However, under this test, it is only the relationship between this CGB grain elevator and Aventine that is examined.

The CGB grain elevator and Aventine are free to contract with third parties, neither plant can assume control of the other and neither is required to submit periodic reports to the other. The first common control test is therefore not met for the CGB grain elevator and the Aventine plant.

The second common control test in the nonrule policy is the but/for test. This test focuses on whether the auxiliary activity would exist absent the needs of the primary activity. If all or a majority of the output of the auxiliary activity is consumed by the primary activity the but/for test is satisfied. The CGB grain elevator does not supply a majority of its output to the Aventine plant. The CGB grain elevator was in operation prior to Aventine's construction and has many other customers. If the Aventine plant were to shut down the CGB grain elevator would be able to continue to operate. Therefore the second common control test is also not met. IDEM finds that the CGB grain elevator and the Aventine plant are not under common control. Since neither common ownership nor common control exists the first part of the definition of major source is not met for the CGB grain elevator and the Aventine plant.

IDEM now examines whether the CTL plant and the Aventine plant are under common control. Under the first common control test the CTL plant performs an integral part of the production process by shipping Aventine's ethanol and Dry Distillers Grain with Solubles (DDGS) products to market. However, the CTL plant does not provide a majority of its shipping services to Aventine. From June 1, 2011 to May 31, 2012, the CTL plant shipped a total of 279,795 tons of DDGS and ethanol for Aventine, approximately 47% of its total tonnage. CTL's operators expect this percentage to decline in the future, as the CTL plant has applied for a modification to its facility to add material handling for direct reduced iron. Therefore, the CTL plant and the Aventine plant do not meet the first common control test.

Under the second common control test IDEM focuses on whether the CTL plant, as the auxiliary activity, would exist absent the needs of the primary activity, the Aventine plant. The CTL plant does not supply a majority of its services to the Aventine plant. The CTL plant was in operation prior to Aventine's operation. If the Aventine plant were to shut down the CTL plant would be able to continue to operate. Therefore the second common control test is also not met and the CTL plant and the Aventine plant are not under common control. Since neither common ownership nor common control exists the first part of the definition of major source is not met for the CTL plant and the Aventine plant.

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 on the Internet. The CTL plant belongs to the two-digit Major Group 44, corresponding to SIC Code 4491 for marine cargo handling. The CGB grain elevator belongs to the two-digit Major Group 51, for Wholesale Trade-Nondurable Goods. The Aventine plant belongs to the two-digit Major Group 28, for Chemicals and Allied Products. None of the three plants has the same two-digit SIC Code.

A plant is a support facility to another plant if it dedicates 50% or more of its output to another plant. The CGB grain elevator supplies less than 50% of its output to the Aventine plant. The CTL plant provides less than 50% of its output to the Aventine plant. The CTL plant does not do any shipping for the CGB grain elevator. Since none of the three plants has a support relationship and all three plants have different SIC Codes, none of the three plants meet the second part of the major source definition.

The CGB grain elevator, the CTL plant and the Aventine plant are all on separate properties with no common boundary line. Since they are not on the same or contiguous properties, IDEM examined whether the plants are on adjacent properties.

The term "adjacent" is not defined in Indiana's air permitting rules. IDEM, OAQ has located a May 21, 1988 letter from U.S. EPA Region 8 to the Utah Division of Air Quality and a U.S. EPA Region 5 letter dated October 18, 2010 to Scott Huber at Summit Petroleum Corporation, that discuss the term "adjacent". These letters are in no way binding on IDEM, OAQ, but they are persuasive in that they illustrate a longstanding analysis used to determine if two sources are "adjacent"; going as far back as the preamble to the 1980 NSR program definition of a 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". The evaluation should look at whether the distance between the plants is sufficiently small that it enables them to operate as a single source. Some sample questions are:

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?

The CGB grain elevator property boundary is about 1,000 feet from the nearest Aventine plant boundary. Grain is frequently transferred from the CGB grain elevator to the Aventine plant. There are no conveyors or other direct connections between the plants. The grain is delivered by truck or railcar using the rail line that runs throughout the Port. Nothing is transferred from Aventine to the CGB grain elevator. The plants have separate managers and separate production staff with no managers or other workers shuttling back and forth to be actively involved in the other plant. The production process itself is not split between the two plants. The Aventine plant receives grain from other grain elevators located much farther away. The CGB grain elevator could be much further away and still function in the same way in relation to the Aventine plant. The CGB grain elevator and the Aventine plant are therefore not adjacent and do not meet the third part of the major source definition.

The CTL plant property is about 1,000 feet from the Aventine plant property. A dedicated pipeline transferring ethanol from the Aventine plant to the CTL plant directly connects the two plants. The plants have separate managers and separate production staff with no managers or other workers shuttling back and forth to be actively involved in the other plant. Part of any production process is the shipment of products to markets or customers. Although the Aventine plant is capable of shipping out its products by truck or railcar, the CTL plant performs most of the shipment function for the Aventine plant. The relatively short distance between the two plants enables them to operate in this manner, especially with respect to the dedicated pipeline. The CTL plant and the Aventine plant are therefore adjacent, meeting the third part of the major source definition.

The CGB grain elevator property and the CTL plant property are approximately 600 feet apart. No materials are transferred between the two plants. There are no direct connections between the two plants. The plants have separate managers and separate production staff with no managers or other workers shuttling back and forth to be actively involved in the other plant. There are no production processes split between the two plants. The CGB grain elevator and the CTL plant are therefore not adjacent and do not meet the third part of the major source definition.

Since the CGB grain elevator and the Aventine plant do not meet any of the three parts of the major source definition, IDEM, OAQ has determined that the Aventine plant and CGB grain elevator are not part of the same major source. The CTL plant and the Aventine plant do not meet all three parts of the major source definition and, therefore, IDEM, OAQ has determined that the CTL plant and the Aventine plant are not part of the same major source. The CGB grain elevator and the CTL plant do not meet all three parts of the major source definition and IDEM, OAQ has determined that the CGB grain elevator and the CTL plant are not part of the same major source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

(a) Grain receiving and handling operations, identified as process P-1, installed in 2008, with a maximum capacity of 350 tons of grain per hour and an average annual throughput of 143 tons of grain per hour. The grain when received from various sources is already dried and cleaned. These operations include the following:

(1) One (1) grain truck dump pit, identified as EP-01, installed in 2008, with one (1) conveyor and one (1) elevator system. The particulate emissions from the dump pit are controlled by one (1) baghouse, C-1A, exhausting to stack S-1A.

(2) One (1) rail dump pit, installed in 2008, with conveyor system and elevator system. The particulate emissions from the dump pit are controlled by baghouse, C-1A, exhausting to stack S-1A.

(3) Two (2) corn storage silos, identified as EP-02a and EP-02b, installed in 2008, with a total storage capacity of 600,000 bushels with two (2) conveyor systems.

(4) One (1) grain scalper, identified as EP-03a installed in 2008, and one (1) surge bin, identified as EP-03b, installed in 2008, both units controlled by one (1) baghouse, C-1B, exhausting to stack S-1B.

(b) Grain milling operation, identified as process P-2, installed in 2008, which include the following:

(1) One (1) hammermill feed system, installed in 2008, with a maximum capacity of 6,000 bushels of grain per hour.

(2) Four (4) hammermills, identified as EP-05 through EP-08, installed in 2008, each has a capacity of 1,700 bushels per hour (7,000 bushels per hour total). The particulate emissions from these hammermills are controlled by four (4) baghouses, C-2A through C-2D, exhausting to stacks S-2A through S-2D.

(c) Milled grain cooking operation, identified as process P-4, installed in 2008, which includes the following:

(1) Milled grain cooking operation, consisting of the following major components:

(A) One (1) process condensate tank, installed in 2008,

(B) One (1) slurry mix tank, installed in 2008,

(C) Two (2) liquification tanks, installed in 2008, and

(D) One (1) yeast tank, installed in 2008.

The emissions from these tanks will be controlled by two (2) Thermal Oxidizers, C-6A and C-6B, exhausting to stacks S-6A and S-6B. Each thermal oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) One (1) ammonia tank, installed in 2008.

(d) Fermentation operation, identified as process P-5, installed in 2008, with a maximum throughput of 87,000 gallons of beer per hour or 13,302 gallons of ethanol per hour, controlled by one (1) CO_2 scrubber, C-5A, exhausting to stack S-5A. The maximum undenatured ethanol production rate is 13,302 gallons per hour or 116.5 million gallons per year. The exhaust gas stream from the scrubber may be sent to an offsite company for further processing of the CO_2 gas stream or vented directly to the atmosphere. The source has the option to use a supplemental additive, such as sodium bisulfite, in the CO_2 scrubber. This operation includes the following:

(1) Seven (7) fermenters tanks, installed in 2008.

(2) One (1) beer well tank, installed in 2008, controlled by the CO_2 scrubber, C-5A, exhausting to stack S-5A.

(e) Distillation and dehydration operations, identified as process P-6, installed in 2008, with a throughput of 13,302 gallons of undenatured ethanol per hour (116.5 million gallons of undenatured ethanol per year) consisting of the following emission units:

(1) Two (2) beer columns, #1 and #2, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B. Each Thermal Oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) One (1) acid reduction column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(3) One (1) rectifier column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(4) Two (2) molecular sieves, installed in 2008.

(5) One (1) 200 proof condenser, installed in 2008.

(6) One (1) whole stillage tank, installed in 2008.

(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, installed in 2008, , with a maximum throughput of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), consisting of the following emission units:

(1) Four (4) centrifuges, installed in 2008.

(2) One (1) thin stillage tank, installed in 2008.

(3) Two (2) evaporator systems, installed in 2008.

(4) One (1) syrup tank, installed in 2008.

(5) One (1) wet cake pad, installed in 2008.

(6) DDGS drying, #1 and #2, installed in 2008, with a total drying rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), with two (2) DDGS dryers, each with a heat input capacity of 90 MMBtu/hr. Dryer #1 is controlled by Thermal Oxidizer #1, C-6A, exhausting to stack S-6A, and Dryer #2 is controlled by Thermal Oxidizer #2, C-6B, exhausting to stack S-6B.

(7) Two (2) DDGS coolers, identified as EP-22 (#1) and EP-23 (#2), installed in 2008, with a maximum throughput of 391,148 tons (dry basis) of DDGS per year. Cooler #1 is controlled by Cooler Baghouse #1, C-7A, installed in 2008, and may exhaust to stack S-7A when not being used as make-up air for DDGS Dryer #1. Cooler #2 is controlled by Cooler Baghouse #2, C-7B, installed in 2008, and may exhaust to stack S-7B when not being used as make-up air for DDGS Dryer #2.

(g) DDGS handling, storage and loadout operations, identified as process P-8, installed in 2008, with a rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour) consisting of the following emission units:

(1) One (1) DDGS storage building, installed in 2008, which includes supporting equipment; one (1) enclosed DDGS conveyor, identified as EP-09, with a maximum throughput capacity of 44.65 tons per hour. Particulate emissions between the DDGS storage building and DDGS loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(2) One (1) truck loadout, identified as EP-10, installed in 2008, with a maximum rate of 55 tons (dry basis) per hour. Particulate emissions from truck loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(3) One (1) rail loadout, identified as EP-11, installed in 2008, with a maximum rate of 180 tons (dry basis) per hour. Particulate emissions from rail loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(h) Denatured ethanol loadout, identified as P-9, installed in 2008, with a total maximum throughput of 36,000 gallons per hour or an average throughput of 13,943 gallons per hour (122.1 million gallons per year) consisting of the following emission units:

(1) One (1) truck loadout, identified as EP-24, installed in 2008, and

(2) One (1) rail loadout, identified as EP-25, installed in 2008,

These two (2) loading racks are controlled by enclosed Flare system C-9, installed in 2008. The flare is fueled by natural gas and has a pilot gas flare heat input capacity of 0.092 MMBtu/hr.

(i) Product Storage, identified as process P-10, installed in 2008, consisting of the following emission units:

(1) Three (3) 200 proof above ground storage tanks, identified as Tk001 through Tk003, installed in 2008, each with a capacity of 172,000 gallons.

(2) One (1) denaturant storage tank, identified as Tk004, installed in 2008, with a capacity of 105,000 gallons, and a maximum design capacity less than 20,000 gallons of gasoline per day throughput.

(3) Two (2) denatured ethanol storage tanks, identified as Tk005 and Tk006, installed in 2008, each storing a denatured ethanol with a Reid Vapor Pressure less than 27.6 kilopascals, each with a capacity of 1,406,000 gallons.

(4) One (1) corrosion inhibitor storage tank, identified as Tk007, installed in 2008, with a capacity of 6,392 gallons.

(j) Natural gas combustion sources, identified as P-11, consisting of four (4) natural gas-fired package boilers, identified as EP-26 through EP-29, installed in 2008, each with a heat input capacity of 92.4 MMBtu/hr.

(k) Two (2) Thermal Oxidizers, C-6A and C-6B, installed in 2008, with a heat input capacity of 18 million British thermal units per hour (MMBtu/hr), each, controlling emissions from the following:

(A) One (1) process condensate tank.

(B) One (1) slurry mix tank.

(C) Two (2) liquification tanks.

(D) One (1) yeast tank.

(E) Two (2) beer columns, identified as EP-16.

(F) One (1) side stripper (acid reduction column), identified as EP-17.

(G) One (1) rectifier column, identified as EP-18.

(H) One (1) whole stillage tank.

(I) One (1) thin stillage tank.

(J) One (1) syrup tank.

(K) Two (2) DDGS dryers, identified as EP-20 and EP-21.

Thermal oxidizer C-6A exhausts to stack S-6A and thermal oxidizer C-6B exhausts to stack S-6B.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

The source constructed and operated the following emission unit without proper permits.

(a) Grain receiving and handling operations:

(1) One (1) grain scalper, identified as EP-03a installed in 2008, and one (1) surge bin, identified as EP-03b, installed in 2008, both units controlled by one (1) baghouse, C-1B, exhausting to stack S-1B.

(b) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, installed in 2008, consisting of the following emission units:

(1) Two (2) Cooler Baghouses, installed in 2008, controlling particulate emissions from the two (2) DDGS Coolers. The Cooler Baghouses may exhaust to the DDGS Dryers as make-up air.

(c) One (1) diesel-fired emergency fire pump, installed in 2008, with a capacity of 420 horsepower (HP). This pump is identified as process P-12.

(d) One (1) cooling tower with three (3) cells identified as F-1, installed in 2008, with a total circulation rate of 2,256,000 gallons of water per hour.

(e) Fuel dispensing activities, as follows:

(1) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

(A) One (1) gasoline dispensing operation for plant vehicles, installed in 2008, with a maximum throughput of 75 gallons per month. [40 CFR 63, Subpart BBBBBB] [40 CFR 63, Subpart CCCCCC]

(B) Vapor collection-equipped gasoline cargo tanks, installed in 2008. [40 CFR 63, Subpart BBBBBB]

Emission Units and Pollution Control Equipment Removed From the Permit

The source has not removed any emission units; however, several units that were originally proposed were never constructed. The following emission units were not constructed:

(a) Grain receiving and handling operations, identified as process P-1, which include the following:

(1) Two (2) grain truck dump pits, EP-02 and EP-03, with two (2) conveyors and tow (2) elevator systems.

(A) two (2) baghouses, C-1A and C-1B, controlling particulate emissions from the two (2) grain truck dump pits, EP-02 and EP-03.

(3) Five (5) corn storage silos, EP-06 through EP-10, with a total storage capacity of 2,550,000 bushels with five (5) conveyor systems.

(A) Five (5) bin vent filters, C-1F through C1-J, controlling PM emissions from five (5) corn storage silos, EP-06 through EP-10.

(4) Three (3) surge bins, EP-12 through EP-14.

(A) Four (4) bin vent filters, C-1K through C-1N, controlling four (4) surge bins, EP-11 through EP-14.

(b) Grain milling operation, identified as process P-2, which include the following:

(2) Four (4) hammermills, identified as EP-19 through EP-22, each has a capacity of 1500 bushels per hour (12,000 bushels per hour total).

(A) Four (4) baghouses, C-3A through C-3D for controlling particulate emissions from the Four (4) hammermills, identified as EP-19 through EP-22.

(c) Milled grain cooking operation, identified as process P-4, which includes the following:

(1) Milled grain cooking operation consisting of the following major components;

(A) One (1) process condensate tank,

(B) One (1) slurry mix tank,

(C) Two (2) liquification tanks, and

(D) One (1) yeast tank.

The emissions from these tanks will be controlled by two (2) Thermal Oxidizers, C-6c and C-6D.

(2) One (1) ammonia tank.

(d) Fermentation operation, identified as process P-5, consisting of the following emission units:

(1) Seven (7) fermenters, with a combined processing rate of 11,398 gallons per hour.

(2) One (1) beer well, #2, with a processing rate of 11,398 gallons per hour, controlled by the CO_2 scrubber, C-5B.

(3) Two (2) Slurry Tanks, #1 and #2.

(4) Four (4) Liquefaction Tanks, #1 through #4.

(5) Two (2) Yeast Tanks, #1 and #2.

(e) Distillation and dehydration operations, identified as process P-6, consisting of the following emission units:

(1) One (1) acid reduction column, #2, controlled by either of the two (2) Thermal Oxidizers, C-6C or C-6D.

(2) One (1) rectifier column, #2, controlled by either of the two (2) Thermal Oxidizers, C-6C or C-6D.

(3) Two (2) molecular sieves.

(4) One (1) 200 proof condenser.

(5) One (1) whole stillage tank.

(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, consisting of the following emission units:

(1) Four (4) centrifuges.

(2) One (1) thin stillage tank.

(4) One (1) syrup tank.

(6) Two (2) DDGS dryers, Dryer #3 and Dryer #4, with a total drying rate of 335,782 tons (dry basis) of DDGS per year, each with a heat input capacity of 90 MMBtu/hr.

(7) Two (2) DDGS coolers, Cooler #3 and Cooler #4, with a maximum throughput of 335,782 tons (dry basis) of DDGS per year.

(A) One (1) Thermal Oxidizer #3, C-6C, for controlling Milled grain cooking operations, beer column, #2, acid reduction column, #2, rectifier column, #2, Dryer #3 and Cooler #3.

(B) One (1) Thermal Oxidizer #4, C-6D, for controlling Milled grain cooking operations, beer column, #2, acid reduction column, #2, rectifier column, #2, Dryer #4 and Cooler #4.

(g) DDGS handling, storage and loadout operations, identified as process P-8 consisting of the following emission units:

(1) One (1) DDGS storage building, which includes supporting equipment;

(A) One (1) enclosed DDGS conveyor, EP-24. PM emissions between the DDGS storage building and DDGS loadout are controlled by two (2) DDGS receiving filter, C-8B.

(2) Two (2) truck loadouts, EP-26 and EP-27, with a total maximum rate of 110 tons (dry basis) per hour.

(A) three (3) baghouses (C-8C, C-8D and C-8E), controlling two (2) truck loadouts, EP-26 and EP-27.

(3) One (1) baghouse (C-8F) for controlling the one (1) rail loadout, EP-28.

(h) Denatured ethanol loadout, identified as process P-9, consisting of:

(1) One (1) barge loadout, with a total maximum throughput of 108.7 million gallons per year. This loading rack is controlled by enclosed Flare system C-9.

(i) Product Storage, identified as process P-10, consisting of the following emission units:

(1) Two (2) 200 proof above ground storage tanks, identified as Tk004 and Tk005, each has a capacity of 172,000 gallons.

(3) Two (2) denatured ethanol storage tanks, identified as Tk009 and Tk010, each has a capacity of 1,406,000 gallons.

(j) Natural gas combustion sources, identified as P-11, consisting of four (4) natural gas-fired package boilers, each with a heat input capacity of 92.4 MMBtu/hr.

(k) Two (2) diesel-fired emergency generators, each has a capacity of 3,740 HP. These generators are identified as process P-13.

(l) Two (2) diesel-fired emergency fire pumps, each has a capacity of 290 horsepower (HP). These pumps are identified as process P-12.

(m) One (1) cooling tower with two (2) banks, each bank has 15 cells, identified as F-1, with a total circulation rate of 4,512,000 gallons of water per hour.

Insignificant Activities

The source also consists of the following insignificant activities:

(a) Vehicular traffic on paved roads. [326 IAC 6-4]

Summary of Proposed Modification

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Aventine Renewable Energy - Mt. Vernon LLC on December 19, 2011, relating to installation of a grain scalper with an associated surge bin, two (2) baghouses for the DDGS Coolers, and a gasoline dispensing operation for plant vehicles all of which were install in 2008 but not specifically identified in the permit.

Additionally, a two (2) cell cooling tower is permitted for installation in 2008; however, a three (3) cell tower was installed. Rather than install two (2) diesel-fired emergency fire pumps, each with a 290 HP rating, one (1) pump with rating of 420 HP was installed. . The following is a list of the proposed emission units:

(a) Grain receiving and handling operations:

(1) One (1) grain scalper, identified as EP-03a installed in 2008, and one (1) surge bin, identified as EP-03b, installed in 2008, both units controlled by one (1) baghouse, C-1B, exhausting to stack S-1B.

(b) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, installed in 2008, consisting of the following emission units:

(1) Two (2) Cooler Baghouses, installed in 2008, controlling particulate emissions from the two (2) DDGS Coolers. The Cooler Baghouses may exhaust to the DDGS Dryers as make-up air.

(c) One (1) diesel-fired emergency fire pump, installed in 2008, with a capacity of 420 horsepower (HP). This pump is identified as process P-12.

(d) One (1) cooling tower with three (3) cells identified as F-1, installed in 2008, with a total circulation rate of 2,256,000 gallons of water per hour.

(e) Fuel dispensing activities, as follows:

(1) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

(A) One (1) gasoline dispensing operation for plant vehicles, installed in 2008, with a maximum throughput of 75 gallons per month.

(B) Vapor collection-equipped gasoline cargo tanks, installed in 2008.

Permit Level Determination – Part 70

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

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

PTE Before Controls of the Modification (ton/yr)						
Pollutant	**Grain Scalper**	**DDGS Cooler Baghouses**		**Fire Pump Engine**	**Cooling Tower**	**Gasoline Dispensing Operation**
CO	--	--	--	0.70	--	--
NO_X	--	--	--	0.69	--	--
PM	176.86	203.04	177.85	0.03	0.82	--
PM_{10}	176.86	203.04	177.85	0.03	0.82	--
$PM_{2.5}$	176.86	203.04	177.85	0.03	0.82	--
SO_2	--	--	--	0.0004	--	--
VOC	--	--	--	0.26	--	0.0053
CO_2e	--	--	--	8.54	--	--
HAP Acetaldehyde	--	--	--	4.9e-7	--	--
HAP Acrolein	--	--	--	5.9e-8	--	--
HAP Formaldehyde	--	--	--	7.5e-7	--	--
Single HAPs	--	--	--		--	--
Total HAPs	--	--	--	4.5e-6	--	--

Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

This source modification is subject to 326 IAC 2-7-10.5(g) because the potential to emit is greater than twenty-five (25) tons per year of PM, PM_{10} and direct $PM_{2.5}$. Additionally, the modification will be incorporated into the Part 70 Operating Permit Renewal since the changes would require a significant permit modification under 326 IAC 2-7-12(d) because the modification involves case-by-case determination of an emission limitation or other standard.

Permit Level Determination - PSD

A detailed description of the 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) permit level determination is located under the Potential to Emit After Issuance section of this document.

Existing Approvals

Since the issuance of the Part 70 Operating Permit (129-24836-00051) on September 20, 2007, the source has not been operating under any additional approvals.

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

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled “Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit”. This proposed permit is intended to satisfy the requirements of the construction permit rules.

IDEM is aware that there is a pending enforcement action for exceeding PM/PM_{10} emissions from the hammer mills, DDG load out, grain receiving, and the #1 RTO, fermentation carbon dioxide (CO_2) scrubber, nitrogen oxide (NO_X) from the #2 RTO, failed to maintain minimum temperatures on the #1 and #2 RTOs. The permit includes revised emission limitations that will bring the source into compliance.

IDEM is reviewing these matters and will take appropriate action.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Posey County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Unclassifiable or attainment effective April 5, 2005, for $PM_{2.5}$.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_X) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to ozone. Posey County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_X emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Posey County has been classified as attainment for $PM_{2.5}$. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
Posey County has been classified as attainment or unclassifiable in Indiana for CO, NO_2, PM_{10}, SO_2, and Pb. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

The source includes a stationary ethanol production operation and boilers supporting the ethanol plant with a total heat input rating of greater than 250 million British thermal units per hour (MMBtu/hr).

(1) EPA published a final rule in the Federal Register on May 1, 2007, that excluded ethanol production facilities that produce ethanol through natural fermentation, from the major source category "Chemical Process Plants". Therefore, the fugitive emissions from ethanol production facilities are no longer counted toward determination of PSD, Emission Offset, and Part 70 Permit applicability.

(2) The grain elevator does not meet the definition of a grain terminal elevator with a permanent storage capacity of more than 88,100 m^3 (ca. 2.5 million U.S. bushels.) Therefore, the source is not subject to 40 CFR 60, Subpart DD, and fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

(3) The boilers, with a total heat input rating of greater than 250 MMBtu/hr are considered one of the 28 listed source categories, based on the EPA guidance for “nesting activities”. Therefore, any fugitive emissions from these boilers are counted toward PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
CO	<100
NO_x	>100; <250
PM	**>250**
PM_{10}	**>250**
$PM_{2.5}$	**>250**
SO_2	<100
VOC	**>250**
GHGs	**>100,000**
HAP Acetaldehyde	**>10**
HAP Acrolein	**>10**
HAP Formaldehyde	**>10**
HAP Hexane	<10
HAP Manganese	<10
HAP Methanol	**>10**
HAP Methylcyclohexane	<10
Total HAP	**>25**

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of CO, PM, PM_{10}, $PM_{2.5}$, and VOC is 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.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHGs is equal to or greater than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) 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.

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

Actual Emissions

The following table shows the actual emissions as reported by the source. This information reflects the 2010 OAQ emission data.

Pollutant	Actual Emissions (ton/year)
CO	2.38
NO_X	1.64
PM	0.33
PM_{10}	1.84
$PM_{2.5}$	1.84
SO_2	0.70
VOC	2.11
CO_2	5,259.60
CH_4	0.10
N_2O	0.10
HAP Hexane	0.08

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 After Issuance

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

		Potential To Emit of Modification After Issuance (tons/year)									
Process	Emission Unit	CO	NO_X	PM	PM_{10}*	$PM_{2.5}$**	SO_2	VOC	CO_2e***	Total HAPs	Single HAP
P-1	EP-03a Grain Scalper Baghouse, C-1B	--	--	1.95	1.95	1.95	--	--	--	--	--
P-7	Baghouse C-7A Exhaust (DDGS Cooler #1)	--	--	2.44	2.44	2.44	--	7.47	--	0.48	0.29 (acet.)
P-7	Baghouse C-7B Exhaust (DDGS Cooler #2)	--	--	2.13	2.13	2.13	--	7.47	--	0.77	0.58 (acet.)
P-12	Fire Pump	0.70	0.69	0.03	0.03	0.03	0.0004	0.26	43.12	5.7e-3	1.1e-3 (form.)
	Cooling Tower	--	--	0.82	0.82	0.82	--	--	--	--	--

Process	Emission Unit	Potential To Emit of Modification After Issuance (tons/year)									
		CO	NO_X	PM	PM_{10}*	$PM_{2.5}$**	SO_2	VOC	CO_2e***	Total HAPs	Single HAP
	Gasoline Dispensing	--	--	--	--	--	--	0.0053	--	neg.	neg.
Total PTE of Modification		**0.70**	**0.69**	**7.38**	**7.38**	**7.38**	**0.0004**	**15.20**	**43.12**	**1.26**	**0.87 (acet.)**
PSD Major Source Thresholds		250	250	250	250	250	250	250	100,000	NA	NA

This modification is not a major modification, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 250 tons per year or more, it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1), and the source has not undertaken a physical change or change in the method of operation on or after July 1, 2011, that resulted in an emissions increase of seventy-five thousand (75,000) or more tons of CO_2e per year.

Entire Source

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

Process	Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
		CO	NO_X	PM	PM_{10}*	$PM_{2.5}$**	SO_2	VOC	CO_2e***	Total HAPs	Single HAP
P-1	EP-01a Grain Receiving Baghouse, C-1A for 1 truck dump pit	--	--	2.02	2.02	2.02	--	--	--	--	--
	EP-01b Grain Receiving Baghouse, C-1A for 1 rail dump pit	--	--				--	--	--	--	--
	EP-02a Corn Storage Silo	--	--	15.66	3.95	0.69	--	--	--	--	--
	EP-02b Corn Storage Silo	--	--				--	--	--	--	--
	Storage Silo Conveyor	--	--	38.21	21.30	3.63	--	--	--	--	--
	EP-03a Grain Scalper Baghouse, C-1B	--	--	1.95	1.95	1.95	--	--	--	--	--
	EP-03b Surge Bin	--	--				--	--	--	--	--
P-2	EP-05 Hammermill Baghouse C-2A	--	--	1.30	1.30	1.30	--	--	--	--	--
	EP-06 Hammermill Baghouse C-2B	--	--	1.30	1.30	1.30	--	--	--	--	--
	EP-07 Hammermill Baghouse C-2C	--	--	1.30	1.30	1.30	--	--	--	--	--
	EP-08 Hammermill Baghouse C-2D	--	--	1.23	1.23	1.23	--	--	--	--	--

Process	Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
		CO	NO_X	PM	PM_{10}*	$PM_{2.5}$**	SO_2	VOC	CO_2e***	Total HAPs	Single HAP
P-4	Milled Grain Cooking (RTO C-6A)	--	--	--	--	--	--	MAIN: 38.51 for all ALT: 28.05 for RTO C-6A and 7.47 for BH C-7A	--	MAIN: 2.02 for all ALT: 1.54 for RTO C-6A and 0.48 for BH C-7A	MAIN: 1.06 (acet.) for all ALT: 0.77 for RTO C-6A and 0.29 for BH C-7A
P-6	Distillation & Dehydration (RTO C-6A)	--	--	--	--	--	--		--		
P-7	Baghouse C-7A Exhaust (DDGS Cooler #1)	--	--	MAIN: 51.49 for all ALT: 49.06 for RTO C-6A and 2.44 for BH C-7A	MAIN: 51.49 for all ALT: 49.06 for RTO C-6A and 2.44 for BH C-7A	MAIN: 51.49 for all ALT: 49.06 for RTO C-6A and 2.44 for BH C-7A	--		--		
	DDGS Dryer (process emissions)	31.10	40.87				19.26		--		
	DDGS Dryer (NG combustion)								61,009		
	Thermal Oxidizer C-6A (NG combustion)										
P-4	Milled Grain Cooking (RTO C-6B)	--	--	--	--	--	--	MAIN: 38.51 for all ALT: 28.05 for RTO C-6B and 7.47 for BH C-7B	--	MAIN: 2.46 for all ALT: 1.69 for RTO C-6B and 0.77 for BH C-7B	MAIN: 1.45 (acet.) for all ALT: 0.87 for RTO C-6B and 0.58 for BH C-7B
P-6	Distillation & Dehydration (RTO C-6B)	--	--	--	--	--	--		--		
P-7	Baghouse C-7B Exhaust (DDGS Cooler #2)	--	--	MAIN: 51.49 for all ALT: 49.06 for RTO C-6B and 2.13 for BH C-7B	MAIN: 51.49 for all ALT: 49.06 for RTO C-6B and 2.13 for BH C-7B	MAIN: 51.49 for all ALT: 49.06 for RTO C-6B and 2.13 for BH C-7B	--		--		
	DDGS Dryer (process emissions)	31.10	40.87				19.26		--		
	DDGS Dryer (NG combustion)								61,009		
	Thermal Oxidizer C-6B (NG combustion)										
P-5	Fermentation	--	--	1.05	1.05	1.05	--	36.05	++	7.66	7.32 (acet.)
P-7	*EP-19 Wet Distillers Grain Solubles*	The Distillers Grains and Solubles (DGS) is either being dried (Dry Distillers Grains Solubles (DDGS) or is not dried (Wet Distillers Grains Solubles (WDGS). The worse case emission rate is DDGS; therefore, no emissions are shown for WDGS.									
P-8	EP-09 DDGS Conveyor Baghouse C-8	--	--	0.35	0.35	0.35	--	--	--	--	--
	EP-10 DDGS Truck/Barge Loadout	--	--				--	--	--	--	--
	EP-11 DDGS Rail Loadout	--	--				--	--	--	--	--
	EP-09a DDGS Reclaim Conveyor #1	--	--	11.93	0.0091	0.00086	--	--	--	--	--
	EP-09b DDGS Reclaim Conveyor #2	--	--				--	--	--	--	--
P-9	Denatured Ethanol Loading Rack Emissions - Truck/Railcar Loading	5.10	2.04	0.018	0.018	0.018	--	8.87	--	0.19	0.11 (hex.)

Process	Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
		CO	NO_X	PM	PM_{10}*	$PM_{2.5}$**	SO_2	VOC	CO_2e***	Total HAPs	Single HAP
	Flare	3.4E-2	4.0E-2	3.1E-3	3.1E-3	3.1E-3	2.4E-4	2.2E-3	51.97	7.8e-4	7.4e-4
P-11	Boiler #1	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	0.75	0.78 (hex.)
	Boiler #2	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	0.75	0.78 (hex.)
	Boiler #3	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	0.75	0.78 (hex.)
	Boiler #4	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	0.75	0.78 (hex.)
P-12	Fire Pump	0.70	0.69	0.03	0.03	0.03	0.0004	0.26	43.12	5.7e-3	1.1e-3 (form.)
FS002	Grain Receiving Truck Dump Pit - Fugitive	--	--	1.10	0.24	0.24	--	--	--	--	--
	Grain Receiving Rail Dump Pit - Fugitive	--	--				--	--	--	--	--
FS003	DDGS Storage Building - Fugitive	--	--	0.032	0.0078	0.0078	--	--	--	--	--
FS004	DDGS Truck Loadout EP-10 - Fugitives	--	--	0.097	0.024	0.024	--	--	--	--	--
	DDGS Rail Loadout Station 1 EP-11 - Fugitives	--	--				--	--	--	--	--
	DDGS Rail Loadout Station 2 EP-11 - Fugitives	--	--				--	--	--	--	--
Total PTE of Aventine under MAIN Operating Scenario		**97.17**	**133.08**	**201.89**	**150.27**	**127.67**	**39.48**	**141.16**	**330,902**	**15.33**	**9.83 (acet.) 4.64 (hex.)**
Title V Major Source Thresholds		100	100	NA	100	100	100	100	100,000	25	10
PSD Major Source Thresholds		250	250	250	250	250	250	250	100,000	NA	NA

Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM_{10}), not particulate matter (PM), is considered as a "regulated air pollutant".
The total PTE of the facility is limited to less than 250 tons per year, including fugitive emissions. The table above only lists the fugitive emissions that must be included for Part 70 and PSD Applicability.
**$PM_{2.5}$ listed is direct $PM_{2.5}$.
***Green House Gas (GHG) values are given on a basis of CO_2 equivalent emissions.
+The Distillers Grains Solubles is either being dried (DDGS) or is not (Wet Distillers Grains Solubles). DDGS was considered in the PTE since it is worse than WDGS.
++CO_2 emissions from fermentation are not counted toward the total greenhouse gases at this time.

(a) This existing source is not a major stationary source for PSD (326 IAC 2-2) because the emissions of each regulated pollutant, excluding GHGs, are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1), and the source has not undertaken a physical change or change in the method of operation on or after July 1, 2011, that resulted in an emissions increase of seventy-five thousand (75,000) tons per year of CO_2e or more.

(b) On July 20, 2011, U.S. EPA issued a deferral of Biogenic CO_2 emissions from PSD and Title V. Therefore, these CO_2 emissions were not included in the listed GHG emissions. The GHG emissions shown in the above table result from natural gas and diesel combustion.

Nested Activity

The table below summarizes the potential to emit, reflecting all limits, of the emission units that are a nested activity under PSD.

Potential To Emit of the Nested Activities (tons/year)											
Process/ Emission Unit		CO	NO_X	PM	PM_{10}*	$PM_{2.5}$**	SO_2	VOC	CO_2e***	Total HAPs	HAP Hexane
P-11	Boiler #1	7.28	12.14	2.02	2.02	2.02	0.24	0.81	47,352	0.78	0.74
	Boiler #2	7.28	12.14	2.02	2.02	2.02	0.24	0.81	47,352	0.78	0.74
	Boiler #3	7.28	12.14	2.02	2.02	2.02	0.24	0.81	47,352	0.78	0.74
	Boiler #4	7.28	12.14	2.02	2.02	2.02	0.24	0.81	47,352	0.78	0.74
Total PTE of Nested Activity		29.12	48.56	8.08	8.08	8.08	0.96	3.24	189,408	3.12	2.96
PSD Major Source Thresholds		100	100	100	100	100	100	100	100,000	NA	NA

Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM_{10}), not particulate matter (PM), is considered as a "regulated air pollutant".

**$PM_{2.5}$ listed is direct $PM_{2.5}$.

*** Green House Gas (GHG) values are given on a basis of CO_2 equivalent emissions.

The nested activity is not a major stationary source for PSD (326 IAC 2-2) because the emissions of each regulated pollutant, excluding GHGs, are less than one hundred (<100) tons per year, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1), and the source has not undertaken a physical change or change in the method of operation on or after July 1, 2011, that resulted in an emissions increase of seventy-five thousand (75,000) tons per year of CO_2e or more.

Federal Rule Applicability

Compliance Assurance Monitoring (CAM)

(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/yr)	Controlled PTE (tons/yr)	Major Source Threshold (tons/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
PM, PM_{10}, & $PM_{2.5}$	EP-01a and EP-01b Grain Receiving for 1 truck dump pit & 1 rail dump pit	BH C-1A	Y (all)	PM < 250 PM_{10} >100 $PM_{2.5}$ >100	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM =250 PM_{10} =100 $PM_{2.5}$ =100	N (PM) Y (PM_{10}) Y ($PM_{2.5}$)	N (PM) N (PM_{10}) N ($PM_{2.5}$)
PM, PM_{10}, & $PM_{2.5}$	EP-03a Grain Scalper	BH C-1B	Y (all)	PM < 250 PM_{10} >100 $PM_{2.5}$ >100	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM =250 PM_{10} =100 $PM_{2.5}$ =100	N (PM) Y (PM_{10}) Y ($PM_{2.5}$)	N (PM) N (PM_{10}) N ($PM_{2.5}$)
PM, PM_{10}, & $PM_{2.5}$	EP-05 Hammermill	BH C-2A	Y (all)	PM < 250 PM_{10} >100 $PM_{2.5}$ >100	< PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM =250 PM_{10} =100 $PM_{2.5}$ =100	N (PM) Y (PM_{10}) Y ($PM_{2.5}$)	N (PM) N (PM_{10}) N ($PM_{2.5}$)
PM, PM_{10}, & $PM_{2.5}$	EP-06 Hammermill	BH C-2B	Y (all)	PM < 250 PM_{10} >100 $PM_{2.5}$ >100	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM =250 PM_{10} =100 $PM_{2.5}$ =100	N (PM) Y (PM_{10}) Y ($PM_{2.5}$)	N (PM) N (PM_{10}) N ($PM_{2.5}$)
PM, PM_{10}, & $PM_{2.5}$	EP-07 Hammermill	BH C-2C	Y (all)	PM < 250 PM_{10} >100 $PM_{2.5}$ >100	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM =250 PM_{10} =100 $PM_{2.5}$ =100	N (PM) Y (PM_{10}) Y ($PM_{2.5}$)	N (PM) N (PM_{10}) N ($PM_{2.5}$)
PM, PM_{10}, & $PM_{2.5}$	EP-08 Hammermill	BH C-2D	Y (all)	PM < 250 PM_{10} >100 $PM_{2.5}$ >100	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM =250 PM_{10} =100 $PM_{2.5}$ =100	N (PM) Y (PM_{10}) Y ($PM_{2.5}$)	N (PM) N (PM_{10}) N ($PM_{2.5}$)
VOC	P-4 Milled Grain Cooking P-6 Distillation & Dehydration BH C-7A Exhaust (P-7 DDGS Cooler #1) P-7 DDGS Dryer #1 P-7 DDGS Dryer #1 - combustion RTO C-6A - combustion	TO C-6A	Y	>100	<100	100	Y	N
VOC	P-4 Milled Grain Cooking P-6 Distillation & Dehydration BH C-7B Exhaust (P-7 DDGS Cooler #2)	TO C-6B	Y	>100	<100	100	Y	N

Emission Unit / Pollutant		Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/yr)	Controlled PTE (tons/yr)	Major Source Threshold (tons/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
	P-7 DDGS Dryer #2							
	P-7 DDGS Dryer #2 - combustion							
	RTO C-6B - combustion							
HAP Acetal-dehyde	P-4 Milled Grain Cooking	TO C-6A	Y	>10	<10	10	Y	N
	P-6 Distillation & Dehydration							
	BH C-7A Exhaust (P-7 DDGS Cooler #1)							
	P-7 DDGS Dryer #1							
	P-7 DDGS Dryer #1 - combustion							
	RTO C-6A - combustion							
HAP Acetal-dehyde	P-4 Milled Grain Cooking	TO C-6B	Y	>10	<10	10	Y	N
	P-6 Distillation & Dehydration							
	BH C-7B Exhaust (P-7 DDGS Cooler #2)							
	P-7 DDGS Dryer #2							
	P-7 DDGS Dryer #2 - combustion							
	RTO C-6B - combustion							
HAP Acrolein	P-4 Milled Grain Cooking	TO C-6A	Y	>10	<10	10	Y	N
	P-6 Distillation & Dehydration							
	BH C-7A Exhaust (P-7 DDGS Cooler #1)							
	P-7 DDGS Dryer #1							

Emission Unit / Pollutant		Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/yr)	Controlled PTE (tons/yr)	Major Source Threshold (tons/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
	P-7 DDGS Dryer #1 - combustion							
	RTO C-6A - combustion							
HAP Acrolein	**P-4 Milled Grain Cooking**	**TO C-6B**	**Y**	**>10**	**<10**	**10**	**Y**	**N**
	P-6 Distillation & Dehydration							
	BH C-7B Exhaust (P-7 DDGS Cooler #2)							
	P-7 DDGS Dryer #2							
	P-7 DDGS Dryer #2 - combustion							
	RTO C-6B - combustion							
Total HAP	**P-4 Milled Grain Cooking**	**TO C-6A**	**Y**	**>25**	**<25**	**25**	**Y**	**N**
	P-6 Distillation & Dehydration							
	BH C-7A Exhaust (P-7 DDGS Cooler #1)							
	P-7 DDGS Dryer #1							
	P-7 DDGS Dryer #1 - combustion							
	RTO C-6A - combustion							
Total HAP	**P-4 Milled Grain Cooking**	**TO C-6B**	**Y**	**>25**	**<25**	**25**	**Y**	**N**
	P-6 Distillation & Dehydration							
	BH C-7B Exhaust (P-7 DDGS Cooler #2)							
	P-7 DDGS Dryer #2							
	P-7 DDGS Dryer #2 - combustion							

Emission Unit / Pollutant		Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/yr)	Controlled PTE (tons/yr)	Major Source Threshold (tons/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
	RTO C-6B - combustion							
PM, PM_{10}, & $PM_{2.5}$	**BH C-7A Exhaust (P-7 DDGS Cooler #1)** **P-7 DDGS Dryer #1** **P-7 DDGS Dryer #1 - combustion** **RTO C-6A - combustion**	**TO C-6A**	**Y (all)**	**PM > 250 PM_{10} >100 $PM_{2.5}$ >100**	**PM <250 PM_{10} <100 $PM_{2.5}$ <100**	**PM =250 PM_{10} =100 $PM_{2.5}$ =100**	**Y (PM) Y (PM_{10}) Y ($PM_{2.5}$)**	**N (PM) N (PM_{10}) N ($PM_{2.5}$)**
PM, PM_{10}, & $PM_{2.5}$	**BH C-7B Exhaust (P-7 DDGS Cooler #2)** **P-7 DDGS Dryer #2** **P-7 DDGS Dryer #2 - combustion** **RTO C-6B - combustion**	**TO C-6B**	**Y (all)**	**PM < 250 PM_{10} >100 $PM_{2.5}$ >100**	**PM <250 PM_{10} <100 $PM_{2.5}$ <100**	**PM =250 PM_{10} =100 $PM_{2.5}$ =100**	**N (PM) Y (PM_{10}) Y ($PM_{2.5}$)**	**N (PM) N (PM_{10}) N ($PM_{2.5}$)**
VOC	P-5 Fermentation	SC C-5A	Y	<100	<100	100	N	N
PM, PM_{10}, & $PM_{2.5}$	P-5 Fermentation	SC C-5A	Y (all)	<100	<100	100	N	N
HAP Acetal-dehyde	**P-5 Fermentation**	**SC C-5A**	**Y**	**>10**	**<10**	**10**	**Y**	**N**
Total HAP	**P-5 Fermentation**	**SC C-5A**	**Y**	**>25**	**<25**	**25**	**Y**	**N**
PM, PM_{10}, & $PM_{2.5}$	P-7 DDGS Cooler #1	BH C-7A	Y (all)	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM =250 PM_{10} =100 $PM_{2.5}$ =100	N (PM) Y (PM_{10}) Y ($PM_{2.5}$)	N (PM) N (PM_{10}) N ($PM_{2.5}$)
PM, PM_{10}, & $PM_{2.5}$	P-7 DDGS Cooler #2	BH C-7B	Y (all)	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM =250 PM_{10} =100 $PM_{2.5}$ =100	N (PM) Y (PM_{10}) Y ($PM_{2.5}$)	N (PM) N (PM_{10}) N ($PM_{2.5}$)
PM, PM_{10}, & $PM_{2.5}$	P-8 DDGS Conveyor (DDGS Storage BLDG) EP-09 P-8 DDGS Truck Loadout EP-10 P-8 DDGS Rail Loadout EP-11	BH C-8B	Y (all)	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM =250 PM_{10} =100 $PM_{2.5}$ =100	N (PM) Y (PM_{10}) Y ($PM_{2.5}$)	N (PM) N (PM_{10}) N ($PM_{2.5}$)

Emission Unit / Pollutant		Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/yr)	Controlled PTE (tons/yr)	Major Source Threshold (tons/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
VOC	P-9 Ethanol Loadout	Flare C-9	Y	<100	<100	100	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to:

Control Device	Pollutants	Emission Units
BH C-1A	PM_{10}, & $PM_{2.5}$	EP-01a and EP-01b Grain Receiving for 1 truck dump pit & 1 rail dump pit
BH C-1B	PM_{10}, & $PM_{2.5}$	EP-03a Grain Scalper
BH C-2A	PM_{10}, & $PM_{2.5}$	EP-05 Hammermill
BH C-2B	PM_{10}, & $PM_{2.5}$	EP-06 Hammermill
BH C-2C	PM_{10}, & $PM_{2.5}$	EP-07 Hammermill
BH C-2D	PM_{10}, & $PM_{2.5}$	EP-08 Hammermill
TO C-6A	VOC; HAP Acetaldehyde; HAP Acrolein; Total HAP	P-4 Milled Grain Cooking
		P-6 Distillation & Dehydration
		BH C-7A Exhaust (P-7 DDGS Cooler #1)
		P-7 DDGS Dryer #1
		P-7 DDGS Dryer #1 - combustion
		RTO C-6A - combustion
TO C-6B	VOC; HAP Acetaldehyde; HAP Acrolein; Total HAP	P-4 Milled Grain Cooking
		P-6 Distillation & Dehydration
		BH C-7B Exhaust (P-7 DDGS Cooler #2)
		P-7 DDGS Dryer #2
		P-7 DDGS Dryer #2 - combustion
		RTO C-6B - combustion
TO C-6A	PM, PM_{10}, & $PM_{2.5}$	BH C-7A Exhaust (P-7 DDGS Cooler #1)
		P-7 DDGS Dryer #1
		P-7 DDGS Dryer #1 - combustion
		RTO C-6A - combustion
TO C-6B	PM_{10}, & $PM_{2.5}$	BH C-7B Exhaust (P-7 DDGS Cooler #2)
		P-7 DDGS Dryer #2
		P-7 DDGS Dryer #2 - combustion
		RTO C-6B - combustion
SC C-5A	HAP acetaldehyde	P-5 Fermentation
SC C-5A	Total HAP	P-5 Fermentation

upon issuance of the Title V Renewal. A CAM plan will be incorporated into this Part 70 permit renewal.

Emission Unit / Pollutant		Control Device Used	Subject to 326IAC 6-3-2 (Y/N)	Uncontrolled PTE (tons/yr)	Controlled PTE (tons/yr)	Major Source Threshold (tons/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
PM, PM_{10}, & $PM_{2.5}$	**EP-01a and EP-01b Grain Receiving for 1 truck dump pit & 1 rail dump pit**	**BH C-1A**	**Y (all)**	**PM_{10} >100**	**PM_{10} <100**	**PM_{10} =100**	**N (PM) Y (PM_{10}) Y ($PM_{2.5}$)**	**N (PM) N (PM_{10}) N ($PM_{2.5}$)**
PM, PM_{10}, & $PM_{2.5}$	**EP-03a Grain Scalper**	**BH C-1B**	**Y (all)**	**PM < 250 PM_{10} >100 $PM_{2.5}$ >100**	**PM <250 PM_{10} <100 $PM_{2.5}$ <100**	**PM =250 PM_{10} =100 $PM_{2.5}$ =100**	**N (PM) Y (PM_{10}) Y ($PM_{2.5}$)**	**N (PM) N (PM_{10}) N ($PM_{2.5}$)**
PM, PM_{10}, & $PM_{2.5}$	**EP-05 Hammermill**	**BH C-2A**	**Y (all)**	**PM < 250 PM_{10} >100 $PM_{2.5}$ >100**	**< PM <250 PM_{10} <100 $PM_{2.5}$ <100**	**PM =250 PM_{10} =100 $PM_{2.5}$ =100**	**N (PM) Y (PM_{10}) Y ($PM_{2.5}$)**	**N (PM) N (PM_{10}) N ($PM_{2.5}$)**
PM, PM_{10}, & $PM_{2.5}$	**EP-06 Hammermill**	**BH C-2B**	**Y (all)**	**PM < 250 PM_{10} >100 $PM_{2.5}$ >100**	**PM <250 PM_{10} <100 $PM_{2.5}$ <100**	**PM =250 PM_{10} =100 $PM_{2.5}$ =100**	**N (PM) Y (PM_{10}) Y ($PM_{2.5}$)**	**N (PM) N (PM_{10}) N ($PM_{2.5}$)**
PM, PM_{10}, & $PM_{2.5}$	**EP-07 Hammermill**	**BH C-2C**	**Y (all)**	**PM < 250 PM_{10} >100 $PM_{2.5}$ >100**	**PM <250 PM_{10} <100 $PM_{2.5}$ <100**	**PM =250 PM_{10} =100 $PM_{2.5}$ =100**	**N (PM) Y (PM_{10}) Y ($PM_{2.5}$)**	**N (PM) N (PM_{10}) N ($PM_{2.5}$)**
PM, PM_{10}, & $PM_{2.5}$	**EP-08 Hammermill**	**BH C-2D**	**Y (all)**	**PM < 250 PM_{10} >100 $PM_{2.5}$ >100**	**PM <250 PM_{10} <100 $PM_{2.5}$ <100**	**PM =250 PM_{10} =100 $PM_{2.5}$ =100**	**N (PM) Y (PM_{10}) Y ($PM_{2.5}$)**	**N (PM) N (PM_{10}) N ($PM_{2.5}$)**
PM, PM_{10}, & $PM_{2.5}$	**BH C-7A Exhaust (P-7 DDGS Cooler #1)** **P-7 DDGS Dryer #1** **P-7 DDGS Dryer #1 - combustion** **RTO C-6A - combustion**	**TO C-6A**	**Y (all)**	**PM > 250 PM_{10} >100 $PM_{2.5}$ >100**	**PM <250 PM_{10} <100 $PM_{2.5}$ <100**	**PM =250 PM_{10} =100 $PM_{2.5}$ =100**	**Y (PM) Y (PM_{10}) Y ($PM_{2.5}$)**	**N (PM) N (PM_{10}) N ($PM_{2.5}$)**
PM, PM_{10}, & $PM_{2.5}$	**BH C-7B Exhaust (P-7 DDGS Cooler #2)** **P-7 DDGS Dryer #2** **P-7 DDGS Dryer #2 - combustion** **RTO C-6B - combustion**	**TO C-6B**	**Y (all)**	**PM < 250 PM_{10} >100 $PM_{2.5}$ >100**	**PM <250 PM_{10} <100 $PM_{2.5}$ <100**	**PM =250 PM_{10} =100 $PM_{2.5}$ =100**	**N (PM) Y (PM_{10}) Y ($PM_{2.5}$)**	**N (PM) N (PM_{10}) N ($PM_{2.5}$)**
VOC	P-5 Fermentation	SC C-5A	Y	<100	<100	100	N	N
PM, PM_{10}, & $PM_{2.5}$	P-5 Fermentation	SC C-5A	Y (all)	<100	<100	100	N	N

Emission Unit / Pollutant		Control Device Used	Subject to 326IAC 6-3-2 (Y/N)	Uncontrolled PTE (tons/yr)	Controlled PTE (tons/yr)	Major Source Threshold (tons/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
HAP Acetal-dehyde	**P-5 Fermentation**	**SC C-5A**	**Y**	**>10**	**<10**	**10**	**Y**	**N**
Total HAP	**P-5 Fermentation**	**SC C-5A**	**Y**	**>25**	**<25**	**25**	**Y**	**N**
PM, PM_{10}, & $PM_{2.5}$	P-7 DDGS Cooler #1	BH C-7A	Y (all)	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM =250 PM_{10} =100 $PM_{2.5}$ =100	N (PM) Y (PM_{10}) Y ($PM_{2.5}$)	N (PM) N (PM_{10}) N ($PM_{2.5}$)
PM, PM_{10}, & $PM_{2.5}$	P-7 DDGS Cooler #2	BH C-7B	Y (all)	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM =250 PM_{10} =100 $PM_{2.5}$ =100	N (PM) Y (PM_{10}) Y ($PM_{2.5}$)	N (PM) N (PM_{10}) N ($PM_{2.5}$)
PM, PM_{10}, & $PM_{2.5}$	P-8 DDGS Conveyor (DDGS Storage BLDG) EP-09 P-8 DDGS Truck Loadout EP-10 P-8 DDGS Rail Loadout EP-11	BH C-8B	Y (all)	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM <250 PM_{10} <100 $PM_{2.5}$ <100	PM =250 PM_{10} =100 $PM_{2.5}$ =100	N (PM) Y (PM_{10}) Y ($PM_{2.5}$)	N (PM) N (PM_{10}) N ($PM_{2.5}$)
VOC	P-9 Ethanol Loadout	Flare C-9	Y	<100	<100	100	N	N

New Source Performance Standards (NSPS)

(a) **Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971 (40 CFR 60, Subpart D)**
The requirements of 40 CFR 60, Subpart D are not applicable to the four (4) natural gas fired boilers because each boiler has a heat input capacity of less than 250 MMBtu/hr. Therefore, the requirements of the NSPS are not included in the permit.

(b) **Standards of Performance for Electric Utility Steam Generating Units (40 CFR 60, Subpart Da)**
The requirements of 40 CFR 60, Subpart Da are not included in the permit for the four (4) natural gas fired boilers because these boilers are not electric utility steam generating units.

(c) **Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Db)**
The requirements of 40 CFR 60, Subpart Db are not included in the permit for the four (4) natural gas fired boilers because each boiler has a heat input capacity of less than 100 MMBtu/hr.

(d) **Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units** (**40 CFR 60, Subpart Dc)**

The four (4) natural gas fired boilers are still subject to the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Dc), which is incorporated by reference as 326 IAC 12. The four (4) natural gas fired boilers are steam generating units for which construction, modification, or reconstruction commenced after June 9, 1989 and that have a maximum design heat input capacities of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

The following units are subject to 40 CFR 60, Subpart Dc:

(j) Natural gas combustion sources, identified as P-11, consisting of four (4) natural gas-fired package boilers, identified as EP-26 through EP-29, installed in 2008, each with a heat input capacity of 92.4 MMBtu/hr.

The four (4) natural gas fired boilers are subject to the following portions of 40 CFR 60, Subpart Dc:

(1) 40 CFR 60.40c(a)
(2) 40 CFR 60.40c(b)
(3) 40 CFR 60.41c
(4) 40 CFR 60.48c(a)(1)
(5) 40 CFR 60.48c(g)
(6) 40 CFR 60.48c(i)
(7) 40 CFR 60.48c(j)

The provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the four (4) natural gas fired boilers except when otherwise specified in 40 CFR 60, Subpart Dc.

(e) **Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984 (40 CFR 60, Subpart Kb)**

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

The entire Aventine facility was constructed after July 23, 1984. Therefore, the following emission units that store volatile organic liquids (VOL) were evaluated under this rule:

(i) Product Storage, identified as process P-10, installed in 2008, consisting of the following emission units:

(1) Three (3) 200 proof above ground storage tanks, identified as Tk001 through Tk003, installed in 2008, each with a capacity of 172,000 gallons.

(2) One (1) denaturant storage tank, identified as Tk004, installed in 2008, with a capacity of 105,000 gallons.

(3) Two (2) denatured ethanol storage tanks, identified as Tk005 and Tk006, installed in 2008, each with a capacity of 1,406,000 gallons.

(4) One (1) corrosion inhibitor storage tank, identified as Tk007, installed in 2008, with a capacity of 6,392 gallons.

(1) The corrosion inhibitor storage tank (Tk007) has a capacity less than 75 cubic meters (19,813 gallons). Therefore, this tank is not subject to the requirements of 40 CFR 60, Subpart Kb.

(2) Tanks Tk001 through Tk006 have capacities greater than 75 cubic meters (19,813 gallons) and will be used to store volatile organic liquids. Therefore, these tanks are subject to the following requirements of 40 CFR 60, Subpart Kb.

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

The provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the storage tanks T001 through T005, except when otherwise specified in 40 CFR 60, Subpart Kb.

(f) **Standards of Performance for Grain Elevators (40 CFR 60, Subpart DD)**
The grain elevator at Aventine Renewable Energy - Mt. Vernon LLC is not subject to the requirements of 40 CFR 60, Subpart DD because it does not meet the definition of a grain terminal elevator because it does not have a permanent storage capacity of more than 88,100 m^3 (ca. 2.5 million U.S. bushels) and it does not meet the definition of a grain storage elevator because the source is a dry corn milling source producing product not for human consumption. Therefore, the requirements of the NSPS are not included in the permit.

(g) **Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006** (**40 CFR 60, Subpart VV)**
The requirements of 40 CFR 60, Subpart VV are not included in the permit because the source commenced construction after November 7, 2006.

NOTE: This rule was previously cited in the Part 70 Operating Permit as being applicable for this operation. When this ethanol plant was proposed for construction, there was no "end date" for the applicability of this rule, and the subsequent rule, 40 CFR 60, Subpart VVa, had not yet been promulgated. Since Subpart VVa is now the applicable rule, the provisions of Subpart VV are not applicable.

(h) **Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 (40 CFR 60, Subpart VVa)**
Ethanol (CAS No. 64–17–5) is one of the chemicals listed in 40 CFR 60.489, and this ethanol plant was constructed after November 7, 2006. Therefore, this ethanol production plant is subject to the requirements of 40 CFR 60, Subpart VVa. Under NSPS, Subpart VVa, equipment (as defined in 40 CFR 60.481a) within a process unit (as defined in 40 CFR 60.480a(f)) is an affected facility.

The following units are subject to 40 CFR 60, Subpart VVa:

(d) Fermentation operation, identified as process P-5, installed in 2008, with a maximum throughput of 13,302 gallons per hour, controlled by one (1) CO_2 scrubber, C-5A, exhausting to stack S-5A. The maximum undenatured ethanol production rate is 116.5 million gallons per year. The exhaust gas stream from the scrubber may be sent to an offsite company for further processing of the CO_2 gas stream or vented directly to the atmosphere. The source has the option to use a supplemental additive, such as sodium bisulfite, in the CO_2 scrubber. This operation includes the following:

(1) Seven (7) fermenters, installed in 2008, with a combined processing rate of 13,302 gallons per hour.

(2) One (1) beer well, #1, installed in 2008, with a processing rate of 13,302 gallons per hour, controlled by the CO_2 scrubber, C-5A, exhausting to stack S-5A.

(e) Distillation and dehydration operations, identified as process P-6, installed in 2008, with a throughput of 13,302 gallons per hour (116.5 million gallons of undenatured ethanol per year) consisting of the following emission units:

(1) Two (2) beer columns, #1 and #2, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B. Each Thermal Oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) One (1) acid reduction column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(3) One (1) rectifier column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(4) Two (2) molecular sieves, installed in 2008.

(5) One (1) 200 proof condenser, installed in 2008.

(6) One (1) whole stillage tank, installed in 2008.

(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, installed in 2008, , with a maximum throughput of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), consisting of the following emission units:

(1) Four (4) centrifuges, installed in 2008.

(2) One (1) thin stillage tank, installed in 2008.

(3) Two (2) evaporator systems, installed in 2008.

(4) One (1) syrup tank, installed in 2008.

(5) One (1) wet cake pad, installed in 2008.

(6) Two (2) DDGS dryers, identified as EP-20 (#1) and EP-21 (#2), installed in 2008, with a total drying rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), with two (2) DDGS dryers, each with a heat input capacity of 90 MMBtu/hr. Dryer #1 is controlled by Thermal Oxidizer #1, C-6A, exhausting to stack S-6A, and Dryer #2 is controlled by Thermal Oxidizer #2, C-6B, exhausting to stack S-6B.

(7) Two (2) DDGS coolers, identified as EP-22 (#1) and EP-23 (#2), installed in 2008, with a maximum throughput of 391,148 tons (dry basis) of DDGS per year. Cooler #1 is controlled by Cooler Baghouse #1, C-7A, installed in 2008, and may exhaust to stack S-7A when not being used as make-up air for DDGS Dryer #1. Cooler #2 is controlled by Cooler Baghouse #2, C-7B, installed in 2008, and may exhaust to stack S-7B when not being used as make-up air for DDGS Dryer #2.

(h) Denatured ethanol loadout, identified as process P-9, installed in 2008, consisting of one (1) truck loadout and one (1) rail loadout, with a total maximum throughput of 122.1 million gallons per year (13,943 gallons per hour). These two (2) loading racks are controlled by enclosed Flare system C-9. The flare is fueled by natural gas and has a pilot gas flare heat input capacity of 0.092 MMBtu/hr.

(i) Product Storage, identified as process P-10, installed in 2008, consisting of the following emission units:

(1) Three (3) 200 proof above ground storage tanks, identified as Tk001 through Tk003, installed in 2008, each with a capacity of 172,000 gallons.

(2) One (1) denaturant storage tank, identified as Tk004, installed in 2008, with a capacity of 105,000 gallons.

(3) Two (2) denatured ethanol storage tanks, identified as Tk005 and Tk006, installed in 2008, each with a capacity of 1,406,000 gallons.

(4) One (1) corrosion inhibitor storage tank, identified as Tk007, installed in 2008, with a capacity of 6,392 gallons.

The ethanol production plant is subject to the following portions of 40 CFR 60, Subpart VVa.

(1) 40 CFR 60.480a(a), (b), (c), (d), and (f)
(2) 40 CFR 60.481a
(3) 40 CFR 60.482-1a
(4) 40 CFR 60.482-2a
(5) 40 CFR 60.482-3a
(6) 40 CFR 60.482-4a
(7) 40 CFR 60.482-5a
(8) 40 CFR 60.482-6a
(9) 40 CFR 60.482-7a
(10) 40 CFR 60.482-8a
(11) 40 CFR 60.482-9a
(12) 40 CFR 60.482-10a
(13) 40 CFR 60.482-11a
(14) 40 CFR 60.483-1a
(15) 40 CFR 60.483-2a
(16) 40 CFR 60.484a
(17) 40 CFR 60.485a
(18) 40 CFR 60.486a
(19) 40 CFR 60.487a
(20) 40 CFR 60.488a

(21) 40 CFR 60.489a

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

NOTE: The definition of "process unit" under 40 CFR 60.481a was stayed. Pursuant to 40 CFR 60.480a(f)(2), owners or operators that start a new, reconstructed, or modified affected source prior to November 16, 2007, are not required to comply with the requirements in 'this paragraph' until EPA takes final action to require compliance and publishes a document in the 'Federal Register'. Therefore, the process storage tanks are not included in the definition of the "Process unit".

(i) **Standards of Performance for Bulk Gasoline Terminals (40 CFR 60, Subpart XX)**
The requirements of 40 CFR 60, Subpart XX are not included in this permit. Per 40 CFR 60.501, the definition of bulk gasoline terminal includes receiving gasoline by pipeline, ship or barge. The gasoline received at this source is by truck and rail, so the source does not meet the definition of a bulk gasoline terminal for Subpart XX.

(j) **Standards of Performance for Volatile Organic Liquid Storage Vessels VOC Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations (40 CFR 60, Subpart NNN)**
Ethanol is one of the chemicals listed in 40 CFR 60.667. However, according to the EPA memorandum from Mr. George T. Czerniak dated December 6, 2002, the manufacture of ethanol using a fermentation process (biological synthesis) was excluded from the scope of NSPS, Subpart NNN. Therefore, the distillation unit at this ethanol production plant is not subject to the requirements of 40 CFR 60, Subpart NNN. Therefore, the requirements of the NSPS are not included in the permit.

(k) **Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes(40 CFR 60, Subpart RRR)**
The requirements 40 CFR 60, Subpart RRR, are not included in this permit. Ethanol is one of the chemicals listed in 40 CFR 60.707; however, according to the EPA memorandum from Mr. George T. Czerniak, dated December 6, 2002, the manufacture of ethanol using a fermentation process (biological synthesis) was excluded from the scope of NSPS, Subpart RRR. Therefore, the fermentation operations at this ethanol production plant are not subject to the requirements of 40 CFR 60, Subpart RRR.

(l) **Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII)**
The diesel-fired emergency fire pump (P-12) is a compression ignition internal combustion engine with a displacement of less than 30 liters per cylinder that was constructed after July 11, 2005, manufactured after April 1, 2006 (*2007 model year*).

(a) One (1) diesel-fired emergency fire pump, identified as process P-12, installed in 2008, with a capacity of 420 horsepower (HP).

Therefore, the diesel-fired emergency fire pump (P-12) is subject to the following requirements of 40 CFR 60, Subpart IIII.

(1) 40 CFR 60.4200 (a)(2)(i) and (c)
(2) 40 CFR 60.4205 (b)
(3) 40 CFR 60.4206
(4) 40 CFR 60.4207(a), (b), and (c)
(5) 40 CFR 60.4208
(6) 40 CFR 60.4209
(7) 40 CFR 60.4211 (a), (c), and (e)
(8) 40 CFR 60.4212

(9) 40 CFR 60.4214 (b) and (c)
(10) 40 CFR 60.4218
(11) 40 CFR 60.4219
(12) Table 1 to 40 CFR 60, Subpart IIII
(13) Table 8 to 40 CFR 60, Subpart IIII

The provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to this source, except when otherwise specified in Table 8 to 40 CFR 60, Subpart IIII.

NOTE: The list of applicable requirements has been updated.

(m) **Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60, Subpart JJJJ)**
The provisions of 40 CFR 60, Subpart JJJJ are not applicable to the fire pump because it is a compression ignition internal combustion engine and not a spark ignition internal combustion engine.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(a) **National Emission Standards for Organic Hazardous Air Pollutants From Synthetic Organic Chemical Manufacturing Industry (40 CFR Part 63, Subpart F)**
The requirements of 40 CFR Part 63, Subpart F, are not included in this permit because (1) this source has accepted limits that make it a minor source of hazardous air pollutants; (2) the source does not manufacture as a primary product any of the chemicals listed in Table 1 of 40 CFR 63, Subpart F, Tetrahydro-benzaldehyde, or Crotonaldehyde; and (3) the source does not use as a reactant, manufacture as a product or co-product any of the chemicals listed in Table 2 of 40 CFR 63, Subpart F.

(b) **National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (40 CFR Part 63, Subpart G)**
The requirements of 40 CFR Part 63, Subpart G, are not included in this permit because (1) this source has accepted limits that make it a minor source of hazardous air pollutants; (2) the source does not manufacture as a primary product any of the chemicals listed in Table 1 of 40 CFR 63, Subpart F, Tetrahydro-benzaldehyde, or Crotonaldehyde; and (3) the source does not use as a reactant, manufacture as a product or co-product any of the chemicals listed in Table 2 of 40 CFR 63, Subpart F.

(c) **National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks (40 CFR Part 63, Subpart H)**
The requirements of 40 CFR Part 63, Subpart H, are not included in this permit because (1) this source has accepted limits that make it a minor source of hazardous air pollutants; (2) the source does not manufacture as a primary product any of the chemicals listed in Table 1 of 40 CFR 63, Subpart F, Tetrahydro-benzaldehyde, or Crotonaldehyde; and (3) the source does not use as a reactant, manufacture as a product or co-product any of the chemicals listed in Table 2 of 40 CFR 63, Subpart F.

(d) **National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks (40 CFR 63, Subpart I)**
The requirements of 40 CFR 63, Subpart I, are not included in this permit. The source does not operate any of the processes specified in 40 CFR 63.190(b).

(e) **National Emission Standards for Industrial Process Cooling Towers (40 CFR 63, Subpart Q)**
This source has accepted limits that make it a minor source of hazardous air pollutants. Therefore, the requirements of 40 CFR 63, Subpart Q are not applicability to this source. Therefore, the requirements for 40 CFR 63, Subpart Q, is not included in this permit.

(f) **National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) (40 CFR 63, Subpart R)**
The requirements of 40 CFR 63, Subpart R are not included in this permit because this plant does not meet the definition of a bulk gasoline terminal pursuant to 40 CFR 63.421 because it does not receive gasoline by pipeline, ship, or barge.

(g) **National Emission Standards for Tanks - Level 1 (40 CFR 63, Subpart OO)**
The requirements of 40 CFR 63, Subpart OO are not included in this permit because there are no subparts of 40 CFR 60, 61, or 63 applicable to this source that reference Subpart OO.

(h) **National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process** (**40 CFR 63, Subpart SS)**
The requirements of 40 CFR 63, Subpart SS are not included in this permit because there are no subparts of 40 CFR Part 63 that reference the use of Subpart SS.

(i) **National Emission Standards for Equipment Leaks - Control Level 1 (40 CFR 63, Subpart TT)**
The requirements of 40 CFR 63, Subpart TT are not included in this permit because there are no subparts of 40 CFR Part 63 that reference the use of Subpart TT.

(j) **National Emission Standards for Equipment Leaks - Control Level 2 Standards (40 CFR 63, Subpart UU)**
The requirements of 40 CFR 63, Subpart UU are not included in this permit because there are no subparts of 40 CFR Part 63 that reference the use of Subpart UU.

(k) **National Emission Standards for Storage Vessels (Tanks) - Control Level 2 (40 CFR 63.4060, Subpart WW)**
The requirements of 40 CFR 63, Subpart WW are not included in this permit because there are no subparts of 40 CFR Part 63 that reference the use of Subpart WW.

(l) **National Emission Standards for Organic Liquids Distribution (non-gasoline) (40 CFR 63, Subpart EEEE)**
This source has accepted limits that make it a minor source of hazardous air pollutants. Therefore, the requirements of 40 CFR 63, Subpart EEEE are not applicability to this source. Therefore, the requirements of 40 CFR 63, Subpart EEEE, are not included in this permit.

(m) **National Emission Standards for Miscellaneous Organic Chemical Manufacturing (40 CFR 63, Subpart FFFF)**
This source has accepted limits that make it a minor source of hazardous air pollutants. Therefore, the requirements of 40 CFR 63, Subpart FFFF are not applicability to this source. Therefore, the requirements of 40 CFR 63, Subpart FFFF, are not included in this permit.

(n) **National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ)**
The diesel-fired emergency fire pump (P-12) is subject to the requirements of 40 CFR 63, Subpart ZZZZ, because it is a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions. Pursuant to 40 CFR 63.6590(a)(2)(iii), this unit is a new affected source because it was constructed after June 12, 2006. Pursuant to 40 CFR 63.6590(c)(1), new stationary RICE located at an area source must meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII. No further requirements apply for such engines under Part 63.

The following unit is subject to this rule:

(a) One (1) diesel-fired emergency fire pump, identified as process P-12, installed in 2008, with a capacity of 420 horsepower (HP).

The diesel-fired emergency fire pump (P-12) is subject to the following portions of Subpart ZZZZ.

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585, (a), (c), and (d)
(3) 40 CFR 63.6590, (a), (a)(2)(iii), and (c)(1)
(4) 40 CFR 63.6595(a)(6), (b)
(5) 40 CFR 63.6665
(6) 40 CFR 636.6670
(7) 40 CFR 63.6675

Pursuant to 40 CFR 63.6590(c), new stationary RICE located at area sources of HAP emissions do not need to comply with any of the requirements of the General Provisions specified in Table 8 of 40 CFR 63, Subpart ZZZZ.

(o) **National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD)**
This source has accepted limits that make it a minor source of hazardous air pollutants. Therefore, the requirements of 40 CFR 63, Subpart DDDDD are not applicability to this source. Therefore, the requirements of 40 CFR 63, Subpart DDDDD, are not included in this permit.

(p) **National Emission Standards for Hazardous Air Pollutants for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities (Area Sources) (40 CFR 63, Subpart BBBBBB)**
The source is potentially subject to the requirements of 40 CFR 63, Subpart BBBBBB because it is an area source and gasoline is received by cargo tank. For the purposes of Subpart BBBBBB, gasoline includes 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. However, the requirements of 40 CFR 63, Subpart BBBBBB, are not included in the permit for the following reasons:

(1) The three (3) 200 proof above ground storage tanks, identified as Tk001 through Tk003, and the two (2) denatured ethanol storage tanks, identified as Tk005 and Tk006, do not meet the definition of gasoline, pursuant to 40 CFR 63.11100, because the tanks do not have a Reid vapor pressure exceeding 27.6 kilopascals; however the fuel could still be used for internal combustion engines.

(1) One (1) denaturant storage tank, identified as Tk004, with a maximum design capacity less than 20,000 gallons of gasoline per day throughput, and one (1) corrosion inhibitor storage tank, identified as Tk007, with a capacity of 6,392 gallons, pursuant to 40 CFR 63.11081(g), these tanks do not meet the definition of bulk gasoline plant or bulk gasoline terminal because the tanks do not exceed the 20,000 gallons per day threshold throughput.

Therefore, the requirements of 40 CFR 63, Subpart DDDDD, are not included in this permit.

(q) **National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities (40 CFR 63, Subpart CCCCCC)**
The source is subject to the requirements of 40 CFR 63, Subpart CCCCCC because it is an area source and this ethanol plant has a gasoline dispensing operation for plant vehicles. The affected sources include the following and are considered new affected sources pursuant to 40 CFR 63.11112(b) because construction commenced after November 9, 2006, and they are identified as part of the affected source under 40 CFR 63.11111:

(A) One (1) gasoline dispensing operation for plant vehicles, installed in 2008, with a maximum throughput of 75 gallons per month.

(B) Vapor collection-equipped gasoline cargo tanks, installed in 2008.

The gasoline dispensing operation for plant vehicles (T009) and the vapor collection-equipped gasoline cargo tanks are subject to the following requirements of40 CFR 63, Subpart CCCCCC:

(1) 40 CFR 63.11110
(2) 40 CFR 63.11111 (a), (b), (e), (f), (h), (i), (j), and (k)
(3) 40 CFR 63.11112(a) and (b)
(4) 40 CFR 63.11113(a), (a)(1), (d), (d)(1), (e), and (e)(1)
(5) 40 CFR 63.11115
(6) 40 CFR 63.11116
(7) 40 CFR 63.11125(d)
(8) 40 CFR 63.11126(b)
(9) 40 CFR 63.11130
(10) 40 CFR 63.11131
(11) 40 CFR 63.11132
(12) Table 3 to 40 CFR 63 Subpart CCCCCC

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart CCCCCC.

NOTE: The list of applicable requirements has been updated.

NOTE: This rule was not previously included in the FESOP for this operation. These are not new units, but it has been determined that Subpart CCCCCC does apply to this operation. The applicable provisions will now be included in the Part 70 Operating Permit.

(r) **National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial and Institutional Boilers and Process Heaters-Area Sources (Subpart 40 CFR 63, Subpart JJJJJJ)**
This source is not subject to the requirements of 40 CFR 63, Subpart JJJJJJ. Both boilers at the source are only capable of using natural gas as fuel, qualifying them as gas-fired boilers and therefore not subject to any requirements of this rule as specified in 40 CFR 63.11195(e). Therefore, the requirements of the NESHAP are not included in the permit.

(s) **National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Chemical Manufacturing Area Sources, (40 CFR 63 Subpart VVVVVV)**
This source is not subject to the requirements of 40 CFR 63 Subpart VVVVVV, due to the source taking a limit on the acetaldehyde produced at the facility.

In order to be subject to Subpart VVVVVV a facility must meet the following three (3) conditions:

1. Use a feedstock or produce a product or byproduct containing any HAP listed in Table 1 of the regulation;

2. The facility is an area (minor) source of HAPs; and

3. The HAP(s) in feedstock are produced at levels greater than 1.0% for noncarcinogen and 0.1% for carcinogen related HAPs.

The facility produces acetaldehyde (a Table 1 HAP and a carcinogen) as a byproduct of the fermentation process. In order to render the requirements of the NESHAP for Chemical Manufacturing Area Sources (40 CFR Part 63, Subpart VVVVVV), not applicable, the Permittee shall comply with the following:

> Any HAP listed in Table 1 of 40 CFR 63, Subpart VVVVVV, that is generated or produced in the chemical manufacturing process unit (CMPU) and is present in process fluid shall be less than 0.1 percent for carcinogens, as defined by the Occupational Safety and Health Administration at 29 CFR 1910.1200(d)(4), and less than 1.0 percent for noncarcinogens.

Compliance with this limit shall render the requirements of 40 CFR Part 63, Subpart VVVVVV (National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources not applicable.

Therefore, the requirements of the NESHAP are not included in the permit.

(t) **National Emission Standards for Hazardous Air Pollutants for Area Sources: Chemical Preparations Industry (40 CFR 63, Subpart BBBBBBB)**
The provisions of 40 CFR 63, Subpart BBBBBBB are not included in this permit because the source does not have a chemical preparations operation as defined in 40 CFR 63.11588.

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 1-5-2 (Emergency Reduction Plans)
The source is subject to 326 IAC 1-5-2.

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
PSD applicability is discussed above in the Potential to Emit After Issuance section, and specific requirements under PSD are outlined below in State Rule Applicability - Individual Facilities.

326 IAC 2-6 (Emission Reporting)
This source, not located in Lake, Porter, or LaPorte County, is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC and PM_{10} is less than 250 tons per year; and the potential to emit of CO, NO_X, and SO_2 is less than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(2), triennial reporting is required. An emission statement shall be submitted in accordance with the compliance schedule in 326 IAC 2-6-3(b)(3) by July 1, 2015, and every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).

326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5 because fugitive particulate matter emissions are less than twenty-five (25) tons per year.

326 IAC 6.5 PM Limitations Except Lake County
This source is not subject to 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

326 IAC 6.8 PM Limitations for Lake County
This source is not subject to 326 IAC 6.8 becuase it is not located in Lake County.

326 IAC 8-4-4 (Bulk Gasoline Terminals)
The source does not operate a bulk gasoline terminal, as defined in 326 IAC 1-2-8, because it does not deliver gasoline to bulk gasoline plants or to commercial or retail accounts primarily by transport. Therefore, the requirements of 326 IAC 8-4-4 are not applicable.

326 IAC 8-4-5 (Bulk Gasoline Plants)
The source does not operate a bulk gasoline plant, as defined in 326 IAC 1-2-7, because it does not dispense gasoline via account trucks to local farms, businesses and service stations. Therefore, the requirements of 326 IAC 8-4-5 are not applicable.

State Rule Applicability – Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
The source is not in one of the twenty-eight (28) source categories as defined in 326 IAC 2-2-1 and the potential to emit CO, NO_X, PM, PM_{10}, $PM_{2.5}$, SO_2, and VOC from the entire source before control is greater than two hundred fifty (250) tons/yr, each.

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable:

(I) Material Handling

The PM, PM_{10}, and $PM_{2.5}$ emissions from the following emission units at Aventine's ethanol production plant shall not exceed the emission limits in the table below:

Process ID	Process Description	Control ID	PM Emissions Limits (lbs/hr)	PM_{10} Emissions Limits (lbs/hr)	$PM_{2.5}$ Emissions Limits (lbs/hr)
EP-01a	Truck dump pit	Baghouse C-1A	0.46	0.46	0.46
EP-01b	Rail dump pit				
EP-05	Hammermill	Baghouse C-2A	0.30	0.30	0.30
EP-06	Hammermill	Baghouse C-2B	0.30	0.30	0.30
EP-07	Hammermill	Baghouse C-2C	0.30	0.30	0.30
EP-08	Hammermill	Baghouse C-2D	0.28	0.28	0.28
EP-03a	Grain Scalper	Baghouse C-1B	0.44	0.44	0.44
EP-09	DDGS conveyor	Baghouse C-8A	0.08	0.08	0.08
	DDGS storage				

(II) DDGS Drying and Cooling

(A) The VOC emissions from the following ethanol emissions units shall not exceed the following emission limits:

Operating Scenario One: DDGS Cooler Baghouse #1 (C-7A) exhausting into DDGS dryer #1 and DDGS Cooler Baghouse #2 (C-7B) exhausting into the DDGS dryer #2..

(a1) The VOC emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 8.77 pounds per hour.

(b1) The VOC emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 8.77 pounds per hour.

(c1) The VOC emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall exhaust to the DDGS dryer #1.

(d1) The VOC emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall exhaust to the DDGS dryer #2.

Operating Scenario Two: DDGS Cooler Baghouse #1 (C-7A) and DDGS Cooler Baghouse #2 (C-7B) exhausting to atmosphere.

(a2) The VOC emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 6.4 pounds per hour.

(b2) The VOC emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 6.4 pounds per hour.

(c2) The VOC emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall not exceed 1.55 pounds per hour.

(d2) The VOC emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall not exceed 1.55 pounds per hour.

(B) The NOx emissions from the following ethanol emissions units shall not exceed the following emission limits:

(a) The NOx emissions from the two (2) Thermal Oxidizers stack exhaust shall not exceed 86.4 pounds per million cubic feet of natural gas burned by the two (2) DDGS Dryers and two (2) RTOs.

(b) The total throughput of natural gas to the two (2) DDGS dryers #1 and #2 and two (2) Thermal Oxidizers, C-6A andC-6B shall be limited to 1,892 million cubic feet per twelve month period, with compliance determined at the end of each month.

(C) The Carbon Monoxide (CO) emissions from the following ethanol emissions units shall not exceed the following emission limits:

(a) The CO emissions from Thermal Oxidizer #1 (C-6A), which controls the CO emissions from the DDGS dryer #1, shall not exceed 7.1 pounds per hour.

(b) The CO emissions from Thermal Oxidizer #2 (C-6B), which controls the CO emissions from the DDGS dryer #1, shall not exceed 7.1 pounds per hour.

(D) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following ethanol emissions units shall not exceed the following emission limits:

Operating Scenario One: DDGS Cooler Baghouse #1 (C-7A) exhausting into the DDGS dryer #1 and DDGS Cooler Baghouse #2 (C-7B) exhausting into DDGS dryer #2.

(a1) The PM, PM_{10}, and $PM_{2.5}$ emissions from the Thermal Oxidizer #1 exhaust (C-6A), which controls the DDGS dryer #1, shall not exceed 11.75 pounds per hour.

(b1) The PM, PM_{10}, and $PM_{2.5}$ emissions from the Thermal Oxidizer #2 exhaust (C-6B), which controls the DDGS dryer #2, shall not exceed 11.68 pounds per hour.

(c1) The PM, PM_{10}, and $PM_{2.5}$ emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall exhaust to the DDGS dryer #1.

(d1) The PM, PM_{10}, and $PM_{2.5}$ emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall exhaust to the DDGS dryer #2.

Operating Scenario Two: DDGS Cooler Baghouse #1 (C-7A) and DDGS Cooler Baghouse #2 (C-7B) exhausting to atmosphere.

(a2) The PM, PM_{10}, and $PM_{2.5}$ emissions from the Thermal Oxidizer #1 exhaust (C-6A), which controls the DDGS dryer #1, shall not exceed 11.2 pounds per hour.

(b2) The PM, PM_{10}, and $PM_{2.5}$ emissions from the Thermal Oxidizer #2 exhaust (C-6B), which controls the DDGS dryer #2, shall not exceed 11.2 pounds per hour.

(c2) The PM, PM_{10}, and $PM_{2.5}$ emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall not exceed 0.56 pounds per hour.

(d2) The PM, PM_{10}, and $PM_{2.5}$ emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall not exceed 0.48 pounds per hour.

(E) The sulfur dioxide (SO_2) emissions from the following ethanol emissions units shall not exceed the following emission limits:

(a) The sulfur dioxide (SO_2) emissions from the two (2) DDGS dryers #1 and #2 shall not exceed 0.053 pound per ton of DDGS dried.

(b) The total DDGS throughput to the two DDGS dryers shall not exceed 391,148 tons per twelve consecutive month period, with compliance determined at the end of each month.

(III) Fermentation

(A) The VOC emissions from Fermentation, Scrubber C-5A, shall not exceed 8.23 pounds per hour.

(B) The PM, PM_{10}, and $PM_{2.5}$ emissions from Fermentation, Scrubber C-5A, shall not exceed 8.23 pounds per hour.

(a) The PM emissions from Fermentation, Scrubber C-5A, shall not exceed 0.24 pound per hour.

(b) The PM_{10} emissions from Fermentation, Scrubber C-5A, shall not exceed 0.24 pound per hour.

(c) The $PM_{2.5}$ emissions from Fermentation, Scrubber C-5A, shall not exceed 0.24 pound per hour.

(IV) Ethanol Loading Racks

(A) The VOC emissions from the loading racks shall be limited as follows:

(a) The VOC emissions from the enclosed Flare, C-9, which controls one (1) truck ethanol loadout and one (1) rail ethanol loadout systems shall not exceed 0.00015 pound per gallon of ethanol loaded out.

(b) The trucks and rail loading racks shall be limited to a combined throughput of 122,141,250 gallons of denatured ethanol per twelve (12) consecutive month period, with compliance determined at the end of each month.

(B) The CO emissions from the enclosed Flare, C-9, which controls one (1) truck ethanol loadout and one (1) rail ethanol loadout systems shall not exceed 0.0835 pound per kilogallon of ethanol loaded out.

(C) The NO_X emissions from the enclosed Flare, C-9, which controls one (1) truck ethanol loadout and one (1) rail ethanol loadout systems shall not exceed 0.0334 pound per kilogallon of ethanol loaded out.

(D) The PM, PM_{10}, and $PM_{2.5}$ emissions from the enclosed Flare, C-9, which controls one (1) truck ethanol loadout and one (1) rail ethanol loadout systems shall not exceed 0.000299 pound per kilogallon of ethanol loaded out.

(V) Cooling Tower

(A) The PM, PM_{10}, and $PM_{2.5}$ emissions from the cooling tower shall not exceed 0.38 pounds per hour, and it shall be designed with a drift rate of 0.0005% and circulation rate of 2,256,000 gallons of make up water per hour.

(IV) Boilers

(A) The NO_X and CO emissions from the four (4) package boilers shall be limited as follows:

(a) The four (4) package boilers shall only combust natural gas. The natural gas throughput to the four package boilers shall be limited to 3,237.5 MMCF per twelve consecutive month period, with compliance determined at the end of each month.

(b) The NO_X emissions from the four (4) package boilers shall not exceed 30.0 pounds per million cubic feet of natural gas.

(c) The CO emissions from the four (4) package boilers shall not exceed 18 pounds per million cubic feet of natural gas.

Compliance with the NOx and CO limits for the four (4) package boilers shall limit the NO_X and CO emissions from the four (4) package boilers to less than 100 tons per year, which renders the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.

Compliance with the above emission limits in conjunction with the unrestricted PTE from this source, shall limit the CO, NOx, PM, PM_{10}, $PM_{2.5}$, SO_2, and VOC emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for CO, NOx, PM, PM_{10}, $PM_{2.5}$, SO_2, and VOC.

***Note**: Some of these limits are changed from the FESOP for this source.*

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit acetaldehyde, methanol, and hexane from the entire source before control is greater than ten (10) tons/yr, each, and the potential to emit total HAP from the entire source before control is greater than twenty-five (25) tons/yr.

In order to render the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)) not applicable, the HAP emissions from the following ethanol emissions units shall not exceed the following emission limits:

(I) DDGS Drying and Cooling: Operating Scenario One: DDGS Cooler Baghouse #1 (C-7A) exhausting into the DDGS dryer #1 and DDGS Cooler Baghouse #2 (C-7B) exhausting into DDGS dryer #2.

(a1) The single HAP emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.24 pounds per hour.

(b1) The single HAP emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.33 pounds per hour.

(c1) The total HAP emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.46 pounds per hour.

(d1) The total HAP emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.56 pounds per hour.

(e1) The HAP emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall exhaust to the DDGS dryer #1.

(f1) The HAP emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall exhaust to the DDGS dryer #2.

(II) DDGS Drying and Cooling: Operating Scenario Two: DDGS Cooler Baghouse #1 (C-7A) and DDGS Cooler Baghouse #2 (C-7B) exhausting to atmosphere.

(a2) The single HAP emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.18 pounds per hour.

(b2) The single HAP emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.20 pounds per hour.

(c2) The single HAP emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall not exceed 0.07 pounds per hour.

(d2) The single HAP emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall not exceed 0.13 pounds per hour.

(e2) The total HAP emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.35 pounds per hour.

(f2) The total HAP emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.39 pounds per hour.

(g2) The total HAP emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall not exceed 0.11 pounds per hour.

(h2) The total HAP emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall not exceed 0.18 pounds per hour.

(III) Fermentation

(a) The single HAP emissions from the CO_2 Scrubber (C-5A) exhaust shall not exceed 1.67 pounds per hour.

(b) The total HAP emissions from the CO_2 Scrubber (C-5A) exhaust shall not exceed 1.75 pounds per hour.

Compliance with the above HAP emission limits in conjunction with the unrestricted PTE from this source, shall limit the HAP emissions from the entire source to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year for total HAPs. Therefore, the requirements of 326 IAC 2-4.1 (Major Source of Hazardous Air Pollutants) are not applicable to the emissions units described above, and the entire source is rendered an area source of HAP emissions under 40 CFR 63.

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)
Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the boilers shall not exceed 0.23 pounds per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

where Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.
Q = total source heat input capacity (MMBtu/hr)
For these units, Q = 369.6 MMBtu/hr.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) shall not exceed the following:

Summary of Process Weight Rate Limits					
Process / Emission Unit		**P** (ton/hr)	**E** (lb/hr)	**Equation Used**	**Control Equipment Necessary to Comply**
EP-01a and	Truck dump pit	143	54.94	(b)	BH C-1A

Summary of Process Weight Rate Limits					
Process / Emission Unit		**P** (ton/hr)	**E** (lb/hr)	**Equation Used**	**Control Equipment Necessary to Comply**
EP-01b	Rail dump pit				
EP-02a	Corn storage bin	71.5	47.97	(b)	na
EP-02b	Corn storage bin	71.5	47.97	(b)	na
EP-03b	Surge bin	143	54.94	(b)	Baghouse C-1B
EP-05	Hammermill	42.0	42.97	(b)	Baghouse C-2A
EP-06	Hammermill	42.0	42.97	(b)	Baghouse C-2B
EP-07	Hammermill	42.0	42.97	(b)	Baghouse C-2C
EP-08	Hammermill	42.0	42.97	(b)	Baghouse C-2D
EP-03a	Grain Scalper	143	54.94	(b)	Baghouse C-1B
EP-09	DDGS conveyor DDGS storage	44.65	43.55	(b)	Baghouse C-8A
EP-10	DDGS truck loadout	55	45.47	(b)	Baghouse C-8B
EP-11	DDGS rail loadout	400	66.31	(b)	Baghouse C-8B
EP-20	DDGS Dryer #1	22.3	32.85	(a)	RTO C-6A
EP-21	DDGS Dryer #2	22.3	32.85	(a)	RTO C-6B
EP-22	DDGS Cooler #1	22.3	32.85	(a)	RTO C-6A
EP-23	DDGS Cooler #2	22.3	32.85	(a)	RTO C-6B

The pound per hour limitations were calculated with the following equations:

(a) Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

(b) Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

The control equipment shall be in operation at all times the respective process is in operation, in order to comply with these limits.

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)
The fermentation process, distillation process, DDGS dryers, DDGS cooler, and ethanol load-out operation are subject to the requirements in 326 IAC 8-5-6. Therefore, these operations are not subject to the requirements of 326 IAC 8-1-6 (BACT).

326 8-4-3 (Petroleum Liquid Storage Facilities)
(a) Tanks Tk001, Tk002, Tk003, Tk005, Tk006, and Tk007, will not be used to store petroleum. Therefore, these tanks are not subject to requirements of 326 IAC 8-4-3.

(b) The denaturant storage tank (Tk004) has a maximum capacity greater than 39,000 gallons and will be used to store gasoline which has a vapor pressure greater than 1.52 psi. Therefore, tank Tk004 is subject to the requirements of 326 IAC 8-4-3. Tank Tk004 will be equipped with an internal floating roof.

(A) Pursuant to 326 IAC 8-4-3(b)(1)(B), storage tank Tk004 shall be maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials.

(B) Pursuant to 326 IAC 8-4-3(b)(1)(C), all openings, except stub drains, are equipped with covers, lids, or seals such that:

(1) The cover, lid or seal in the closed potion at all times except when in actual use;

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

(3) 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.

(C) Pursuant to 326 IAC 8-4-3(d), the Permittee shall maintain the following records for a period of two (2) years for tank Tk004:

(1) The types of volatile petroleum liquid stored;

(2) The maximum true vapor pressure of the liquids as stored; and

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

The above records shall be made available to the IDEM, OAQ upon written request.

326 8-4-6 (Gasoline Dispensing Facilities)
The requirements of 326 IAC 8-4-6 are not applicable to the gasoline dispensing operation storage because the monthly gasoline throughput from the gallon gasoline dispensing operation storage tank is less than 10,000 gallons.

326 IAC 8-5-6 (Fuel Grade Ethanol Production at Dry Mills)
The ethanol production plant was constructed after April 1, 2007, will use dry mill operations, and have combined potential VOC emissions from the fermentation process, distillation process, DDGS dryers, and ethanol load-out operation greater than 25 tons per year. Therefore, the fermentation process, distillation process, DDGS dryers, and ethanol load-out operation at this source are subject to the requirements in 326 IAC 8-5-6 (Fuel Grade Ethanol Production at Dry Mills) and shall comply with the following:

(a) Pursuant to 326 IAC 8-5-6(c), the Permittee has chosen to control the VOC emissions from the fermentation process with a wet scrubber, the distillation process and DDGS dryers by a thermal oxidizer, and the ethanol load-out operation by an enclosed flare. Therefore, the following conditions apply:

(1) The Permittee shall control the VOC emissions from the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation using a thermal oxidation system with an overall control efficiency of not less than ninety-eight percent (98%), or the VOC outlet concentration shall not exceed ten (10) parts per million (ppm).

(2) The Permittee shall control the VOC emissions from the Fermentation process using a wet scrubber system with an overall control efficiency of not less than ninety-eight percent (98%), or the VOC outlet concentration shall not exceed twenty (20) part per million (ppm).

(3) The Permittee shall control the VOC emissions from the truck and rail loading racks using enclosed flare C-9 with an overall control efficiency of not less than ninety-eight percent (98%).

(b) Pursuant to 326 IAC 8-5-6(e), the Permittee shall ensure and verify continuing compliance with the control efficiency requirements by doing the following:

(1) The Permittee shall meet the following requirements for the CO_2 Scrubber C-5A:

(A) The pressure drop across the scrubber must be within the normal range established during the latest stack test. The pressure drop of the scrubber must be monitored at least once per day when the associated emission unit is in operation to ensure that the pressure drop across the scrubber is within the normal range established during the latest stack test.

(B) The scrubber flow rate must be greater than the minimum flow rate for the scrubber during normal operation. The scrubber flow rate must be monitored at least once per day when the associated emission unit is in operation to ensure that the flow rate of the scrubber is greater than the minimum flow rate established during the latest stack test.

(C) Maintain daily records of pressure drop and flow rate for the scrubber during normal operation.

(2) The Permittee shall meet the following requirements for the Thermal Oxidizers, C-6A and C-6B:

(A) The three (3) hour average operating temperature of the oxidizer, as measured by a continuous temperature monitor, must be greater than or equal to the minimum operating temperature established during the most recent compliance demonstration.

(B) Maintain continuous temperature records for the thermal oxidizer and the three (3) hour average operating temperature used to demonstrate compliance during the most recent compliant stack test.

(C) The three (3) hour average duct pressure or fan amperage, as measured by a continuous parameter monitoring system, must be within the normal range established during the most recent compliance demonstration.

(D) Maintain daily records of the duct pressure or fan amperage for the thermal oxidizer.

(3) The Permittee shall meet the following requirements for the enclosed Flare system C-9:

(A) Maintain a flare pilot flame when the associated emission unit is in operation and continuously monitor the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame when the associated emission unit is in operation.

(B) Maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when the loading rack is in operation.

(C) The overall efficiency for the enclosed Flare system C-9 (including the capture efficiency and destruction efficiency) shall be at least 98%.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)
The source is not located in Clark, Floyd, Lake, or Porter County. Therefore, the requirements of 326 IAC 8-9-1 are not applicable to the tanks at this source.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

Compliance Determination Requirements
The compliance determination requirements applicable to this source are as follows:

Emission Unit		Control Device	Timeframe for Testing	Pollutant	Frequency of Testing	Limit or Requirement
EP-01a and EP-01b	Truck dump pit Rail dump pit	BH C-1A	within 5 years of last valid test	PM / PM_{10} / $PM_{2.5}$	every 5 years	326 IAC 2-2
EP-05	Hammermill	BH C-2A	Test one (1) of the four (4) baghouses within 5 years of last valid test	PM / PM_{10} / $PM_{2.5}$	every 5 years (Repeat testing shall be conducted on a different baghouse than the one tested for the previous testing period.)	326 IAC 2-2
EP-06	Hammermill	BH C-2B		PM / PM_{10} / $PM_{2.5}$		326 IAC 2-2
EP-07	Hammermill	BH C-2C		PM / PM_{10} / $PM_{2.5}$		326 IAC 2-2
EP-08	Hammermill	BH C-2D		PM / PM_{10} / $PM_{2.5}$		326 IAC 2-2
EP-03a	Grain Scalper	BH C-1B	within 5 years of last valid test	PM / PM_{10} / $PM_{2.5}$	every 5 years	326 IAC 2-2
EP-09	DDGS conveyor DDGS storage	BH C-8	within 5 years of last valid test	PM / PM_{10} / $PM_{2.5}$	every 5 years	326 IAC 2-2
EP-20	DDGS Dryer #1	TO C-6A	within 5 years of last valid test	NO_X / CO / SO_2	every 5 years	326 IAC 2-2 326 IAC 2-4.1
EP-21	DDGS Dryer #2	TO C-6B	within 5 years of last valid test	NO_X / CO / SO_2	every 5 years	326 IAC 2-2 326 IAC 2-4.1
P-5 EP-15	Fermentation	S C-5A	within 5 years of last valid test	VOC / PM / PM_{10} / $PM_{2.5}$ / single HAP / total HAP	every 5 years	326 IAC 2-2

Emission Unit		Control Device	Timeframe for Testing	Pollutant	Frequency of Testing	Limit or Requirement
EP-24 EP-25	Denatured Ethanol Loadout	F C-9	within 5 years of last valid test	CO / NO_X / PM / PM_{10} / $PM_{2.5}$ / VOC	every 5 years	326 IAC 2-2
EP-26 EP-27 EP-28 EP-29	Boilers	NA	within 5 years of last valid test	CO / NO_X	every 5 years	326 IAC 2-2
MAIN OPERATING SCENARIO						
P-4 EP-16 EP-17 EP-18 EP-20 EP-22	slurry mix tank, yeast tank, DDGS Dryer #1, CO_2 Scrubber exhaust, beer column, side stripper, rectifier column, DDGS Cooler Baghouse #1 exhaust	TO C-6A	within 5 years of last valid test	VOC / PM / PM_{10} / $PM_{2.5}$ / single HAP / total HAP	every 5 years	326 IAC 2-2 326 IAC 2-4.1
P-4 EP-16 EP-17 EP-18 EP-21 EP-23	slurry mix tank, yeast tank, DDGS Dryer #2, CO_2 Scrubber exhaust, beer column, side stripper, rectifier column, DDGS Cooler Baghouse #2 exhaust	TO C-6B	within 5 years of last valid test	VOC / PM / PM_{10} / $PM_{2.5}$ / single HAP / total HAP	every 5 years	326 IAC 2-2 326 IAC 2-4.1
ALTERNATE OPERATING SCENARIO						
P-4 EP-16 EP-17 EP-18 EP-20	slurry mix tank, yeast tank, DDGS Dryer #1, CO_2 Scrubber exhaust, beer column, side stripper, rectifier column	TO C-6A	within 5 years of last valid test	VOC / PM / PM_{10} / $PM_{2.5}$ / single HAP / total HAP	every 5 years	326 IAC 2-2 326 IAC 2-4.1
P-4 EP-16 EP-17 EP-18 EP-21	slurry mix tank, yeast tank, DDGS Dryer #2, CO_2 Scrubber exhaust, beer column, side stripper, rectifier column	TO C-6B	within 5 years of last valid test	VOC / PM / PM_{10} / $PM_{2.5}$ / single HAP / total HAP	every 5 years	326 IAC 2-2 326 IAC 2-4.1
EP-22	DDGS Cooler #1	BH C-7A	within 5 years of last valid test	VOC / PM / PM_{10} / $PM_{2.5}$ / single HAP / total HAP	every 5 years	326 IAC 2-2 326 IAC 2-4.1
EP-23	DDGS Cooler #2	BH C-7B	within 5 years of last valid test	VOC / PM / PM_{10} / $PM_{2.5}$ / single HAP / total HAP	every 5 years	326 IAC 2-2 326 IAC 2-4.1

The baghouses, thermal oxidizers, CO_2 scrubber, and enclosed flare must be in operation and controlling emissions from their respective operation at all times that these processes are in operation in order to demonstrate compliance with the above limits.

Compliance Monitoring Requirements
The compliance monitoring requirements applicable to this source are as follows:

Control Device	Emission Unit	Parameter	Frequency	Range	Excursions and Exceedances
BH C-1A	Truck dump pit Rail dump pit	Pressure Drop	Daily	1.0 to 6.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
BH C-2A	Hammermill	Pressure Drop	Daily	1.0 to 6.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
BH C-2B	Hammermill	Pressure Drop	Daily	1.0 to 6.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
BH C-2C	Hammermill	Pressure Drop	Daily	1.0 to 6.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
BH C-2D	Hammermill	Pressure Drop	Daily	1.0 to 6.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
BH C-1B	Grain Scalper	Pressure Drop	Daily	1.0 to 6.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
BH C-8	DDGS conveyor DDGS storage	Pressure Drop	Daily	1.0 to 6.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
BH C-7A	DDGS Cooler #1	Pressure Drop	Daily	1.0 to 6.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
BH C-7B	DDGS Cooler #2	Pressure Drop	Daily	1.0 to 6.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
TO C-6A	slurry mix tank, yeast tank, DDGS Dryer #1, CO2 Scrubber exhaust, beer column,	Duct Pressure or Fan Amperage	Daily	**	Response Steps
		Visible Emissions	Daily	Normal-Abnormal	

Control Device	Emission Unit	Parameter	Frequency	Range	Excursions and Exceedances
	side stripper, rectifier column, DDGS Cooler Baghouse #1 exhaust	Temperature	Continuous	≥ the 3-hour average temperature from the latest valid stack test	
TO C-6B	slurry mix tank, yeast tank, DDGS Dryer #2, CO2 Scrubber exhaust, beer column, side stripper, rectifier column, DDGS Cooler Baghouse #2 exhaust	Duct Pressure or Fan Amperage	Daily	**	Response Steps
		Visible Emissions	Daily	Normal-Abnormal	
		Temperature	Continuous	≥ the 3-hour average temperature from the latest valid stack test	
S C-5A	Fermentation	Flow Rate	Daily	≥ minimum flow rate from the latest valid stack test	Response Steps
		Pressure Drop		1.0 to 6.0 inches	
F C-9	truck loadout rail loadout	Presence of Flame	Daily	Present-Absent	Response Steps

** A stack test was performed on August 31, 2011; however, no fan amperage or duct pressure was recorded during the test.

These monitoring conditions are necessary because the control devices for these processes must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations), 326 IAC 2-2 (PSD), and 326 IAC 2-7 (Part 70).

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit (T129-24836-00051). These corrections, changes, and removals may include Title I changes (ex changes that add or modify synthetic minor emission limits). Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Change No. 1 IDEM, OAQ has made the following changes to Condition A.1, General Information:

- Updated rule citation for 326 IAC 2-7-5 to reference (14), descriptive information, rather than (15), terms and conditions.
- Clarified that this ethanol plant is a stationary source.
- Updated the ethanol production rate.
- Updated the location address.
- Removed the mailing address as it is not needed for the permit. IDEM will retain this information on file.

- Removed the word "County" as it is redundant.
- Added the source status with regard to greenhouse gas emissions.
- Clarified that this source is not one of the 28 listed source categories.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(~~15~~**14**)] [326 IAC 2-7-1(22)]

The Permittee owns and operates ~~an~~**a stationary** ethanol production plant ~~with a maximum undenatured ethanol production rate of 216 million gallons per year~~.

Source Address:	~~2751 Bluff~~**7201 Port** Road, ~~Mt.~~**Mount** Vernon, Indiana 47620
~~Mailing Address:~~	~~1300 South Second Street, Pekin, Illinois 61554~~
General Source Phone Number:	~~(309) 347-9241~~LLL **(812) 838-9840**
SIC Code:	2869
County Location:	Posey ~~County~~
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program ~~Major~~ **Minor** Source, under PSD **Rules** **Greenhouse Gas (GHG) potential to emit (PTE) is equal to or more than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year** ~~Major~~ **Area** Source, Section 112 of the Clean Air Act **Not 1 of 28 Source Categories**

Change No. 2 IDEM, OAQ has made the following changes to Condition A.2, Emission Units and Pollution Control Equipment Summary:

- Updated rule citation for 326 IAC 2-7-5 to reference (14), descriptive information, rather than (15), terms and conditions.
- Clarified that this source is stationary.
- Updated capacities of all equipment.
- Removed equipment and processes that were not constructed. These units were discussed in greater detail at the beginning of this document.
- Added equipment that was not included in the previous operating permit. These units were discussed in greater detail at the beginning of this document.
- Added the dates the equipment were approved for construction.
- Clarified emission unit and control device designations.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(~~15~~**14**)]

This ~~ethanol production~~**stationary** source consists of the following emission units and pollution control devices:

(a) Grain receiving and handling operations, identified as process P-1**, installed in 2008**, with a maximum capacity of **143 tons of grain per hour** ~~2,330,160 tons of grains per year (83,077,000 bushels of grain per year)~~. The grain when received from various sources is already dried and cleaned. These operations include the following:

(1) ~~Three (3~~**One (1**) grain truck dump ~~pits,~~ **pit, identified as** EP-01**a**, ~~EP02 and EP-03,~~ **installed in 2008, with a maximum capacity of 143 tons of grain per hour,** with ~~three (3) conveyors~~**one (1) conveyor** and ~~three (3~~**one (1**) elevator ~~systems.~~**system.** The particulate emissions from the ~~three~~ dump ~~pits~~**pit** are controlled by ~~three (3) baghouses~~**one (1) baghouse**, C-1A, ~~C-1B, and C-1C~~**exhausting to stack S-1A**.

(2) One (1) rail dump pit,**identified as EP-01b** ~~which will share the~~**installed in 2008, with** conveyor system and elevator system~~ with third grain truck dump pit, EP-03.~~**.** The particulate emissions from the dump pit are controlled by baghouse, C-~~1C~~**1A, exhausting to stack S-1A**.

(3) ~~Seven (7~~**Two (2**) corn storage silos, ~~EP-04 through EP-10~~**identified as EP-02a and EP-02b, installed in 2008**, with a total storage capacity of ~~3,150~~**600**,000 bushels with ~~seven (7~~**two (2**) conveyor systems.~~ PM emissions from each storage silo are controlled by bin vent filters, C-1D through C1-J.~~ **Each silo has a maximum throughput capacity of 71.5 tons per hour, and the total conveyance capacity is 143 tons per hour.**

(4) ~~Four (4) surge bins, EP-11 through EP-14, each is controlled by bin vent filters, C-1K through C-1N.~~**One (1) grain scalper, identified as EP-03a installed in 2008, and one (1) surge bin, identified as EP-03b, installed in 2008, both units controlled by one (1) baghouse, C-1B, exhausting to stack S-1B.**

(b) Grain milling operation, identified as process P-2**, installed in 2008**, which include the following:

(1) One (1) hammermill feed system**, installed in 2008, with a maximum capacity of 6000 bushels of grain per hour**.

(2) ~~Eight (8~~**Four (4**) hammermills, identified as EP~~-15~~**-05** through EP~~-22~~**-08, installed in 2008**, each has a capacity of 1500 bushels per hour (12,000 bushels per hour total). The particulate emissions from these hammermills are controlled by ~~eight (8~~**four (4**) baghouses, C**-**2A through C**-**2D~~ and C-3A~~**, exhausting to stacks S-2A** through ~~C-3D~~**S-2D**.

(c) Milled grain cooking operation, identified as process P-4**, installed in 2008**, which includes the following:

(1) Milled grain cooking operation**,** consisting of the following major components~~; Two (2~~**:**

(A) **One (1**) process condensate ~~tanks, two (2~~**tank, installed in 2008,**

(B) **One (1**) slurry mix ~~tanks, four (4~~**tank, installed in 2008,**

(C) **Two (2**) liquification tanks, **installed in 2008,** and ~~two (2~~

(D) **One (1**) yeast ~~tanks.~~ **tank, installed in 2008.**

The emissions from these tanks will be controlled by ~~four (4~~**two (2**) Thermal Oxidizers, C-6A ~~through C-6D~~**and C-6B, exhausting to stacks S-6A and S-6B**. Each thermal oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) ~~Two (2~~**One (1**) ammonia ~~tanks~~**tank, installed in 2008**.

(d) Fermentation operation, identified as process P-5**, installed in 2008**, with a maximum throughput of ~~24,700~~**13,302** gallons per hour, controlled by ~~two (2~~**one (1**) CO_2 ~~scrubbers~~**scrubber**, C-5A~~ and C-5B~~.**, exhausting to stack S-5A.** The exhaust gas stream from the ~~scrubbers~~**scrubber** may be sent to an offsite company for further processing of the CO_2 gas stream or vented directly to the atmosphere. The source has the option to use ~~urea as well~~**a supplemental additive, such** as sodium bisulfite**,** in ~~either of~~ the CO_2 ~~scrubbers.~~**scrubber.** This operation includes the following:

(1) ~~Fourteen (14~~**Seven (7**) fermenters, **installed in 2008,** with a combined processing rate of ~~24,700 gallon~~**13,302 gallons** per hour.

(2) ~~Two (2~~ **One (1**) beer ~~wells, #1 and #2~~**well, #1, installed in 2008**, with a ~~combined~~ processing rate of ~~24,700~~**13,302** gallons per hour, controlled by the ~~two (2)~~ CO_2 ~~scrubbers~~**scrubber**, C-5A~~ and C-5B~~.

~~(3) Two (2) Slurry Tanks, #1 and #2.~~

~~(4) Four (4) Liquefaction Tanks, #1 through #4.~~

~~(5) Two (2) Yeast Tanks, #1 and #2~~**, exhausting to stack S-5A**.

(e) Distillation and dehydration operations, identified as process P-6, **installed in 2008,** with a throughput of ~~24,700~~**13,302** gallons per hour consisting of the following emission units:

(1) Two (2) beer columns, #1 and #2, **installed in 2008,** controlled by either of the ~~four (4~~**two (2**) Thermal Oxidizers, C-6A~~ through C-6D~~**, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B**. Each Thermal Oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) ~~Two (2) side strippers, #1 and #2,~~ **One (1) acid reduction column, #1, installed in 2008,** controlled by either of the ~~four (4~~**two (2**) Thermal Oxidizers, C-6A ~~through~~**, exhausting to stack S-6A, or** C-~~6D~~**6B, exhausting to stack S-6B**.

(3) ~~Two (2~~**One (1**) rectifier ~~columns, #1 and #2~~**column, #1, installed in 2008**, controlled by either of the ~~four (4~~**two (2**) Thermal Oxidizers, C-6A~~ through~~**, exhausting to stack S-6A, or** C-~~6D~~**-6B, exhausting to stack S-6B**.

(4) ~~Four (4~~**Two (2**) molecular sieves**, installed in 2008**.

(5) ~~Two (2~~**One (1**) 200 proof ~~condensers~~**condenser, installed in 2008**.

(6) ~~Two (2~~ **One (1**) whole stillage ~~tanks~~**tank, installed in 2008**.

(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7**, installed in 2008**, **with a maximum throughput of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour),** consisting of the following emission units:

~~Eight (8~~**(1) Four (4**) centrifuges**, installed in 2008**.

~~Two (~~2**) One (1**) thin stillage ~~tanks~~**tank, installed in 2008**.

(3) Two (2) evaporator systems**, installed in 2008**.

(4) ~~Two (2~~ **One (1**) syrup ~~tanks~~**tank, installed in 2008.**

(5) One (1) wet cake pad**, installed in 2008**.

The emissions from the thin stillage tank and syrup tank will be controlled by two (2) Thermal Oxidizers, C-6A and C-6B.

(6) **Two (2)** DDGS ~~drying~~ **dryers, identified as EP-20 (#1) and EP-21 (#2), installed in 2008**, with a total drying rate of ~~726,930~~**391,148** tons (dry basis) of DDGS per year, with ~~four (4~~**two (2**) DDGS dryers, each with a heat input capacity of 90 MMBtu/hr. Dryer #1 is controlled by Thermal Oxidizer #1, C-6A~~;~~**, and** Dryer #2 is controlled by Thermal Oxidizer #2, C-6B~~; Dryer #3~~**.**

(7) ~~Four (4)~~ **Two (2)** DDGS coolers, **identified as EP-22 (#1) and EP-23 (#2), installed in 2008,** with a maximum throughput of ~~726,930~~ **391,148** tons (dry basis) of DDGS per year. Cooler #1 is controlled by ~~Thermal Oxidizer #1, C-6A;~~ **Cooler Baghouse #1, C-7A, installed in 2008, and may exhaust to stack S-7A when not being used as make-up air for DDGS Dryer #1.** Cooler #2 is controlled by ~~Thermal Oxidizer #2, C-6B;~~ **Cooler Baghouse #2, C-7B, installed in 2008, and may exhaust to stack S-7B when not being used as make-up air for DDGS Dryer #2.** ~~Cooler #3 is controlled by Thermal Oxidizer #3, C-6C, and Cooler #4 is controlled by Thermal Oxidizer #4, C-6D.~~

(g) DDGS handling, storage and loadout operations, identified as process P-8, **installed in 2008,** with a rate of ~~726,930~~**391,148** tons (dry basis) of DDGS per year consisting of the following emission units:

(1) One (1) DDGS storage building, **installed in 2008,** which includes supporting equipment; ~~two (2~~**one (1**) enclosed DDGS ~~conveyors,~~ **conveyor, identified as** EP~~-23 and EP-24, controlled by two (2) -~~**09. Particulate emissions between the** DDGS ~~receiving filters, C-8A~~**storage building** and ~~C-8B~~**DDGS loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8**.

~~Three (3~~**(2) One (1**) truck ~~loadouts,~~**loadout, identified as** EP~~-25 through EP-27~~**-10, installed in 2008**, with a ~~total~~ maximum rate of ~~165~~**55** tons (dry basis) per hour~~,~~**. Particulate emissions from truck loadout are** controlled by ~~three (3) baghouses (~~**one (1) baghouse,** C-8~~C, C-8D and C-8E).~~**, exhausting to stack S-8.**

(3) One (1) rail loadout, ~~EP-28~~**identified as EP-11, installed in 2008**, with a maximum rate of 180 tons (dry basis) per hour~~,~~**. Particulate emissions from rail loadout are** controlled by one (1) baghouse ~~(~~**,** C-8~~F).~~**., exhausting to stack S-8.**

(h) Denatured ethanol loadout, identified as process P-9**, installed in 2008**, **with a total maximum throughput of 122.1 million gallons per year (13,943 gallons per hour),** consisting of **the following emission units:**

(1) **One** ~~one~~ (1) truck loadout**, identified as EP-24, installed in 2008, and**

(2) **One**~~, one~~ (1) rail loadout**, identified as EP-25, installed in 2008** ~~and one (1) barge loadout, with a total maximum throughput of 227.4 million gallons per year~~.

These ~~three (3~~**two (2**) loading racks are controlled by enclosed Flare system C-9**, installed in 2008**. The flare is fueled by natural gas and has a pilot gas flare heat input capacity of 0.092 MMBtu/hr.

(i) Product Storage, identified as process P-10**, installed in 2008**, consisting of the following emission units:

(1) ~~Five (5~~ **Three (3**) 200 proof above ground storage tanks, identified as Tk001 through ~~Tk005~~**Tk003, installed in 2008**, each ~~has~~**with** a capacity of 172,000 gallons.

(2) One (1) denaturant storage tank, identified as ~~Tk006,~~ **Tk004, installed in 2008,** with a capacity of 105,000 gallons**, and a maximum design capacity less than 20,000 gallons per day throughput.**

(3) ~~Four (4~~**Two (2**) denatured ethanol storage tanks, identified as ~~Tk007 through Tk010~~**Tk005 and Tk006, installed in 2008**, **each storing a denatured ethanol with a Reid Vapor Pressure less than 27.6 kilopascals,** each ~~has~~**with** a capacity of 1,406,000 gallons.

(4) One (1) corrosion inhibitor storage tank, identified as ~~Tk011~~**Tk007, installed in 2008**, with a capacity of 6,392 gallons.

(j) ~~Eight (8~~**Natural gas combustion sources, identified as P-11, consisting of four (4**) natural gas-fired **package** boilers, ~~each has~~**identified as EP-26 through EP-29, installed in 2008, with** a heat input capacity of 92.4 MMBtu/hr~~. These boilers are identified as process P-11~~**, each**.

~~(k) Two (2) diesel-fired emergency generators, each has a capacity of 3,740 HP. These generators are identified as process P-13.~~

~~(l) Vehicular traffic on paved roads.~~

(k) Two (2) Thermal Oxidizers, C-6A and C-6B, installed in 2008, with a heat input capacity of 18 million British thermal units per hour (MMBtu/hr), each, controlling emissions from the following:

(A) One (1) process condensate tank.

(B) One (1) slurry mix tank.

(C) Two (2) liquification tanks.

(D) One (1) yeast tank.

(E) Two (2) beer columns, identified as EP-16.

(F) One (1) side stripper (acid reduction column), identified as EP-17.

(G) One (1) rectifier column, identified as EP-18.

(H) One (1) whole stillage tank.

(I) One (1) thin stillage tank.

(J) One (1) syrup tank.

(K) Two (2) DDGS dryers, identified as EP-20 and EP-21.

Thermal oxidizer C-6A exhausts to stack S-6A and thermal oxidizer C-6B exhausts to stack S-6B.

Change No. 3 IDEM, OAQ has made the following changes to Condition A.3, Insignificant Activities:

- Added the words "Specifically Regulated" to the title of the condition for clarity.

- Updated rule citation for 326 IAC 2-7-5 to reference (14), descriptive information, rather than (15), terms and conditions.
- Changed the phrase "with applicable requirements" to "which are specifically regulated" for clarity.
- Updated capacities of all equipment.
- Removed equipment and processes that were not constructed. These units were discussed in greater detail at the beginning of this document.
- Added equipment that was not included in the previous operating permit. These units were discussed in greater detail at the beginning of this document.
- Added the dates the equipment were approved for construction.
- Clarified emission unit and control device designations.
- Added the rule citations that clarify why these emission units are specifically regulated.

A.3 **Specifically Regulated** Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(~~15~~**14**)]

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

(a) ~~Two (2~~ **One (1**) diesel~~-~~**-**fired emergency fire ~~pumps, each has~~**pump, identified as process P-12, installed in 2008, with** a capacity of ~~290~~**420** horsepower (HP). ~~These pumps are identified as process P-12.~~ **[40 CFR 60, Subpart IIII] [40 CFR 63, Subpart ZZZZ]**

(b) One (1) cooling tower with ~~two (2) banks, each bank has 15~~ **three (3)** cells, identified as F-1**, installed in 2008**, with a total circulation rate of ~~4,512~~**2,256**,000 gallons of water per hour. **[326 IAC 2-2]**

(c) Fuel dispensing activities, as follows:

(1) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

(A) One (1) gasoline dispensing operation for plant vehicles, installed in 2008, with a maximum throughput of 75 gallons per month. [40 CFR 63, Subpart BBBBBB] [40 CFR 63, Subpart CCCCCC]

(B) Vapor collection-equipped gasoline cargo tanks, installed in 2008. [40 CFR 63, Subpart BBBBBB]

(d) Vehicular traffic on paved roads. [326 IAC 6-4]

Change No. 4 IDEM, OAQ has made the following changes to Section B, General Conditions:

- IDEM, OAQ has removed Condition B.1, Permit No Defense. This condition applies for new construction. Since the facility has already completed construction, this condition is no longer needed.
- IDEM, OAQ has removed Condition B.2, Effective Date of the Permit. This condition applies for new construction. Since the facility has already completed construction, this condition is no longer needed.

- IDEM, OAQ has removed Condition B.3, Modification to Construction Conditions. This condition applies for new construction. Since the facility has already completed construction, this condition is no longer needed.
- IDEM, OAQ has removed Condition B.4, Revocation of Permits. This condition applies for new construction. Since the facility has already completed construction, this condition is no longer needed.
- IDEM, OAQ has removed Condition B.6, Affidavit of Construction. This condition applies for new construction. Since the facility has already completed construction, this condition is no longer needed.
- Renumbered remaining permit conditions.
- Updated the permit number of Condition B.7 (now B.2), Permit Term.
- Added the rule citation, IC 13-17-12, to Condition B.9 (now B.4), Enforceability.
- Removed the following statement from Condition B.12 (now B.7), Duty to Provide Information: "The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34)." This submittal does not need to be certified.
- To clarify that Section B - Certification only states what a certification must be, IDEM, OAQ has revised the condition. In addition IDEM, OAQ has decided to clarify Section B - Certification to be consistent with the rule, and to clarify what rule requirements a certification needs to meet.
- IDEM, OAQ has decided to clarify Section B - Preventive Maintenance Plan.
- IDEM, OAQ is revising Section B - Emergency Provisions to delete paragraph (h). 326 IAC 2-7-5(3)(C)(ii) allows that deviations reported under an independent requirement do not have to be included in the Quarterly Deviation and Compliance Monitoring Report. IDEM, OAQ has also added the Southwest Regional Office to Section B - Emergency Provisions.
- IDEM, OAQ has added Condition B.13, Prior Permits Superseded.
- IDEM, OAQ has decided that having a separate condition for the reporting of deviations is unnecessary. Therefore, Section B - Deviation from Permit Requirements and Conditions has been removed and the requirements of that condition have been added to Section C - General Reporting Requirements.
- IDEM, OAQ has decided to state which rule establishes the authority to set a deadline for the Permittee to submit additional information. Therefore, Section B - Permit Renewal has been revised.
- IDEM, OAQ has decided to state that no notice is required for approved changes in Section B - Permit Revision Under Economic Incentives and Other Programs.
- IDEM, OAQ has decided to reference 326 IAC 2 in Section B - Source Modification Requirement rather than the specific construction rule.
- IDEM, OAQ has removed 40 CFR 72 from the list of underlying rules in the title of Condition B.22 (now B.17), Permit Amendment or Modification.
- IDEM, OAQ has corrected the rule citation for Condition B.23 (now B.18), Permit Revision Under Economic Incentives and Other Programs. The condition was also clarified to state "No Part 70 permit revision or notice shall..."
- IDEM, OAQ has corrected the rule citation for 326 IAC 2-7-20 throughout Condition B.24 (now B.19), Operational Flexibility.
- IDEM, OAQ has decided that the phrases "no later than" and "not later than" are clearer than "within" in relation to the end of a timeline. Therefore, all references to timelines have been revised to "no later than" or "not later than" except for the timelines in subparagraphs (b)(4) and (b)(5) of Section B - Emergency Provisions and Section B - Annual Fee Payment, in which the underlying rules state "within".

- 326 IAC 2-7 requires that "a responsible official" perform certain actions. 326 IAC 2-7-1(34) allows for multiple people to meet the definition of "responsible official." Therefore, IDEM, OAQ is revising all instances of "the responsible official" to read "a responsible official".
- IDEM, OAQ has decided to clarify a certification by a "responsible official" needs to meet the requirements of 326 IAC 2-7-6(1).
- Updated the rule citation for the definition of a "responsible official.
- Several of IDEM's Branches and sections have been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to Permit Administration and Development Section and the Permits Branch have been changed to Permit Administration and Support Section. References to Asbestos Section, Compliance Data Section, Air Compliance Section, and Compliance Branch have been changed to Compliance and Enforcement Branch.

~~B.1 Permit No Defense~~

~~This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.~~

~~B.2 Effective Date of the Permit [IC13-15-5-3]~~

~~Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.~~

~~B.3 Modification to Construction Conditions [326 IAC 2]~~

~~All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.~~

~~B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]~~

~~Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.~~

~~B.6 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4]~~

~~This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 when prior to the start of operation, the following requirements are met:~~

~~(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.~~

~~(b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.~~

~~(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.~~

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

(a) This permit, ~~PSD/TV 129-24836~~**T129-31281**-00051, 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.~~9~~**4** Enforceability [326 IAC 2-7-7] **[IC 13-17-12]**

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.~~12~~**7** Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. ~~The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~ Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.~~13~~**8** Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) ~~Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance~~**A** certification ~~submitted shall contain~~**required by this permit meets the requirements of 326 IAC 2-7-6(1) if:**

(1) **it contains a** certification by ~~the~~ **a** "responsible official" ~~of truth, accuracy,~~**as defined by 326 IAC 2-7-1(35),** and ~~completeness. This~~

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

(b) ~~One (1) certification shall be included, using~~**The Permittee may use** the attached Certification Form, **or its equivalent** with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) ~~The~~**A** "responsible official" is defined at 326 IAC 2-7-1(~~34~~**35**).

B.~~14~~**9** Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. ~~The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent~~**All** certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 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 ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**35**).

B.~~15~~**10** Preventive Maintenance Plan [326 IAC 2-7-5~~(1),(3) and~~ (~~13~~**12**)]~~[326 IAC 2-7-6(1) and (6)]~~ [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) ~~within~~**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 ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**35**).

The Permittee shall implement the PMPs.

(~~b~~**c**) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions ~~or potential to emit.~~ **.** The PMPs **and their submittal** do not require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**35**).

(~~c~~**d**) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health**-**based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology**-**based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, **or Southwest 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**
~~Compliance Section), or~~

Telephone Number: 317-233-0178 (ask for **Office of Air Quality,** Compliance ~~Section~~**and Enforcement Branch**)
Facsimile Number: 317-233-6865
Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304.

(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 ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**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)(~~9~~**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.

~~(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.~~

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 T129-31281-00051 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.19 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]~~

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

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

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

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

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

B.~~20~~**15** Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**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.~~21~~**16** Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**35**).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
~~Permits Branch~~**Permit Administration and Support Section**, Office of Air Quality
100 North Senate Avenue
~~,~~MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified**, pursuant to 326 IAC 2-7-4(a)(2)(D),** in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.~~22~~**17** Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]~~[40 CFR 72]~~

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

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

Indiana Department of Environmental Management
~~Permits Branch~~**Permit Administration and Support Section**, Office of Air Quality
100 North Senate Avenue
~~,~~MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application ~~shall be certified~~**does require a certification that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**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~~**18** Permit Revision Under Economic Incentives and Other Programs [~~6~~**326** IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]

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

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

B.~~24~~**19** Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

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

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
~~Permits Branch~~**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)~~, or~~ (~~e~~**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)~~, and (e)(2)~~.

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

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the "~~**a "**responsible official~~"~~**"** as defined by 326 IAC 2-7-1(~~34~~**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.~~25~~**20** Source Modification Requirement [326 IAC 2-7-10.5]

~~(a) A~~ modification, construction, or reconstruction is governed by the requirements of 326 IAC 2~~ and 326 IAC 2-7-10.5~~.

~~(b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2 (for sources located in NA areas).~~

B.~~27~~**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
~~Permits Branch~~**Permit Administration and Support Section**, Office of Air Quality
100 North Senate Avenue
~~,~~MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such ~~The~~ application ~~which shall be submitted by the Permittee~~ does require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**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)]

Change No. 5 IDEM, OAQ has made the following changes to Section C, Source Operation Conditions:

- IDEM, OAQ has decided that the phrases "no later than" and "not later than" are clearer than "within" in relation to the end of a timeline. Therefore, all references to timelines have been revised to "no later than" or "not later than".
- 326 IAC 2-7 requires that "a responsible official" perform certain actions. 326 IAC 2-7-1(34) allows for multiple people to meet the definition of "responsible official." Therefore, IDEM, OAQ is revising all instances of "the responsible official" to read "a responsible official".
- IDEM, OAQ has decided to clarify that a certification by a "responsible official" needs to meet the requirements of 326 IAC 2-7-6(1).
- Updated the rule citation for the definition of a "responsible official.
- Several of IDEM's Branches and sections have been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to Permit Administration and Development Section and the Permits Branch have been changed to Permit Administration and Support Section. References to Asbestos Section, Compliance Data Section, Air Compliance Section, and Compliance Branch have been changed to Compliance and Enforcement Branch.
- IDEM, OAQ has added 326 IAC 5-1-1 to the exception clause of Section C - Opacity, since 326 IAC 5-1-1 does list exceptions.
- IDEM, OAQ has revised Section C - Incineration to more closely reflect the two underlying rules.
- The revisions to 326 IAC 9-1-2 were SIP approved by EPA in a November 30, 2004 rulemaking. Therefore, 326 IAC 9-1-2 is federally enforceable. The statement at the end of Section C - Incineration has been removed.
- The last sentence of Section C - Open Burning was removed because the provisions of 326 IAC 4-1-3(a)(2)(A) and (B) are federally enforceable and are included in Indiana's State Implementation Plan (SIP).
- IDEM, OAQ has clarified that the stack height provisions are not federally enforceable.
- IDEM, OAQ has clarified that Indiana Asbestos Inspectors are required to be "Licensed", not "Accredited".
- IDEM, OAQ has removed the first paragraph of Section C - Performance Testing due to the fact that specific testing conditions elsewhere in the permit will specify the timeline and procedures.
- IDEM, OAQ has revised Section C - Compliance Monitoring. The reference to record keeping has been removed due to the fact that other conditions already address record keeping. The voice of the condition has been changed to clearly indicate that it is the Permittee that must follow the requirements of the condition. IDEM, OAQ has also decided to clarify the Permittee's responsibility under CAM.
- IDEM, OAQ has removed Section C - Monitoring Methods. The conditions that require the monitoring or testing, if required, state what methods shall be used.

- IDEM, OAQ has decided not to list the submission date of the ERP because the ERP can be updated without a permit change. In addition, IDEM has removed paragraph (b) of this condition since the ERP has already been submitted.
- IDEM, OAQ has revised Section C - Response to Excursions or Exceedances. The introduction sentence has been added to clarify that it is only when an excursion or exceedance is detected that the requirements of this condition need to be followed. The word "excess" was added to the last sentence of paragraph (a) because the Permittee only has to minimize excess emissions. The middle of paragraph (b) has been deleted as it was duplicative of paragraph (a). The phrase "or are returning" was added to subparagraph (b)(2) as this is an acceptable response assuming the operation or emission unit does return to normal or its usual manner of operation. The phrase "within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable" was replaced with "normal or usual manner of operation" because the first phrase is just a limited list of the second phrase. The recordkeeping required by paragraph (e) was changed to require only records of the response because the previously listed items are required to be recorded elsewhere in the permit. IDEM, OAQ has also decided to clarify the Permittee's responsibility under CAM.
- IDEM, OAQ has revised Section C - Actions Related to Noncompliance Demonstrated by a Stack Test. The requirements to take response steps and minimize excess emissions have been removed because Section C - response to Excursions or Exceedances already requires response steps related to exceedances and excess emissions minimization. The start of the timelines was revised from "the receipt of the test results" to "the date of the test". There was confusion if the "receipt" was by IDEM, the Permittee or someone else. Since the start of the timelines has been moved up, the length of the timelines was increased. The new timelines require action within a comparable timeline; and the new timelines still ensure that the Permittee will return to compliance within a reasonable timeframe.
- IDEM, OAQ decided to remove paragraph (b) of Section C - Emission Statement since it was duplicative of the requirement in Section C - General Reporting Requirements.
- The requirements from Section B - Deviation from Permit Requirements and Conditions have been added to Section C - General Reporting Requirements. Paragraph (d) of Section C - General Reporting Requirements has been removed because IDEM, OAQ already states the timeline and certification needs of each report in the condition requiring the report. In addition, IDEM, OAQ has decided to clarify the Permittee's responsibility under CAM.
- The voice of paragraph (b) of Section C - General Record Keeping Requirements has been changed to clearly indicate that it is the Permittee that must follow the requirements of the paragraph. IDEM, OAQ has clarified the Permittee's responsibility with regards to record keeping. IDEM, OAQ has clarified the interaction of the Quarterly Deviation and Compliance Monitoring Report and the Emergency Provisions.
- IDEM, OAQ has decided to simplify the referencing in Section C - Compliance with 40 CFR 82 and 326 IAC 22-1.

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 forty percent (40%) 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. ~~326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.~~

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

The Permittee shall not operate an incinerator ~~or incinerate any waste or refuse~~ except as provided in 326 IAC 4-2 ~~and~~**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~~. 326 IAC 9-1-2 is not federally enforceable~~ **or in this permit**.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty**--**five (25) tons per year or more of particulate matter or sulfur dioxide is emitted**. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable**.

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
~~Asbestos Section~~**Compliance and Enforcement Branch**, Office of Air Quality
100 North Senate Avenue
~~,~~MC 61-~~52~~**53** 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 ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**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 ~~Accredited~~**Licensed** Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana ~~Accredited~~**Licensed** Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana ~~Accredited~~**Licensed** Asbestos inspector is not federally enforceable.

C.8 Performance Testing [326 IAC 3-6]

(a) ~~Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.~~ **For performance testing required by this permit, a** ~~A~~ test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty**-**five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**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 ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**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.

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)] **[40 CFR 64] [326 IAC 3-8]**

(a) Unless otherwise specified in this permit, **for** all monitoring ~~and record keeping~~ requirements not already legally required~~ shall be implemented within ninety (90) days of permit issuance. If required by Section D~~, the Permittee shall be ~~responsible for installing any necessary equipment and initiating any required~~**allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such** monitoring~~ related to that equipment.~~**.** If due to circumstances beyond ~~its~~ **the Permittee's** control, ~~that~~**any monitoring** equipment **required by this permit** cannot be installed and operated ~~within~~**no later than** ninety (90) days **after permit issuance or the date of initial startup, whichever is later**, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**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 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]~~

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

C.~~12~~**11** Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

C.~~13~~**12** Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

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

~~(b) These ERPs shall be submitted for approval to:~~

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

~~within 180 days from the date on which this source commences operation.~~

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

~~(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.~~

~~(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.~~

~~(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.~~

~~(f~~**(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.~~15~~**14** Response to Excursions or Exceedances [**40 CFR 64] [**326 IAC **3-8] [326 IAC** 2-7-5] [326 IAC 2-7-6]

(~~a~~**l**) Upon detecting an excursion **where a response step is required by the D Section,** or **an** exceedance~~, the~~ **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 ~~and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions~~**. The response** may include, but ~~are~~**is** not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned **or are returning** to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow**-**up actions to return operation to ~~within the indicator range, designated condition,~~**normal** or ~~below the applicable emission limitation or standard, as applicable~~**usual manner of operation**.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall ~~maintain~~**record** the ~~following records:~~**reasonable response steps taken.**

~~(1) monitoring data;~~

~~(2) monitor performance data, if applicable; and~~

~~(3) corrective actions 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.16~~**C.15** Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C **-** Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall ~~take appropriate response actions. The Permittee shall~~ submit a description of ~~these~~**its** response actions to IDEM, OAQ, ~~within thirty (30~~**no later than seventy-five (75**) days ~~of receipt~~**after the date** of the test~~ results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented~~.

(b) A retest to demonstrate compliance shall be performed ~~within~~**no later than** one hundred ~~twenty (120~~**eighty (180**) days ~~of receipt of~~**after** the ~~original~~**date of the** test ~~results~~. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred ~~and twenty (120~~**eighty (180**) days is not practicable, IDEM, OAQ may extend the retesting deadline~~.~~

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**35**).

C.~~17~~**16** Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

~~(a) 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.~~ **In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 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 ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the "~~**a "**responsible official~~"~~**"** as defined by 326 IAC 2-7-1(~~34~~**35**).

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

C.~~18~~**17** General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(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. **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.

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

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

~~C.19~~**C.18** General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] **[40 CFR 64] [326 IAC 3-8]**

(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 ~~within~~**not later than** thirty (30) days ~~of~~**after** the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**35**). **A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.**

~~(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:~~

(b) The address for report submittal is:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) ~~Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

~~(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.~~ Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

C.~~20~~**19** Compliance with 40 CFR 82 and 326 IAC 22-1

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

~~(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.~~

~~(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.~~

~~(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.~~

Change No. 6 IDEM, OAQ has made the following changes through Sections D.1 through D.8:

- Changed the Section Heading from "FACILITY OPERATION CONDITIONS" to "EMISSION UNIT OPERATION CONDITIONS".
- IDEM, OAQ updated rule citation for 326 IAC 2-7-5 to reference (14), descriptive information, rather than (15), terms and conditions.
- IDEM, OAQ updated descriptions for all equipment such that the descriptions match those in Section A of the permit.
- IDEM, OAQ removed the title "Operation Conditions". This title is unnecessary since all of the requirements are operating conditions.
- IDEM, OAQ removed requirements for emission units that were not constructed.
- IDEM, OAQ corrected typographical errors.
- IDEM, OAQ updated the rule citation for 326 IAC 2-7-5 (Preventive Maintenance Plan requirements) to reference (12) rather than (13).
- IDEM, OAQ updated the testing requirements based on the new emission limitations. IDEM, OAQ has also decided to clarify Section D - Testing Requirements to state that testing shall be done in accordance with 326 IAC 3-6 instead of in accordance with another permit condition that refers to 326 IAC 3-6.
- For clarity, IDEM, OAQ has changed references to the general conditions such as "in accordance with Section B", "in accordance with Section C", or other similar language to "Section C...contains the Permittee's obligation with regard to the records required by this condition. This affects Preventive Maintenance Plan, Testing Requirements, Compliance Monitoring, Record Keeping Requirements, and Reporting Requirements.
- The word "status" has been added to the Record Keeping Requirements and Reporting Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.
- IDEM, OAQ has decided that the phrases "no later than" and "not later than" are clearer than "within" in relation to the end of a timeline. Therefore, all references to timelines have been revised to "no later than" or "not later than". IDEM, OAQ updated the reporting requirement to be not later than thirty (30) days following the end of the each calendar quarter.
- IDEM, OAQ has decided to clarify what rule requirements a certification needs to meet. 326 IAC 2-7 requires that "a responsible official" perform certain actions.
- 326 IAC 2-7-1(35) allows for multiple people to meet the definition of "responsible official." Therefore, IDEM, OAQ is revising all instances of "the responsible official" to read "a responsible official". IDEM, OAQ updated the rule citation for the definition of a "responsible official" from (34) to (35).

Change No. 7 IDEM, OAQ has made the following changes to Section D.1:

- Updated PM and PM_{10} emission limits. Some limits have increased, while others have decreased. The overall limitation for the entire source did not change.
- Added $PM_{2.5}$ emission limits since the source elected to take limits to avoid being a major source under 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).
- IDEM, OAQ updated the Particulate Emission Limitations under 326 IAC 6-3-2.
- Updated "Particulate Control" to remove references to vent filters, to clarify the controls used at the dump pits and DDGS loadout, and to include language regarding bag failure in multi-compartment baghouses.
- Updated the Visible Emissions Notations requirements to clarify the requirements for the existing baghouses and to add the requirements for the newly permitted baghouses.

- Updated the Parametric Monitoring requirements to clarify the requirements for the existing baghouses and to add the requirements for the newly permitted baghouses.
- Updated record keeping requirements to clarify the records required for the existing baghouses and to add the requirements for the newly permitted baghouses.
- Added language to the requirement for records of pressure drop readings to clarify that a record is still needed even if a pressure drop reading was not taken.

SECTION D.1 ~~FACILITY~~ **EMISSION UNIT** OPERATION CONDITIONS

~~Facility~~ **Emission Unit** Description**s** [326 IAC 2-7-5(~~15~~**14**)]:

(a) Grain receiving and handling operations, identified as process P-1**, installed in 2008**, with a maximum capacity of **143 tons of grain per hour** ~~2,330,160 tons of grains per year (83,077,000 bushels of grain per year)~~. The grain when received from various sources is already dried and cleaned. These operations include the following:

(1) ~~Three (3~~**One (1**) grain truck dump ~~pits,~~ **pit, identified as** EP-01**a**, ~~EP02 and EP-03,~~ **installed in 2008, with a maximum capacity of 143 tons of grain per hour,** with ~~three (3) conveyors~~**one (1) conveyor** and ~~three (3~~**one (1**) elevator ~~systems.~~**system.** The particulate emissions from the ~~three~~ dump ~~pits~~**pit** are controlled by ~~three (3) baghouses~~**one (1) baghouse**, C-1A, ~~C-1B, and C-1C~~**exhausting to stack S-1A**.

(2) One (1) rail dump pit, **identified as EP-01b** ~~which will share the~~**installed in 2008, with a maximum capacity of 143 tons of grain per hour, with** conveyor system and elevator system ~~with third grain truck dump pit, EP-03.~~**.** The particulate emissions from the dump pit are controlled by baghouse, C-~~1C~~**1A, exhausting to stack S-1A**.

(3) ~~Seven (7~~**Two (2**) corn storage silos, ~~EP-04 through EP-10~~**identified as EP-02A and EP-02B, installed in 2008**, with a total storage capacity of ~~3,150~~**600**,000 bushels with ~~seven (7~~**two (2**) conveyor systems. ~~PM emissions from each storage silo are controlled by bin vent filters, C-1D through C1-J.~~ **Each silo has a maximum throughput capacity of 71.5 tons per hour, and the total conveyance capacity is 143 tons per hour.**

(4) ~~Four (4) surge bins, EP-11 through EP-14, each is controlled by bin vent filters, C-1K through C-1N.~~ **One (1) grain scalper, identified as EP-03a installed in 2008, and one (1) surge bin, identified as EP-03b, installed in 2008, both units controlled by one (1) baghouse, C-1B, exhausting to stack S-1B.**

(b) Grain milling operation, identified as process P-2**, installed in 2008**, which include the following:

(1) One (1) hammermill feed system**, installed in 2008, with a maximum capacity of 6000 bushels of grain per hour**.

(2) ~~Eight (8~~**Four (4**) hammermills, identified as EP~~-15~~**-05** through EP~~-22~~**-08, installed in 2008**, each has a capacity of 1500 bushels per hour (12,000 bushels per hour total). The particulate emissions from these hammermills are controlled by ~~eight (8~~**four (4**) baghouses, C**-**-2A through C**-**-2D ~~and C-3A~~**, exhausting to stacks S-2A** through ~~C-3D~~**S-2D**.

(g) DDGS handling, storage and loadout operations, identified as process P-8, **installed in 2008,** with a rate of ~~726,930~~**391,148** tons (dry basis) of DDGS per year consisting of the following emission units:

(1) One (1) DDGS storage building, **installed in 2008,** which includes supporting equipment; ~~two (2~~**one (1**) enclosed DDGS ~~conveyors,~~ **conveyor, identified as** EP~~-23 and EP-24, controlled by two (2)~~ **-09. Particulate emissions between the** DDGS ~~receiving filters,~~

~~C-8A~~**storage building** and ~~C-8B~~**DDGS loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8**.

~~Three (3~~**(2) One (1)** truck ~~loadouts,~~**loadout, identified as** EP~~-25 through EP-27~~**-10, installed in 2008**, with a ~~total~~ maximum rate of ~~165~~**55** tons (dry basis) per hour~~,~~**. Particulate emissions from truck loadout are** controlled by ~~three (3) baghouses (~~**one (1) baghouse,** C-8~~C, C-8D and C-8E).~~**, exhausting to stack S-8.**

(3) One (1) rail loadout, ~~EP-28~~**identified as EP-11, installed in 2008**, with a maximum rate of 180 tons (dry basis) per hour~~,~~**. Particulate emissions from rail loadout are** controlled by one (1) baghouse ~~(~~**,** C-8~~F).~~**, exhausting to stack S-8.**

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

~~Operation Conditions~~

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

D.1.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

The PM~~/~~, PM_{10}**, and $PM_{2.5}$** emissions from the following emission units at Aventine's ethanol production plant shall not exceed the emission limits in the table below:

Process ID	**Process Description**	**Control ID**	**PM Emissions Limits (lbs/hr)**	~~PM/~~**PM_{10} Emissions Limits** (~~pounds/hour~~ **lbs/hr**)	**$PM_{2.5}$ Emissions Limits (lbs/hr)**
EP-~~01~~**01a**	Truck dump pit	Baghouse C-1A	**0.46**	0.~~26~~**46**	**0.46**
EP-~~02~~**01b**	~~Truck~~**Rail** dump pit	~~Baghouse C-1B~~		~~0.26~~	
~~EP-03~~	~~Truck/rail dump pit~~	~~Baghouse C-1C~~		~~0.26~~	
~~EP-04~~	~~Corn storage bin~~	~~Vent filter C-1D~~		~~0.01~~	
~~EP-05~~	~~Corn storage bin~~	~~Vent filter C-1E~~		~~0.01~~	
~~EP-06~~	~~Corn storage bin~~	~~Vent filter C-1F~~		~~0.01~~	
~~EP-07~~	~~Corn storage bin~~	~~Vent filter C-1G~~		~~0.01~~	
~~EP-08~~	~~Corn storage bin~~	~~Vent filter C-1H~~		~~0.01~~	
~~EP-09~~	~~Corn storage bin~~	~~Vent filter C-1I~~		~~0.01~~	
~~EP-10~~	~~Corn storage bin~~	~~Vent filter C-1J~~		~~0.01~~	
EP-~~15~~**05**	Hammermill	Baghouse C-2A	**0.30**	0.~~05~~**30**	**0.30**
EP-~~16~~**06**	Hammermill	Baghouse C-2B	**0.30**	0.~~05~~**30**	**0.30**
EP-~~17~~**07**	Hammermill	Baghouse C-2C	**0.30**	0.~~05~~**30**	**0.30**
EP-~~18~~**08**	Hammermill	Baghouse C-2D	**0.28**	0.~~05~~**28**	**0.28**
EP-~~19~~**03a**	~~Hammermill~~**Grain Scalper**	Baghouse C-~~2E~~**1B**	**0.44**	0.~~05~~**44**	**0.44**
~~EP-20~~	~~Hammermill~~	~~Baghouse C-2F~~		~~0.05~~	
~~EP-21~~	~~Hammermill~~	~~Baghouse C-2G~~		~~0.05~~	
~~EP-22~~	~~Hammermill~~	~~Baghouse C-2H~~		~~0.05~~	
EP-~~23~~**09**	DDGS conveyor	~~Filter~~**Baghouse C**-8A	**0.08**	0.~~02~~**08**	**0.08**
~~EP-24~~	DDGS ~~conveyor~~**storage**	~~Filter-8B~~		~~0.02~~	
~~EP-25~~	~~DDGS truck loadout~~	~~Baghouse C-8C~~		~~0.02~~	
~~EP-26~~	~~DDGS truck loadout~~	~~Baghouse C-8D~~		~~0.02~~	
~~EP-27~~	~~DDGS truck loadout~~	~~Baghouse C-8E~~		~~0.02~~	

Process ID	Process Description	Control ID	PM Emissions Limits (lbs/hr)	~~PM/~~PM_{10} Emissions Limits (~~pounds/hour~~ lbs/hr)	$PM_{2.5}$ Emissions Limits (lbs/hr)
~~EP-28~~	~~DDGS rail loadout~~	~~Baghouse C-8F~~		~~0.03~~	

Compliance with ~~these~~**the above** PM~~/~~**,** PM_{10}**, and** $PM_{2.5}$ **emission limits and the PM,** PM_{10}**, and** $PM_{2.5}$ emission limits in **Conditions D.2.4, D.3.2, and D.6.1 in** conjunction with the ~~PM/PM10 emission limits~~**unrestricted PTE** from ~~the other units in~~ this ~~NSR/Part 70 Permit No. 129-24836-00051, and the PM/PM10 emission limits in the Consolidated Grain & Barge Co. Part 70 Permit No. 129-24928-00014~~**source,** shall limit the PM~~/~~**,** PM_{10}**, and** $PM_{2.5}$ emissions from the entire source ~~(Aventine's ethanol production plant and Consolidated Grain & Barge Co. grain merchandising plant)~~ to less than **two hundred fifty (**250**)** tons per year, ~~which renders~~**each. Therefore,** the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD~~)~~**), are** not applicable **to the source for PM,** PM_{10}**, or** $PM_{2.5}$.

D.1.2 Particulate Emission Limitations [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the following processes shall not exceed the pound per hour limits as follows:

Process ID	Process~~/Facility~~ Description	Process Weight Rate (tons/hr)	Particulate Emissions ~~Limit~~Limits (lbs/hr)
EP-01a and EP-01b	~~Grain Receiving, EP-01~~**Truck dump pit**	~~980~~**350**	~~77.33~~**64.76**
	~~Grain receiving, EP-02~~**Rail dump pit**	~~980~~	~~77.33~~
~~Grain receiving, EP-03~~		~~980~~	~~77.33~~
EP-02a	Corn ~~Storage Bin #1~~**storage bin**	~~980~~**350**	~~77.33~~**64.76**
~~Corn Storage Bin #2~~		~~980~~	~~77.33~~
~~Corn Storage Bin #3~~		~~980~~	~~77.33~~
~~Corn Storage Bin #4~~		~~980~~	~~77.33~~
EP-02b	Corn ~~Storage Bin #5~~**storage bin**	~~980~~**350**	~~77.33~~**64.76**
EP-03b	~~Corn Storage Bin #6~~**Surge bin**	~~980~~**350**	~~77.33~~**64.76**
~~Corn Storage Bin #7~~		~~980~~	~~77.33~~
EP-05	Hammermill ~~#1~~	~~42.0~~**47.6**	~~42.97~~**44.12**
EP-06	Hammermill ~~#2~~	~~42.0~~**47.6**	~~42.97~~**44.12**
EP-07	Hammermill ~~#3~~	~~42.0~~**47.6**	~~42.97~~**44.12**
EP-08	Hammermill ~~#4~~	~~42.0~~**47.6**	~~42.97~~**44.12**
~~Hammermill #5~~		~~42.0~~	~~42.97~~
~~Hammermill #6~~		~~42.0~~	~~42.97~~
~~Hammermill #7~~		~~42.0~~	~~42.97~~
~~Hammermill #8~~		~~42.0~~	~~42.97~~

EP-03a	~~DDGS Reclaim, EP-23~~**Grain Scalper**	~~55~~**196**	~~45.47~~**58.29**
EP-09	DDGS ~~Reclaim, EP-24~~**conveyor**	~~55~~**44.65**	~~45.47~~**43.55**
	DDGS ~~Storage~~**storage**	~~83~~	~~49.43~~
EP-10	DDGS ~~Truck Loadout~~**truck loadout**	~~55~~**50**	~~45.47~~**44.58**
~~DDGS Truck Loadout~~		~~55~~	~~45.47~~
~~DDGS Truck Loadout~~		~~55~~	~~45.47~~
EP-11	DDGS ~~Rail Loadout~~**rail loadout**	~~400~~**80**	~~66.31~~**49.06**

The pounds per hour limitations for the emissions units in the above table shall be calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ \mathbf{P}^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), when the process weight rate exceeds two hundred (200) tons per hour, the allowable emissions may exceed that shown in the table in 326 IAC 6-3-2(e) provided the concentration of particulate in the discharge gases to the atmosphere is less than one tenth (0.10) pound per one thousand (1,000) pounds of gases.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(~~13~~**12**)]

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for these facilities and any control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

D.1.4 Particulate Control

(a) In order to comply with Conditions D.1.1 through D.1.2, each of the following emission units shall be controlled by the associated baghouses ~~and vent filters~~ at all times the following units are operating:

Process ID	Process Description	Control ID
EP-01a	Truck dump pit	~~Baghouse C-1A~~**restricting vehicles unloading grain to trucks with choke unloading applications**
~~EP-02~~**EP-01b**	~~Truck~~**Rail** dump pit	~~Baghouse C-1B~~**restricting vehicles unloading grain to hopper bottom rail cars**
~~EP-03~~	Truck~~/rail~~ dump pit **conveyance & elevators**	Baghouse C-~~1C~~**1A**

Process ID	Process Description	Control ID
~~EP-04~~	~~Corn storage bin~~**Rail dump pit conveyance & elevator**	~~Vent filter C-1D~~
~~EP-05~~	~~Corn storage bin~~	~~Vent filter C-1E~~
~~EP-06~~	~~Corn storage bin~~	~~Vent filter C-1F~~
~~EP-07~~	~~Corn storage bin~~	~~Vent filter C-1G~~
~~EP-08~~	~~Corn storage bin~~	~~Vent filter C-1H~~
~~EP-09~~	~~Corn storage bin~~	~~Vent filter C-1I~~
~~EP-10~~	~~Corn storage bin~~	~~Vent filter C-1J~~
~~EP-11~~	~~Surge bin~~	~~Vent filter C-1K~~
~~EP-12~~	~~Surge bin~~	~~Vent filter C-1L~~
~~EP-13~~	~~Surge bin~~	~~Vent filter C-1M~~
~~EP-14~~	~~Surge bin~~	~~Vent filter C-1N~~
EP-~~15~~**05**	Hammermill	Baghouse C-2A
EP-~~16~~**06**	Hammermill	Baghouse C-2B
EP-~~17~~**07**	Hammermill	Baghouse C-2C
EP-~~18~~**08**	Hammermill	Baghouse C-2D
EP-~~19~~**03a**	~~Hammermill~~**Grain Scalper**	Baghouse C-~~2E~~**1B**
~~EP-20~~	~~Hammermill~~	~~Baghouse C-2F~~
~~EP-21~~	~~Hammermill~~	~~Baghouse C-2G~~
~~EP-22~~	~~Hammermill~~	~~Baghouse C-2H~~
~~EP-23~~	~~DDGS conveyor~~	~~Filter-8A~~
~~EP-24~~	~~DDGS conveyor~~	~~Filter-8B~~
EP-~~25~~**09**	DDGS ~~truck loadout~~ **conveyor**	Baghouse C-~~8C~~**8**
~~EP-26~~	DDGS ~~truck loadout~~ **storage**	~~Baghouse C-8D~~
EP-~~27~~**10**	DDGS truck loadout	~~Baghouse C-8E~~**shoot extension with a funnel device**
EP-~~28~~**11**	DDGS rail loadout	~~Baghouse C-8F~~**shoot extension with a funnel device**

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.5 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform **the following testing utilizing methods as approved by the Commissioner:**

(a) PM, PM_{10} **and $PM_{2.5}$ testing for Baghouse C-1A, controlling the truck/rail dump pit (EP-01a and EP-01b),**

(b) **PM, PM_{10} and $PM_{2.5}$** testing for one ~~of Baghouses C-1A through C-1C, controlling three (3) grain dump pits (EP-01 through EP-03), one~~**(1)** of Baghouses C-2A through C-~~2H~~**2D**, controlling ~~eight (8~~**four (4**) hammermills (EP-~~13~~**05** through **EP-08),**

(c) **PM, PM_{10} and $PM_{2.5}$ testing for Baghouse C-1B, controlling grain scalper (**EP-~~22),~~ ~~within 60 days after achieving maximum production capacity, but no later than 180 days after initial startup, utilizing methods as approved by the Commissioner.~~ **03a),**

(d) PM, PM_{10} and $PM_{2.5}$ testing for Baghouse C-8, controlling DDGS conveyor and DDGS storage (EP-09),

PM_{10} and $PM_{2.5}$ includes filterable and condensable PM.

These tests shall be repeated on a different set of baghouses at least once every five (5) years from the date of this valid compliance demonstration. **The source will test the set of baghouses for which the longest period of time has passed since the last valid compliance test.** ~~Testing shall be conducted in accordance with Section C – Performance Testing. PM10 includes filterable and condensable PM10.~~

Testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

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

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the stacks exhausts from ~~baghouses, filters and vent filters~~**:**

(1) Baghouse C-1A, controlling ~~truck dump pit (EP-01), truck dump pit (EP-02),~~**the** truck/rail dump pit (EP-~~03), corn~~ **01a and EP-01b),**

(2) Baghouses C-2A through C-2D, controlling four (4) hammermills (EP-05 through EP-08),

(3) Baghouse C-1B, controlling grain scalper (EP-03a),

(4) Baghouse C-8A, controlling DDGS conveyor and DDGS storage ~~bins (EP-04 through (~~EP-~~10), surge bins (EP-11 through EP-14), hammermills (EP15 through 22), DDGS receiving conveyors and trucks/barge DDGS loadouts shall be~~ **09),**

shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take **a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the** reasonable response steps ~~in accordance with Section C - Response to Excursions or Exceedances.~~**required by this condition.** Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~ shall be considered a deviation from this permit.

D.1.7 Baghouses Parametric Monitoring

(a) The Permittee shall record the pressure drop across ~~baghouses; C-1A controlling one (1) truck dump pit (EP-01); C-1B controlling one (1) truck dump pit (EP-02) and C-1C controlling one (1) truck dump pit and~~ **Baghouse C-1C, controlling the truck/**rail dump pit (EP-~~03, baghouses (~~**01a and EP-01b) at least once per day when the emission unit is in operation. When, for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.**

(b) The Permittee shall record the pressure drop across Baghouses C-2A through C-~~2H), each~~**2D,** controlling ~~one (1) hammermill (EP15~~**four (4) hammermills (EP-05** through ~~22),~~**EP-08)** at least once per day when the respective emission units are in operation. **When, for any one reading, the pressure drop across a baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.**

(~~b~~c) **The Permittee shall record the pressure drop across Baghouse C-1B, controlling grain scalper (EP-03a) at least once per day when the respective emission units are in operation.** When, for any one reading, the pressure drop across ~~each~~**a** baghouse is outside ~~of~~ the normal range~~ of~~**, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between** 1.0 and 6.0 inches of water **unless a different upper-bound** or ~~a~~**lower-bound value for this** range ~~established~~**is determined** during the ~~last~~**latest** stack test~~, the Permittee shall take reasonable response steps in accordance with~~ **.**

(d) The Permittee shall record the pressure drop across Baghouse C-8A, controlling DDGS storage (EP-09) at least once per day when the respective emission units are in operation. When, for any one reading, the pressure drop across a baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

Section C **-** Response to Excursions ~~or~~**and** Exceedances~~.~~ **contains the Permittee's obligation with regard to the reasonable response steps required by this condition.** A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances,~~ shall be considered a deviation from this permit.

~~(c)~~ The instruments used for determining the pressure shall comply with Section C **–** Instrument Specifications**,** of this permit, **shall be subject to approval by IDEM, OAQ,** and shall be calibrated **or replaced** at least once every six (6) months.

D.1.8 Broken or Failed Bag Detection

~~In the event that bag failure has been observed:~~

~~(a)~~ For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions), or

~~(b)~~ For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, or leaks, or dust traces.

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

D.1.9 Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.1.6, the Permittee shall maintain a daily record of visible emission notations of the stacks exhausts from**:** ~~baghouses and vent filters controlling truck dump pit (EP-02), truck dump pit (EP-03), rail dump pit, corn storage bins (EP-04 through EP-10), surge bins (EP-11 through EP-14), hammermills (EP15 through 22), DDGS receiving conveyors and trucks/barge DDGS loadouts.~~

(1) Baghouse C-1A, controlling the truck/rail dump pit (EP-01a and EP-01b),

(2) Baghouses C-2A through C-2D, controlling four (4) hammermills (EP-05 through EP-08),

(3) Baghouse C-1B, controlling grain scalper (EP-03a),

(4) Baghouse C-8A, controlling DDGS conveyor and DDGS storage (EP-09),

The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document **the** compliance **status** with Condition D.1.7, the Permittee shall maintain a daily record of the pressure drop across**:** ~~each of the baghouses controlling truck dump pit (EP-02), truck dump pit EP-03), rail dump pit, and hammermills (EP15 through EP22).~~

(1) Baghouse C-1A, controlling the truck/rail dump pit (EP-01a and EP-01b),

(2) Baghouses C-2A through C-2D, controlling four (4) hammermills (EP-05 through EP-08),

(3) Baghouse C-1B, controlling grain scalper (EP-03a),

(4) Baghouse C-8A, controlling DDGS conveyor and DDGS storage (EP-09).

The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements **contains the Permittee's obligation with regard to the record keeping requirements**~~,~~ of this permit.

Change No. 8 IDEM, OAQ has made the following changes to Section D.2:

- IDEM, OAQ updated the VOC, PM, and PM_{10} emission limits. The new limits reflect two operating scenarios as well as the lower operating capacity of the source.

- IDEM, OAQ updated the NO_X, CO, and SO_2 emission limits. The new limits reflect the lower operating capacity of the source.
- IDEM, OAQ added $PM_{2.5}$ emission limits since the source elected to take limits to avoid being a major source under 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)). The new limits reflect two operating scenarios.
- IDEM, OAQ updated the Particulate Emission Limitations under 326 IAC 6-3-2.
- IDEM, OAQ added HAP emission limits since the source elected to take limits to be an area source under 40 CFR 63. The new limits reflect two operating scenarios.
- IDEM, OAQ clarified the emission units regulated under 326 IAC 8-5-6].
- IDEM, OAQ clarified that the "VOC Control" requirement also addresses HAP Control.
- IDEM, OAQ added "Particulate Control" to include the control requirements for the newly permitted baghouses.
- IDEM, OAQ updated the testing requirements to correspond to the new and revised emission limits and the two operating scenarios.
- IDEM, OAQ updated the Visible Emissions Notations requirements to include the requirements for the newly permitted baghouses.
- IDEM, OAQ updated the requirements for Thermal Oxidizers Parametric Monitoring and Thermal Oxidizers Temperature.
- IDEM, OAQ added Parametric Monitoring and Broken or Failed Bag Detection requirements for the newly permitted baghouses.
- IDEM, OAQ updated the record keeping requirements to include the requirements for the newly permitted baghouses.

SECTION D.2 ~~FACILITY~~ **EMISSION UNIT** OPERATION CONDITIONS

~~Facility~~ **Emission Unit** Descriptions [326 IAC 2-7-5(~~15~~**14**)]:

(c) Milled grain cooking operation, identified as process P-4**, installed in 2008**, which includes the following:

(1) Milled grain cooking operation**,** consisting of the following major components~~; Two (2~~**:**

(A) **One (1**) process condensate ~~tanks, two (2~~**tank, installed in 2008,**

(B) **One (1**) slurry mix ~~tanks, four (4~~**tank, installed in 2008,**

(C) **Two (2**) liquification tanks, **installed in 2008,** and ~~two (2~~

(D) **One (1**) yeast ~~tanks.~~ **tank, installed in 2008.**

The emissions from these tanks will be controlled by ~~four (4~~**two (2**) Thermal Oxidizers, C-6A ~~through C-6D~~**and C-6B, exhausting to stacks S-6A and S-6B**. Each thermal oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) ~~Two (2~~**One (1**) ammonia ~~tanks~~**tank, installed in 2008**.

(e) Distillation and dehydration operations, identified as process P-6, **installed in 2008,** with a throughput of ~~24,700~~**13,302** gallons per hour consisting of the following emission units:

(1) Two (2) beer columns, #1 and #2, **installed in 2008,** controlled by either of the ~~four (4~~**two (2**) Thermal Oxidizers, C-6A ~~through C-6D~~**, exhausting to stack S-6A, or C-6B,**

exhausting to stack S-6B. Each Thermal Oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) ~~Two (2) side strippers, #1 and #2,~~ **One (1) acid reduction column, #1, installed in 2008,** controlled by either of the ~~four (4~~**two (2**) Thermal Oxidizers, C-6A ~~through~~**, exhausting to stack S-6A, or** C-~~6D~~**6B, exhausting to stack S-6B**.

(3) ~~Two (2~~**One (1**) rectifier ~~columns, #1 and #2~~**column, #1, installed in 2008**, controlled by either of the ~~four (4~~**two (2**) Thermal Oxidizers, C-6A ~~through~~**, exhausting to stack S-6A, or** C-~~6D~~**-6B, exhausting to stack S-6B**.

(4) ~~Four (4~~**Two (2**) molecular sieves**, installed in 2008**.

(5) ~~Two (2~~**One (1**) 200 proof ~~condensers~~**condenser, installed in 2008**.

(6) ~~Two (2~~ **One (1**) whole stillage ~~tanks~~**tank, installed in 2008**.

(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7**, installed in 2008**, **with a maximum throughput of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour),** consisting of the following emission units:

~~Eight (8~~**(1) Four (4**) centrifuges**, installed in 2008**.

~~Two (~~2**) One (1**) thin stillage ~~tanks~~**tank, installed in 2008**.

(3) Two (2) evaporator systems**, installed in 2008**.

(4) ~~Two (2~~ **One (1**) syrup ~~tanks~~**tank, installed in 2008.**

(5) One (1) wet cake pad**, installed in 2008**.

The emissions from the thin stillage tank and syrup tank will be controlled by two (2) Thermal Oxidizers, C-6A and C-6B.

(6) **Two (2)** DDGS ~~drying~~ **dryers, identified as EP-20 (#1) and EP-21 (#2), installed in 2008**, with a total drying rate of ~~726,930~~**391,148** tons (dry basis) of DDGS per year, with ~~four (4~~**two (2**) DDGS dryers, each with a heat input capacity of 90 MMBtu/hr. Dryer #1 is controlled by Thermal Oxidizer #1, C-6A~~;~~**, and** Dryer #2 is controlled by Thermal Oxidizer #2, C-6B~~; Dryer #3~~**.**

(7) ~~Four (4)~~ **Two (2)** DDGS coolers, **identified as EP-22 (#1) and EP-23 (#2), installed in 2008,** with a maximum throughput of ~~726,930~~ **391,148** tons (dry basis) of DDGS per year. Cooler #1 is controlled by ~~Thermal Oxidizer #1, C-6A;~~ **Cooler Baghouse #1, C-7A, installed in 2008, and may exhaust to stack S-7A when not being used as make-up air for DDGS Dryer #1.** Cooler #2 is controlled by ~~Thermal Oxidizer #2, C-6B;~~ **Cooler Baghouse #2, C-7B, installed in 2008, and may exhaust to stack S-7B when not being used as make-up air for DDGS Dryer #2.** ~~Cooler #3 is controlled by Thermal Oxidizer #3, C-6C, and Cooler #4 is controlled by Thermal Oxidizer #4, C-6D.~~

(k) Two (2) Thermal Oxidizers, C-6A and C-6B, installed in 2008, with a heat input capacity of 18 million British thermal units per hour (MMBtu/hr), each, controlling emissions from the following:

(A) One (1) process condensate tank.

(B) One (1) slurry mix tank.

(C) Two (2) liquification tanks.

(D) One (1) yeast tank.

(E) Two (2) beer columns, identified as EP-16.

(F) One (1) side stripper (acid reduction column), identified as EP-17.

(G) One (1) rectifier column, identified as EP-18.

(H) One (1) whole stillage tank.

(I) One (1) thin stillage tank.

(J) One (1) syrup tank.

(K) Two (2) DDGS dryers, identified as EP-20 and EP-21.

Thermal oxidizer C-6A exhausts to stack S-6A and thermal oxidizer C-6B exhausts to stack S-6B.

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

~~Operation Conditions~~

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

D.2.1 Prevention of Significant Deterioration (PSD) Minor VOC Limits [326 IAC 2-2]

The VOC emissions from the following ethanol emissions units shall not exceed the following emission limits:

Operating Scenario One: DDGS Cooler Baghouse #1 (C-7A) exhausting into the DDGS dryer #1 and DDGS Cooler Baghouse #2 (C-7B) exhausting into DDGS dryer #2.

(a**1**) The VOC emissions from **the** Thermal Oxidizer #1 (C-6A), which controls the **slurry mix tank and yeast tank in the milled grain cooking operation, the** DDGS dryer #1, ~~DDGS cooler #1,~~ **a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the** distillation and evaporation **operation,** shall not exceed ~~6.4~~**8.77** pounds per hour.

(b**1**) The VOC emissions from **the** Thermal Oxidizer #2 (C-6B), which controls the **slurry mix tank and yeast tank in the milled grain cooking operation, the** DDGS dryer #2, ~~DDGS cooler #2,~~ **a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the** distillation and evaporation **operation,** shall not exceed ~~6.4~~**8.77** pounds per hour.

(c**1**) The VOC emissions from ~~Thermal Oxidizer #3~~**the DDGS Cooler Baghouse #1** (C-~~6C~~**7A**), which controls the DDGS **Cooler #1, shall exhaust to the DDGS** dryer #~~3, DDGS cooler #3, distillation and evaporation shall not exceed 6.4 pounds per hour~~**1**.

(d**1**) The VOC emissions from ~~Thermal Oxidizer #4~~**the DDGS Cooler Baghouse #2** (C-~~6D~~**7B**), which controls the DDGS **Cooler #2, shall exhaust to the DDGS** dryer #~~4, DDGS cooler #4,~~**2.**

Alternate Operating Scenario: DDGS Cooler Baghouse #1 (C-7A) and DDGS Cooler Baghouse #2 (C-7B) exhausting to atmosphere.

(a2) The VOC emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 6.4 pounds per hour.

(b2) The VOC emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation **operation,** shall not exceed 6.4 **pounds per hour.**

(c2) The VOC emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall not exceed 1.55 pounds per hour.

(d2) The VOC emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall not exceed 1.55 pounds per hour.

Compliance with ~~these~~**the above** VOC emission limits **and the VOC emission limits in Conditions D.3.1 and D.4.1** in conjunction with the ~~VOC emission limits~~**unrestricted PTE** from ~~the other units in~~ this ~~NSR/Part 70 Permit No. 129-24836-00051, and the VOC emission limits in the Consolidated Grain & Barge Part 70 Permit No. 129-24928-00014~~**source,** shall limit the VOC emissions from the entire source ~~(Aventine's ethanol production plant and Consolidated Grain & Barge Co. grain merchandising plant) to~~ **to** less than **two hundred fifty (**250**)** tons per year~~, which renders~~**. Therefore,** the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD)**, are** not applicable **to the source for VOC**.

D.2.2 Prevention of Significant Deterioration (PSD) Minor NOx Limits [326 IAC 2-2]

(a) The NOx emissions from the ~~four (4~~**two (2**) Thermal Oxidizers stack exhaust shall not exceed ~~43.2~~**86.4** pounds per million cubic feet of natural gas burned by the ~~four (4~~**two (2**) DDGS Dryers and ~~four (4~~**two (2**) RTOs~~).~~**.**

(b) The total throughput of natural gas to the ~~four (4~~**two (2**) DDGS dryers #1 ~~through #4~~ and ~~four (4~~**#2 and two (2**) Thermal Oxidizers, C-6A~~, C~~ **andC**-6B~~, C-6C and C-6D~~ shall be limited to ~~3,784~~**1,892** million cubic feet per twelve month period, with compliance determined at the end of each month.

Compliance with ~~these~~**the above** NOx emission limits **and the NOx emission limit in Condition D.8.1** in conjunction with the ~~NOx emission limits~~**unrestricted PTE** from ~~the other units in~~ this ~~NSR/Part 70 Permit No. 129-24836-00051, and the NOx emission limits in the Consolidated Grain & Barge Part 70 Permit No. 129-24928-00014~~**source,** shall limit the NOx emissions from the entire source ~~(Aventine's ethanol production plant and Consolidated Grain & Barge Co. grain merchandising plant)~~ to less than **two hundred fifty (**250**)** tons per year, ~~which renders~~**each. Therefore,** the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD~~)~~**), are** not applicable **to the source for NOx**.

D.2.3 Prevention of Significant Deterioration (PSD) Minor CO Limits [326 IAC 2-2]

The Carbon Monoxide (CO) emissions from the following ethanol emissions units shall not exceed the following emission limits:

(a) The CO emissions from Thermal Oxidizer #1 (C-6A), which controls the **CO emissions from the** DDGS dryer #1, ~~DDGS cooler #1, distillation and evaporation~~ shall not exceed ~~8.9~~**7.1** pounds per hour.

(b) The CO emissions from Thermal Oxidizer #2 (C-6B), which controls the **CO emissions from the** DDGS dryer #2~~, DDGS cooler #2, distillation and evaporation~~**,** shall not exceed ~~8.9 pounds per hour.~~

~~(c) The CO emissions from Thermal Oxidizer #3 (C-6C), which controls the DDGS dryer #3, DDGS cooler #3, distillation and evaporation shall not exceed 8.9 pounds per hour.~~

~~(d) The CO emissions from Thermal Oxidizer #4 (C-6D), which controls the DDGS dryer #4, DDGS cooler #4, distillation and evaporation shall not exceed 8.9~~**7.1** pounds per hour.

Compliance with ~~these~~**the above** CO emission limits **and the CO emission limit in Condition D.8.1** in conjunction with the ~~CO emission limits~~**unrestricted PTE** from ~~the other units in~~ this ~~NSR/Part 70 Permit No. 129-24836-00051, and the CO emission limits in the Consolidated Grain & Barge Part 70 Permit No. 129-24928-00014~~**source,** shall limit the CO emissions from the entire source ~~(Aventine's ethanol production plant and Consolidated Grain & Barge Co. grain merchandising plant)~~ to less than **two hundred fifty (**250**)** tons per year, ~~which renders~~**each. Therefore,** the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD~~)~~**), are** not applicable **to the source for CO**.

D.2.4 Prevention of Significant Deterioration (PSD) Minor PM~~/~~**,** PM_{10}**, and** $PM_{2.5}$ Emission Limits [326 IAC 2-2]

The PM~~/~~**,** PM_{10}**, and** $PM_{2.5}$ emissions from the following **ethanol emissions units shall not exceed the following** emission ~~units shall be limited as follows~~**limits**:

Main Operating Scenario: DDGS Cooler Baghouse #1 (C-7A) exhausting into the DDGS dryer #1 and DDGS Cooler Baghouse #2 (C-7B) exhausting into DDGS dryer #2.

(a1) **The** PM~~/~~**,** PM_{10}**, and** $PM_{2.5}$ emissions from the **Thermal Oxidizer #1 exhaust (C-6A), which controls the** DDGS dryer #1~~ and DDGS cooler #1~~**,** shall not exceed ~~4.0~~**11.75** pounds per hour.

(b1) **The** PM~~/~~**,** PM_{10}**, and** $PM_{2.5}$ **emissions from the Thermal Oxidizer #2 exhaust (C-6B), which controls the DDGS dryer #2, shall not exceed 11.68 pounds per hour.**

(c1) **The PM,** PM_{10}**, and** $PM_{2.5}$ emissions from the DDGS ~~dryer #2 and DDGS cooler #2 shall not exceed 4.0 pounds per hour~~**Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall exhaust to the DDGS dryer #1**.

~~(a) PM/PM10 emissions from the DDGS dryer #3 and DDGS cooler #3 shall not exceed 4.0 pounds per hour.~~

(d1) **The** PM~~/~~**,** PM_{10}**, and** $PM_{2.5}$ **emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall exhaust to the DDGS dryer #2.**

Alternate Operating Scenario: DDGS Cooler Baghouse #1 (C-7A) and DDGS Cooler Baghouse #2 (C-7B) exhausting to atmosphere.

(a2) **The PM,** PM_{10}**, and** $PM_{2.5}$ emissions from the **Thermal Oxidizer #1 exhaust (C-6A), which controls the DDGS dryer #1, shall not exceed 11.2 pounds per hour.**

(b2) **The PM,** PM_{10}**, and** $PM_{2.5}$ **emissions from the Thermal Oxidizer #2 exhaust (C-6B), which controls the** DDGS dryer #4~~ and DDGS cooler #4~~**2, shall not exceed 11.2 pounds per hour.**

(c2) **The PM,** PM_{10}**, and** $PM_{2.5}$ **emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1,** shall not exceed ~~4.0~~**0.56 pounds per hour.**

(d2) **The PM, PM_{10}, and $PM_{2.5}$ emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall not exceed 0.48** pounds per hour.

Compliance with ~~these~~**the above** PM~~/~~, PM_{10}**, and $PM_{2.5}$** emission limits **and the PM, PM_{10}, and $PM_{2.5}$ emission limits in Conditions D.1.1, D.3.2, and D.6.1** in conjunction with the ~~PM/PM10 emission limits from the other units in this NSR/Part 70 Permit No. 129-24836-00051, and the PM/PM10 emission limits in the Consolidated Grain & Barge Co. Part 70 Permit No. 129-24928-00014 shall limit the PM/PM10~~**unrestricted PTE from this source, shall limit the PM, PM_{10}, and $PM_{2.5}$** emissions from the entire source ~~(Aventine's ethanol production plant and Consolidated Grain & Barge Co. grain merchandising plant) to~~ **to** less than **two hundred fifty (**250**)** tons per year, ~~which renders~~**each. Therefore,** the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD~~)~~**), are** not applicable **to the source for PM, PM_{10}, or $PM_{2.5}$**.

D.2.5 Prevention of Significant Deterioration (PSD) Minor SO_2 Limits [326 IAC 2-2]

(a) The sulfur dioxide (SO_2) emissions from the ~~four (4~~**two (2**) DDGS dryers #1 ~~through~~ #4~~and~~ **#2** shall not exceed 0.053 pound per ton of DDGS dried~~, and the~~**.**

(b) **The** total DDGS throughput to the ~~four~~**two** DDGS dryers shall not exceed ~~726,930~~**391,148** tons per twelve consecutive month period, with compliance determined at the end of each month.

Compliance with ~~this~~**the above** SO_2 ~~limit~~ **emission limits** in conjunction with the ~~SO_2 emission limits from the other units in this NSR/Part 70 Permit No. 129-24836-00051, and the natural gas usage limit in the Consolidated Grain & Barge Part 70 Permit No. 129-24928-00014~~**unrestricted PTE from this source,** shall limit the SO_2 emissions from the entire source ~~(Aventine's ethanol production plant and Consolidated Grain & Barge Co. grain merchandising plant) to~~ **to** less than **two hundred fifty (**250**)** tons per year, ~~which renders~~**each. Therefore,** the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD~~)~~**), are** not applicable **to the source for SO_2**.

D.2.6 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the following processes shall not exceed the pound per hour limits as follows:

Process/Facility		**Process Weight Rate** (tons/hr)	**Particulate Emissions Limit** (lbs/hr)
EP-20	DDGS Dryer #1	~~26~~**22.3**	~~36.38~~**32.85**
EP-21	DDGS Dryer #2	~~26~~**22.3**	~~36.38~~**32.85**
~~DDGS Dryer #3~~		~~26~~	~~36.38~~
~~DDGS Dryer #4~~		~~26~~	~~36.38~~
EP-22	DDGS Cooler #1	~~26~~**22.3**	~~36.38~~**32.85**
EP-23	DDGS Cooler #~~1~~**2**	~~26~~**22.3**	~~36.38~~**32.85**
~~DDGS Cooler #1~~		~~26~~	~~36.38~~
~~DDGS Cooler #1~~		~~26~~	~~36.38~~

The pounds per hour limitations for the emissions units in the above table shall be calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ \mathbf{P}^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

D.2.7 HAP Minor Limits [40 CFR 63]

The HAP emissions from the following ethanol emissions units shall not exceed the following emission limits:

Main Operating Scenario: DDGS Cooler Baghouse #1 (C-7A) exhausting into the DDGS dryer #1 and DDGS Cooler Baghouse #2 (C-7B) exhausting into DDGS dryer #2.

(a1) The single HAP emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.24 pounds per hour.

(b1) The single HAP emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.33 pounds per hour.

(c1) The total HAP emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.46 pounds per hour.

(d1) The total HAP emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.56 pounds per hour.

(e1) The HAP emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall exhaust to the DDGS dryer #1.

(f1) The HAP emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall exhaust to the DDGS dryer #2.

Alternate Operating Scenario: DDGS Cooler Baghouse #1 (C-7A) and DDGS Cooler Baghouse #2 (C-7B) exhausting to atmosphere.

(a2) The single HAP emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.18 pounds per hour.

(b2) The single HAP emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.20 pounds per hour.

(c2) The single HAP emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall not exceed 0.07 pounds per hour.

(d2) The single HAP emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall not exceed 0.13 pounds per hour.

(e2) The total HAP emissions from the Thermal Oxidizer #1 (C-6A), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.35 pounds per hour.

(f2) The total HAP emissions from the Thermal Oxidizer #2 (C-6B), which controls the slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #2, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation, shall not exceed 0.39 pounds per hour.

(g2) The total HAP emissions from the DDGS Cooler Baghouse #1 (C-7A), which controls the DDGS Cooler #1, shall not exceed 0.11 pounds per hour.

(h2) The total HAP emissions from the DDGS Cooler Baghouse #2 (C-7B), which controls the DDGS Cooler #2, shall not exceed 0.18 pounds per hour.

Compliance with the above HAP emission limits and the HAP emission limits in Condition D.3.3 in conjunction with the unrestricted PTE from this source, shall limit the HAP emissions from the entire source to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year for total HAPs. Therefore, the requirements of 326 IAC 2-4.1 (Major Source of Hazardous Air Pollutants) are not applicable to the ethanol emissions units described above, and the entire source is rendered an area source of HAP emissions under 40 CFR 63.

~~D.2.7~~**D.2.8** VOC Emissions [326 IAC 8-5-6]

Pursuant to 326 IAC 8-5-6(c), the ~~Permitee~~**Permittee** shall control the VOC emissions from the ~~DDGS Dryers #1 through #4 and Distillation and Dehydration~~**slurry mix tank and yeast tank in the milled grain cooking operation, the DDGS dryer #1, a portion of the CO_2 Scrubber (C-5A) exhaust, and the beer column, side stripper, and rectifier column in the distillation and evaporation operation** using **a** thermal oxidation system with an overall control efficiency of not less than ninety-eight percent (98%), or the VOC outlet concentration shall not exceed ten (10) parts per million (ppm).

D.2.~~8~~**9** Preventive Maintenance Plan [326 IAC 2-7-5(~~13~~**12**)]

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for these facilities and any control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

D.2.~~9~~**10** VOC **and HAP** Control

In order to comply with Condition D.2.1, ~~all~~**both** Thermal Oxidizers (C-6A~~,~~ **and** C-6B~~, C-6C and C-6D~~**)** used for VOC control, shall be in operation at all times when an emission unit that the Thermal Oxidizers control is in operation.

D.2.11 Particulate Control

(a) In order to comply with Conditions D.2.4 through D.2.6, each of the following emission units shall be controlled by the associated baghouses at all times the following units are operating:

Process ID	Process Description	Control ID
DDGS Cooler #1	DDGS Cooler	Baghouse C-7A
DDGS Cooler #2	DDGS Cooler	Baghouse C-7B

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

~~D.2.10~~**D.2.12** Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 8-5-6]

~~Within 60 days after achieving the maximum production rate, but no later than 180 days after initial startup of the milled grain cooking operation, identified as process P-4; distillation and dehydration operations, identified as process P-6; DDGS dryers and DDGS coolers, the Permittee shall perform VOC, and CO, including capture and destruction efficiency testing for both pollutants on the four (4) Thermal Oxidizers (C-6A and C-6B or C-6C and C-6D) in order to verify compliance with D.2.1, D.2.3 and D.2.7. PM/PM10, NOx, CO and SO2 testing shall also be performed for the DDGS Dryers and the Thermal Oxidizers to determine compliance with Conditions D.2.2, D.2.3, D.2.4 and D.2.5 utilizing methods as approved by the Commissioner.~~

(a) In order to verify compliance with Conditions D.2.2 and D.2.3, the Permittee shall perform NOx and CO testing for the DDGS Dryers and the Thermal Oxidizers utilizing methods as approved by the Commissioner.

(b) In order to verify compliance with Condition D.2.5, the Permittee shall perform SO_2 testing for the DDGS Dryers to determine compliance with Condition D.2.5 utilizing methods as approved by the Commissioner.

Main Operating Scenario: DDGS Cooler Baghouse #1 (C-7A) exhausting into the DDGS dryer #1 and DDGS Cooler Baghouse #2 (C-7B) exhausting into DDGS dryer #2.

(c1) In order to verify compliance with Conditions D.2.1(a1) through (d1) and D.2.8, the Permittee shall perform VOC testing, including capture and destruction efficiency testing on the two (2) Thermal Oxidizers (C-6A and C-6B) utilizing methods as approved by the Commissioner.

(d1) In order to verify compliance with Conditions D.2.4(a1) through (d1) and D.2. 6, the Permittee shall perform PM~~/~~, PM_{10}, and $PM_{2.5}$ testing for the two (2) Thermal Oxidizers (C-6A and C-6B) utilizing methods as approved by the Commissioner. PM_{10} and $PM_{2.5}$ includes filterable and condensable PM.

(e1) In order to verify compliance with Condition D.2.7(a1) through (f1), the Permittee shall perform HAP testing, including capture and destruction efficiency testing on the two (2) Thermal Oxidizers (C-6A and C-6B) utilizing methods as approved by the Commissioner.

Alternate Operating Scenario: DDGS Cooler Baghouse #1 (C-7A) and DDGS Cooler Baghouse #2 (C-7B) exhausting to atmosphere.

(c2) In order to verify compliance with Conditions D.2.1(a2) through (d2) and D.2.8, the Permittee shall perform VOC testing, including capture and destruction efficiency testing on the two (2) Thermal Oxidizers (C-6A and C-6B) and the two (2) the DDGS Cooler Baghouses (C-7A and C-7B) utilizing methods as approved by the Commissioner.

(d2) In order to verify compliance with Conditions D.2.4(a2) through (d2) and D.2.6, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing for the two (2) Thermal Oxidizers (C-6A and C-6B) and the two (2) the DDGS Cooler Baghouses (C-7A and C-7B) utilizing methods as approved by the Commissioner. PM_{10} and $PM_{2.5}$ includes filterable and condensable PM.

(e2) In order to verify compliance with Condition D.2.7(a2) through (f2), the Permittee shall perform HAP testing, including capture and destruction efficiency testing on the two (2) Thermal Oxidizers (C-6A and C-6B) and the two (2) the DDGS Cooler Baghouses (C-7A and C-7B) utilizing methods as approved by the Commissioner.

~~These tests~~ **Testing** shall be repeated at least once every five (5) years from the date of ~~this~~**the most recent** valid compliance demonstration. ~~PM_{10} includes filterable and condensable PM_{10}.~~ Testing shall be conducted in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures).** Section C~~ –~~ Performance Testing~~.~~ **contains the Permittee's obligations with regard to the testing required by this condition.**

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

D.2.~~11~~**13** Visible Emissions Notations

(a) Visible emission notations of the Thermal Oxidizers stacks ~~exhaust~~**and Baghouses stacks exhausts** shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take **a** reasonable response ~~steps in accordance with~~**.** Section C **–** Response to Excursions ~~or~~**and** Exceedances~~.~~ **contains the Permittee's obligation with regard to the reasonable response steps required by this condition.** Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~ shall be considered a deviation from this permit.

D.2.~~12~~**14** Thermal Oxidizers Parametric Monitoring [326 IAC 8-5-6]

~~To demonstrate compliance with the PSD minor limits in Condition D.2.1, D.2.3 and the requirements of 326 IAC 8-5-6 in Condition D.2.7;~~

(a) **A continuous monitoring system shall be calibrated, maintained, and operated on the two (2) Thermal Oxidizers (C-6A and C-6B) for measuring the duct pressure or fan amperage. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as 3-hour average. From the date of startup until the stack test results are available, the Permittee shall maintain the 3-hour average duct pressure or fan amperage within the normal range.**

(b) ~~The~~ Permittee shall determine the appropriate **3-hour average** duct pressure or fan amperage from the ~~most recent~~**latest** valid stack test ~~as approved by IDEM~~**that demonstrates compliance with the limits in Conditions D.2.1, D.2.3, and D.2.8**.

(b**c**) ~~The duct pressure or fan amperage shall be observed at least once per day when any of the Thermal Oxidizers~~**thermal oxidizer** ~~is in operation.~~ **~~Pursuant to 326 IAC 8-5-6(e)(1)(C),~~** ~~On~~ and after the date the ~~approved~~ stack test results are available, the **3-hour average** duct pressure or fan amperage shall be maintained within the **3-hour average** normal range as established in ~~most recent~~**the latest** compliant stack test.

(d) When, for any one reading, the 3-hour average duct pressure or fan amperage is outside the above mentioned 3-hour average ranges, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.~~13~~**15** Thermal Oxidizers Temperature [326 IAC 8-5-6]

~~In order to comply with the PSD minor limits in Condition D.2.1, D.2.3 and the requirements of 326 IAC 8-5-6 the Permitee shall meet the following:~~

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the ~~four (4~~**two (2**) Thermal Oxidizers (C-6A and C-6B ~~or C-6C and C-6~~) for measuring operating temperature. For the purpose of this condition, continuous means no less **often** than once per ~~minute~~**fifteen (15) minutes**. The output of this system shall be recorded as a 3-hour average. From the date of ~~issuance of this permit~~ **startup** until the ~~approved~~ stack test results are available, the Permittee shall operate the ~~Thermal Oxidizers~~**thermal oxidizers** at or above the 3-hour average temperature of 1,600°F.

(b) The Permittee shall determine the 3-hour average temperature from the ~~most recent~~ **latest** valid stack test that demonstrates compliance with the **PSD minor** limits in Conditions D.2.1~~,~~ **and** D.2.3 and ~~D.2.7 as approved by IDEM~~ **the requirements of 326 IAC 8-5-6 in Condition D.2.8**.

(c) On and after the date the ~~approved~~ stack test results are available, the Permittee shall operate the ~~Thermal Oxidizers~~**thermal oxidizers** at or above the 3-hour average temperature as observed during the **latest** compliant stack test.

(d) If the 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.16 Baghouses Parametric Monitoring

The Permittee shall record the pressure drop across cooler baghouses C-7A and C-7B controlling the DDGS Coolers #1 and #2, and at least once per day when the respective emission units are in operation. When, for any one reading, the pressure drop across a baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for each of these units is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.2.17 Broken or Failed Bag Detection

For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, or leaks, or dust traces.

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

~~D.2.14~~**D.2.18** Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.2.2**(b)**, the Permittee shall maintain a monthly record of the natural gas fuel usage from the ~~four (4)~~ **two (2)** DDGS dryers and from the ~~four (4)~~ **two (2)** Thermal Oxidizers.

(b) To document **the** compliance **status** with Condition D.2.5**(b)**, the Permittee shall maintain a monthly record of the DDGS throughput to the ~~four (4)~~ **two (2)** DDGS dryers.

(c) To document **the** compliance **status** with Condition ~~D.2.11~~**D.2.12**, the Permittee shall maintain a daily record of visible emission notations of the stacks exhaust from the Thermal Oxidizers controlling the ~~four (4)~~ **two (2)** DDGS dryers and **from the Baghouses controlling the** ~~four (4)~~ **two (2)** DDGS coolers. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(d) To document **the** compliance **status** with Condition ~~D.2.12~~**D.2.14**, the Permittee shall maintain ~~once per day~~ **continuous Thermal Oxidizers duct pressure or fan amperage** records **(on a three-hour average basis) and the 3-hour average used to document compliance during the most recent compliant stack test** ~~of the Thermal Oxidizers duct pressure or fan amperage. The Permittee shall include in its daily record when duct pressure or fan amperage is not taken and the reason for the lack of duct pressure or fan amperage notation, (e.g. the process being controlled by the Thermal Oxidizers did not operate that day, etc.).~~

(e) To document **the** compliance **status** with Condition ~~D.2.13~~**D.2.15**, the Permittee shall maintain continuous temperature records (on a three-hour average basis) of the Thermal Oxidizers and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(f) To document the compliance status with Condition D.2.16, the Permittee shall maintain a daily record of the pressure drop across each of the baghouses controlling the DDGS coolers. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day, etc.).

(~~f~~**g**) ~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~ **Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping requirements of this permit.**

D.2.19 Reporting Requirements

A monthly summary of the information to document **the** compliance **status** with Conditions D.2.2 and D.2.5 shall be submitted quarterly ~~to the addresses 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~~ **not later than** thirty (30) days ~~after~~ **following** the end of ~~the~~ **each calendar** quarter ~~being reported~~. The report submitted by the Permittee does require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(~~34~~**35**). **Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting requirements of this permit.**

Change No. 9 IDEM, OAQ has made the following changes to Section D.3:

- IDEM, OAQ updated VOC, PM and PM_{10} emission limits.
- IDEM, OAQ added $PM_{2.5}$ emission limits since the source elected to take limits to avoid being a major source under 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).
- IDEM, OAQ added HAP emission limits since the source elected to be an area source under 40 CFR 63.
- IDEM, OAQ removed "and Particulate" from the VOC Control requirement condition.
- IDEM, OAQ updated testing requirements to include testing for HAP and $PM_{2.5}$.
- IDEM, OAQ updated the Parametric Monitoring requirements for the scrubber.
- IDEM, OAQ updated record keeping requirements.

SECTION D.3 ~~FACILITY~~ **EMISSION UNIT** OPERATION CONDITIONS

~~Facility~~ **Emission Unit** Descriptions [326 IAC 2-7-5(~~15~~**14**)]:

(d) Fermentation operation, identified as process P-5**, installed in 2008**, with a maximum throughput of ~~24,700~~**13,302** gallons per hour, controlled by ~~two (2~~**one (1**) CO_2 ~~scrubbers~~**scrubber**, C-5A ~~and C-5B.~~**, exhausting to stack S-5A.** The exhaust gas stream from the ~~scrubbers~~**scrubber** may be sent to an offsite company for further processing of the CO_2 gas stream or vented directly to the atmosphere. The source has the option to use ~~urea as well~~**a supplemental additive, such** as sodium bisulfite**,** in ~~either of~~ the CO_2 ~~scrubbers.~~**scrubber.** This operation includes the following:

(1) ~~Fourteen (14~~**Seven (7**) fermenters, **installed in 2008,** with a combined processing rate of ~~24,700 gallon~~**13,302 gallons** per hour.

(2) ~~Two (2~~ **One (1**) beer ~~wells, #1 and #2~~**well, #1, installed in 2008**, with a ~~combined~~ processing rate of ~~24,700~~**13,302** gallons per hour, controlled by the ~~two (2)~~ CO_2 ~~scrubbers~~**scrubber**, C-5A ~~and C-5B~~.

~~(3) Two (2) Slurry Tanks, #1 and #2.~~

~~(4) Four (4) Liquefaction Tanks, #1 through #4.~~

~~(5) Two (2) Yeast Tanks, #1 and #2~~**, exhausting to stack S-5A**.

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

~~Operation Conditions~~

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

D.3.1 Prevention of Significant Deterioration (PSD) Minor VOC ~~and PM/PM10~~ Limits [326 IAC 2-2]

(~~a~~) ~~The~~ The VOC emissions from ~~each~~ Fermentation, Scrubber C-5A**,** ~~and Scrubber C-6A~~ shall not exceed 8.23 pounds per hour.

~~(b) The PM/PM10 emissions from each Fermentation, Scrubber C-5A and Scrubber C-6A shall not exceed 0.07 pound per hour.~~

Compliance with the **above** VOC **limit and the VOC emission limits in Conditions D.2.1 and D.4.1 in conjunction with the unrestricted PTE from this source,** ~~and PM/PM10 limits in combination with the VOC and PM/PM10 emission limits from the other units in this NSR/Part 70 Permit No. 129-24836-00051~~ shall limit the VOC ~~and PM/PM10~~ emissions from the entire ~~ethanol production plant~~ **source** to less than **two hundred fifty (**250**)** tons per year**.** ~~, which renders~~ **Therefore,** the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD) **are** not applicable **to the source for VOC**.

D.3.2 Prevention of Significant Deterioration (PSD) Minor PM, PM_{10}, and $PM_{2.5}$ Limits [326 IAC 2-2]

(a) The PM emissions from Fermentation, Scrubber C-5A, shall not exceed 0.24 pound per hour.

(b) The PM_{10} emissions from Fermentation, Scrubber C-5A, shall not exceed 0.24 pound per hour.

(c) The $PM_{2.5}$ emissions from Fermentation, Scrubber C-5A, shall not exceed 0.24 pound per hour.

Compliance with the above PM, PM_{10}, and $PM_{2.5}$ emission limits and the PM, PM_{10}, and $PM_{2.5}$ emission limits in Conditions D.1.1, D.2.4, and D.6.1 in conjunction with the unrestricted PTE from this source, shall limit the PM, PM_{10}, and $PM_{2.5}$ emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for PM, PM_{10}, or $PM_{2.5}$.

D.3.3 HAP Minor Limits [40 CFR 63]

(a) The single HAP emissions from the CO_2 Scrubber (C-5A) exhaust shall not exceed 1.67 pounds per hour.

(b) The total HAP emissions from the CO_2 Scrubber (C-5A) exhaust shall not exceed 1.75 pounds per hour.

Compliance with the above HAP emission limits and the HAP emission limits in Conditions D.2.7 in conjunction with the unrestricted PTE from this source, shall limit the HAP emissions from the entire source to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year for total HAPs. Therefore, the requirements of 326 IAC 2-4.1 (Major Source of Hazardous Air Pollutants) are not applicable to the fermentation emissions units described above, and the entire source is rendered an area source of HAP emissions under 40 CFR 63.

~~D.3.2~~ **D.3.4** VOC Emissions [326 IAC 8-5-6]

Pursuant to 326 IAC 8-5-6(c), the Permitee shall control the VOC emissions from the Fermentation process using a wet scrubber system with an overall control efficiency of not less than ninety-eight percent (98%), or the VOC outlet concentration shall not exceed twenty (20) part per million (ppm).

~~D.3.3~~ **D.3.5** Preventive Maintenance Plan [326 IAC 2-7-5(~~13~~**12**)]

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for ~~these facilities and any control devices~~ **this facility and its control device**. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirement

~~D.3.4~~ **D.3.6** Volatile Organic Compounds (VOC)~~, and Particulate~~ Emissions Control

In order to comply with Condition D.3.1, and D.3.2, the Scrubber~~s~~, C-5A ~~and C-5B~~, for VOC control shall be in operation at all times when the Fermentation process is in operation.

~~D.3.5~~ **D.3.7** Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 8-5-6]

(a) ~~Within 60 days after achieving the maximum production rate for the Fermentation process, but no later than 180 days after startup~~ **In order to determine compliance with Condition D.3.1**, the Permittee shall perform VOC ~~and PM/PM10~~ testing (including the capture and absorption efficiency) on Scrubber~~s~~ C-5A ~~and C-5B~~ for controlling the fermentation process ~~in order to determine compliance with Conditions D.3.1 and D.3.2~~ utilizing methods as approved by the Commissioner.

(b) In order to determine compliance with Condition D.3.2, the Permittee shall perform PM, PM_{10} and $PM_{2.5}$ testing on Scrubber C-5A for controlling the fermentation process utilizing methods as approved by the Commissioner. PM_{10} and $PM_{2.5}$ includes filterable and condensible PM.

(c) In order to determine compliance with Condition D.3.3, no later than 180 days after issuance of Significant Source Modification No. 129-31693-00051, the Permittee shall perform HAP testing (including the capture and absorption efficiency and sodium bisulfite addition rate) on Scrubber C-5A for controlling the fermentation process utilizing methods as approved by the Commissioner.

~~These tests~~ **Testing** shall be repeated at least once every five (5) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~PM-10 includes filterable and condensible PM-10.~~ Testing shall be conducted in accordance with ~~Section C - Performance Testing~~ **the provisions of 326 IAC 3-6 (Source Sampling Procedures)**. **Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.**

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

~~D.3.6~~**D.3.8** Scrubber Parametric Monitoring [326 IAC 8-5-6]

(a) The Permittee shall monitor and record the flow rate of Scrubber C-5A at least once per day when the associated processes are in operation.

(1) The Permittee shall determine the minimum flow rate from the latest valid stack test that demonstrates compliance with the PSD minor limits in Condition D.3.1 and the requirements of 326 IAC 8-5-6 in Condition D.3.2.

(2) On and after the date the stack test results are available, the Permittee shall maintain a flow rate at or above the minimum rate as observed during the latest compliant stack test. If the flow rate falls below the level observed during the latest compliant stack test, the Permittee shall take a reasonable response.

~~(a)~~ **(b) Pursuant to 326 IAC 8-5-6(e)(2)(A), the** ~~The~~ Permittee shall **monitor and** record the pressure drop ~~and scrubbing liquid flow rate of scrubbers~~ **across Scrubber** C-5A ~~and C-5B~~ at least once per day when the ~~Fermentation process is~~ **the associated processes** are in operation ~~to ensure that the flow rate of the scrubbers are greater than the minimum flow rate established during the latest stack test. The scrubbers flow rate must be greater than the minimum flow rate for the scrubbers during normal operation.~~ When for any one reading **the pressure drop across a scrubber** ~~each parametric range or the minimum operating parameter for the scrubbers in below table~~ is outside ~~its~~ **the** normal range, ~~or a range established during the latest stack test,~~ the Permittee shall take **a** reasonable response ~~steps in accordance with Section C- Response to Excursions or Exceedances~~. **The normal range for this unit is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.** ~~A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.~~

~~Scrubber ID~~	~~Pressure Drop Range across the Scrubber (inches)~~	~~Minimum Flow Rate of Scrubbing Liquor (gallons/minute)~~
~~Scrubber, C-5A~~	~~1.0 - 6.0~~	~~100~~
~~Scrubber, C-5B~~	~~1.0 - 6.0~~	~~100~~

(c) The instruments used for determining the pressure drop shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

(d) Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

~~D.3.7~~**D.3.9** Scrubber Detection

In the event that malfunction has been observed:

Failed units and the associated fermentation process shall be shutdown immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions). Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.3.~~8~~**10** Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.3.~~6~~**8**, the Permittee shall maintain once per day records of the scrubbing liquid, pressure drop and scrubbing liquid flow rate from ~~scrubbers~~**scrubber** C-5A ~~and C-5B~~. The Permittee shall include in its daily record when scrubbing liquid, pressure drop and scrubbing liquid flow rate notations are not taken and the reason for the lack of scrubbing liquid, pressure drop and scrubbing liquid flow rate notations (e.g. the process did not operate that day, etc.).

(b) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements~~,~~ **contains the Permittee's obligation with regard to the record keeping requirements** of this permit.

Change No. 10 IDEM, OAQ has made the following changes to Section D.4:

- IDEM, OAQ updated VOC emission limits based on the decreased capacity.
- IDEM, OAQ corrected the rule reference for Condition D.4.3, Preventive Maintenance Plan from 326 IAC 2-8-4(9) (for FESOP) to 326 IAC 2-7-5(12) (for Part 70 permits).
- IDEM, OAQ updated the Parametric Monitoring requirements for the flare.
- IDEM, OAQ clarified the Record Keeping requirements.

SECTION D.4 ~~FACILITY~~ **EMISSION UNIT** OPERATION CONDITIONS

~~Facility~~ **Emission Unit** Descriptions [326 IAC 2-7-5(~~15~~**14**)]:

(h) Denatured ethanol loadout, identified as process P-9**, installed in 2008**, **with a total maximum throughput of 122.1 million gallons per year (13,943 gallons per hour),** consisting of **the following emission units:**

(1) **One** ~~one~~ (1) truck loadout**, identified as EP-24, installed in 2008, and**

(2) **One**~~, one~~ (1) rail loadout**, identified as EP-25, installed in 2008**~~ and one (1) barge loadout, with a total maximum throughput of 227.4 million gallons per year~~.

These ~~three (3~~**two (2**) loading racks are controlled by enclosed Flare system C-9**, installed in 2008**. The flare is fueled by natural gas and has a pilot gas flare heat input capacity of 0.092 MMBtu/hr.

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

~~Operation Conditions~~

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

D.4.1 Prevention of Significant Deterioration (PSD) Minor VOC Limits [326 IAC 2-2]

The VOC emissions from the loading racks shall be limited as follows:

(a) The VOC emissions from the enclosed Flare, C-9, which controls one (1) truck ethanol loadout~~,~~ **and** one (1) rail ethanol loadout~~, and one (1) barge ethanol loadout~~ systems shall not exceed 0.00015 pound per gallon of ethanol loaded out.

(b) The trucks~~, rail~~ and ~~barge~~**rail** loading racks shall be limited to a combined throughput of ~~227,368,000~~**122,141,250** gallons of denatured ethanol per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with ~~this VOC limit in combination with the~~ **the above** VOC emission limits **and the VOC emission limits in Conditions D.2.1 and D.3.1 in conjunction with the unrestricted PTE** from ~~the other units in this NSR/Part 70 Permit No. 129-24836-00051~~**this source,** shall limit the VOC emissions from the entire ~~ethanol production plant~~**source** to less than **two hundred fifty (**250**)** tons per year, ~~which renders~~**each. Therefore,** the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD~~)~~**), are** not applicable **to the source for VOC**.

D.4.2 Prevention of Significant Deterioration (PSD) Minor CO Limits [326 IAC 2-2]

The CO emissions from the enclosed Flare, C-9, which controls one (1) truck ethanol loadout and one (1) rail ethanol loadout systems shall not exceed 0.0835 pound per kilogallon of ethanol loaded out.

Compliance with the above CO emission limit and the CO emission limits in Conditions D.2.3 and D.7.1 in conjunction with the unrestricted PTE from this source, shall limit the CO emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for CO.

D.4.3 Prevention of Significant Deterioration (PSD) Minor NO_X Limits [326 IAC 2-2]

The NO_X emissions from the enclosed Flare, C-9, which controls one (1) truck ethanol loadout and one (1) rail ethanol loadout systems shall not exceed 0.0334 pound per kilogallon of ethanol loaded out.

Compliance with the above NO_X emission limit and the NO_X emission limits in Conditions D.2.2 and D.7.1 in conjunction with the unrestricted PTE from this source, shall limit the NO_X emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for NO_X.

D.4.4 Prevention of Significant Deterioration (PSD) Minor PM, PM_{10}, and $PM_{2.5}$ Limits [326 IAC 2-2]

The PM, PM_{10}, and $PM_{2.5}$ emissions from the enclosed Flare, C-9, which controls one (1) truck ethanol loadout and one (1) rail ethanol loadout systems shall not exceed 0.000299 pound per kilogallon of ethanol loaded out.

Compliance with the above PM, PM_{10}, and $PM_{2.5}$ emission limit and the PM, PM_{10}, and $PM_{2.5}$ emission limits in Conditions D.1.1 D.2.4, D.3.2, and D.6.1 in conjunction with the unrestricted PTE from this source, shall limit the PM, PM_{10}, and $PM_{2.5}$ emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for PM, PM_{10}, and $PM_{2.5}$.

~~D.4.2~~ **D.4.5** VOC Emissions [326 IAC 8-5-6]

Pursuant to 326 IAC 8-5-6(c), the ~~Permitee~~**Permittee** shall control the VOC emissions from the truck~~,~~ **and** rail ~~and barge~~ loading racks using enclosed flare C-9 with an overall control efficiency of not less than ninety-eight percent (98%).

~~D.4.3~~ **D.4.6** Preventive Maintenance Plan ~~[326 IAC 2-8-4(9)]~~ **[326 IAC 2-7-5(12)]**

A Preventive Maintenance Plan~~, in accordance with~~ **is required for these facilities and their control device.** Section B - Preventive Maintenance Plan~~, of~~ **contains the Permittee's obligation with regard to the preventive maintenance plan required by** this ~~permit, is required for this facility and its control device.~~**condition.**

Compliance Determination Requirement

~~D.4.4~~ **D.4.7** Volatile Organic Compounds (VOC)

In order to comply with Condition D.4.1(a), the enclosed Flare, C-9, shall be in operation at all times when denatured ethanol or undenatured ethanol is being loaded out.

~~D.4.5~~ **D.4.8** Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 8-5-6]

In order to determine compliance with Conditions D.4.1 and D.4.5~~Within 60 days after achieving the maximum production rate for the ethanol loadout operation, but no later than 180 days after startup~~, the Permittee shall perform VOC testing (including capture and destruction efficiency), on the enclosed Flare C-9 controlling the ethanol loading racks ~~in order to determine compliance with Conditions D.4.1 and D.4.2~~ utilizing methods as approved by the Commissioner.

~~These tests~~**Testing** shall be repeated at least once every five (5) years from the date of ~~this~~**the most recent** valid compliance demonstration. **Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.**

~~D.4.6~~ **D.4.9** Flare Pilot Flame

The flare must be operated with a flame present at all times the ethanol loading racks are in operation and are loading ethanol to trucks~~,~~ **or** railcars ~~or barge~~.

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

D.4.10 Flare Pilot Flame [326 IAC 8-5-6]

In order to comply with Conditions D.4.1, D.4.2, D.4.3, D.4.4, and D.4.5, the Permittee shall monitor the presence of a flare pilot flame for enclosed flare C-9 using a thermocouple or any other equivalent device to detect the presence of a flame when the loading racks (EP-24 and EP-25) are in operation.

~~D.4.7 Flare Parametric Monitoring [326 IAC 8-5-6]~~

~~To demonstrate compliance with the PSD minor limits in Condition D.4.1(a) and the requirements of 326 IAC 8-5-6 in Condition D.4.2:~~

~~(a) ThePermittee shall continuously monitor the presence of the Flare pilot flame and the combustion chamber temperature using a thermocouple or any other equivalent device when the ethanol loading rack is in operation or are loading denatured ethanol to trucks, railcars or barges. For the purpose of this condition, continuous means no less than once per minute. The temperature of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the flare at or above the 3-hour average combustion chamber temperature of 1,600^{0}F.~~

~~(b) The Permittee shall determine the 3--hour average temperature from the most recent valid stack test that demonstrates compliance with the limit in Condition D.4.1 as approved by IDEM.~~

~~(c) On and after the date the approved stack test results are available, the Permittee shall operate the flare at or above the 3-hour average temperature as observed during the compliant stack test.~~

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

~~D.4.8~~ **D.4.11** Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.4.1(b), the ~~Permitee~~**Permittee** shall maintain a monthly record of the denatured ethanol loaded out into the loading racks.

~~(b) To document compliance with Condition D.4.6, the Permitee shall maintain continuous presence of the Flare pilot flame and the flare combustion chamber temperature records (on a three-hour average basis) and the three-hour average flare combustion chamber temperature used to demonstrate compliance during the most recent compliant stack test.~~

(b) **To document the compliance status with Condition D.4.10, the Permittee shall maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when loading racks (EP-24 and EP-25) are in operation. The Permittee shall include in its records when the presence of a pilot flame is not detected and the reason for the lack of detection (e.g. the process did not operate that day).**

(c) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements~~,~~ **contains the Permittee's obligation with regard to the record keeping requirements** of this permit.

~~D.4.9~~ **D.4.12** Reporting Requirements

A monthly summary of the information to document **the** compliance **status** with Condition D.4.1(b), shall be submitted quarterly ~~to the addresses 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~~**not later than** thirty (30) days ~~after~~**following** the end of the **each calendar** quarter ~~being reported~~. The report submitted by the Permittee does require ~~the~~**a** certification ~~by the~~**that meets the requirements of 326 IAC 2-7-6(1) by a** "responsible official" as defined by 326 ~~IAC 2-7-1(34).~~ **IAC 2-7-1(35). Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting requirements of this permit.**

Change No. 11 IDEM, OAQ has made the following changes to Section D.5:

- IDEM, OAQ clarified that the requirements of 326 IAC 8-4-3 apply to the denaturant storage tank Tk006.
- IDEM, OAQ removed Condition D.5.2, Storage Tanks, because the requirements for 40 CFR 60, Subpart Kb, are included in Section E of the permit.
- IDEM, OAQ corrected the rule reference for Condition D.5.3 (now D.5.2), Preventive Maintenance Plan from 326 IAC 2-8-4(9) (for FESOP) to 326 IAC 2-7-5(12) (for Part 70 permits).
- Updated the record keeping requirements to clarify that these records will demonstrate "the compliance status", and will not necessarily demonstrate "compliance".

SECTION D.5 ~~FACILITY~~ **EMISSION UNIT** OPERATION CONDITIONS

~~Facility~~ **Emission Unit** Descriptions [326 IAC 2-7-5(~~15~~**14**)]:

(i) Product Storage, identified as process P-10**, installed in 2008**, consisting of the following emission units:

(1) ~~Five (5~~ **Three (3**) 200 proof above ground storage tanks, identified as Tk001 through ~~Tk005~~**Tk003, installed in 2008**, each ~~has~~**with** a capacity of 172,000 gallons.

(2) One (1) denaturant storage tank, identified as ~~Tk006,~~ **Tk004, installed in 2008,** with a capacity of 105,000 gallons.

(3) ~~Four (4~~**Two (2**) denatured ethanol storage tanks, identified as ~~Tk007 through Tk010~~**Tk005 and Tk006, installed in 2008**, each ~~has~~**with** a capacity of 1,406,000 gallons.

(4) One (1) corrosion inhibitor storage tank, identified as ~~Tk011~~**Tk007, installed in 2008**, with a capacity of 6,392 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.5.1 Volatile Organic Compounds (VOC) [326 IAC 8-4-3]

(a) Pursuant to 326 IAC 8-4-3(b)(1)(B), **denaturant** storage tank Tk006 shall be maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials.

(~~b~~**1**) Pursuant to 326 IAC 8-4-3(b)(1)(C), all openings, except stub drains, are equipped with covers, lids, or seals such that:

(~~1~~**(2**) The cover, lid or seal in the closed potion at all times except when in actual use;

(~~2~~**3**) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(~~3~~**(4**) 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.

(~~c~~**b**) Pursuant to 326 IAC 8-4-3(d) (Petroleum Liquid Storage Facilities), the Permittee shall maintain the following records for a period of two (2) years for **denaturant storage** tank Tk006:

(1) The types of volatile petroleum liquid stored;

(2) The maximum true vapor pressure of the liquids as stored; and

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

The above records shall be made available to the IDEM, OAQ upon written request.

~~D.5.2 Storage Tanks [326 IAC 12] [40 CFR 60, Subpart Kb]~~

~~Pursuant to 40 CFR 60, Subpart Kb, the Permittee shall comply with the requirement of -Section E.2 for Tanks Tk001 through Tk010.~~

~~D.5.3~~**D.5.2** Preventive Maintenance Plan [326 IAC 2-~~8-4(9~~**7-5(12**)]

A Preventive Maintenance Plan~~, in accordance with~~ **is required for these facilities.** Section B - Preventive Maintenance Plan~~, of~~ **contains the Permittee's obligation with regard to the preventive maintenance plan required by** this ~~permit, is required for these facilities.~~**condition.**

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

~~D.5.4~~**D.5.3** Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.5.1, the Permittee shall maintain the following records for **denaturant storage** tank Tk006:

(1) The types of volatile petroleum liquid stored;

(2) The maximum true vapor pressure of the liquids as stored; and

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

(b) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements~~,~~ **contains the Permittee's obligation with regard to the record keeping requirements** of this permit.

Change No. 12 IDEM, OAQ has removed Section D.6 in its entirety. The generators and fire pumps that were originally permitted were never constructed, and the new fire pump does not require any limitation since the PSD Minor limits for the entire source were calculated using the unrestricted PTE for the new fire pump.

~~SECTION D.6 FACILITY OPERATION CONDITIONS~~

~~Facility Descriptions [326 IAC 2-7-5(1514)]:~~

~~(k) Two (2) diesel-fired emergency generators, each has a capacity of 3,740 HP. These generators are identified as process P-13.~~

~~Insignificant:~~

~~(a) Two (2) diesel-fired emergency fire pumps, each has a capacity of 290 horsepower (HP). These pumps are identified as process P-12.~~

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

~~Operation Conditions~~

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

~~D.6.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]~~

~~(a) The two (2) 3,740 Brake horsepower (Bhp) emergency generators shall only combust diesel fuel. The input of diesel fuel to these two emergency generators shall not exceed 38,469 gallons per twelve (12) consecutive month period, with compliance at the end of each month.~~

~~Each generator shall also be limited to 99 operating hours per twelve consecutive month period, with compliance determined at the end of each month.~~

~~(b) The two (2) 290 Brake horsepower (Bhp) emergency fire pumps shall only combust diesel fuel. The input of diesel fuel to these two emergency fire pumps shall not exceed 2,984 gallons per twelve (12) consecutive month period, with compliance at the end of each month.~~

~~Each fire pump shall also be limited to 99 operating hours per twelve consecutive month period, with compliance determined at the end of each month.~~

~~(c) The PM/ PM_{10} emissions from the each emergency generator shall not exceed 2.62 pounds per hour.~~

~~(d) The PM/PM10 emissions from the each emergency fire pump shall not exceed 0.64 pounds per hour.~~

~~Compliance with these limits in conjunction with the limits from all criteria pollutants from the other units in this NSR/Part 70 Permit No. 129-24836-00051, shall limit all criteria pollutants from the entire ethanol production plant to less than 250 tons per year, which renders the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.~~

~~D.6.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII] [326 IAC 12]~~

~~Pursuant to 40 CFR 60, Subpart IIII, the Permitee shall comply with the requirements of SECTION E.3 for emergency generators and emergency fire pumps.~~

~~D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]~~

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

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

~~D.6.4 Record Keeping Requirements~~

~~(a) To document compliance with Conditions D.6.1 the Permittee shall maintain a monthly record of the diesel fuel fired to the emergency generators and emergency fire pumps and a record of the number of hours that the emergency generators and emergency fire pumps operate each month.~~

~~The Permitee shall maintain on file vendor guarantee on the emergency generators and emergency fire pumps performance.~~

~~(b) Pursuant to 40 CFR 63.6645(d) of NESHAP, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines), the Permittee shall submit an Initial Notification no later than 120 days after becoming subject to this subpart. The notification shall include the information in §63.9(b)(2)(i) through (v) and a statement that the stationary RICE has no additional notification requirements of §63.6645(d)) and an explanation of the basis of exclusion.~~

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

~~D.6.5 Reporting Requirements~~

~~A monthly summary of the information to document compliance with Condition D.6.1, shall be submitted quarterly to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

Change No. 13 IDEM, OAQ has made the following changes to Section D.7 (now D.6):

- IDEM, OAQ has updated PM and PM_{10} emission limits.
- IDEM, OAQ has added $PM_{2.5}$ emission limits since the source elected to take limits to avoid PSD review.

SECTION ~~D.7~~**D.6** ~~FACILITY~~ **EMISSION UNIT** OPERATION CONDITIONS

~~Facility~~ **Emission Unit** Descriptions [326 IAC 2-7-5(~~15~~**14**)]:

Insignificant Activity:

(b) One (1) cooling tower with ~~two (2) banks, each bank has 15~~ **three (3)** cells, identified as F-1**, installed in 2008**, with a total circulation rate of ~~4,512~~**2,256**,000 gallons of water per hour.

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

~~Operation Conditions~~

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

~~D.7.1~~**D.6.1** Prevention of Significant Deterioration (PSD) Minor ~~PM/PM10~~ **PM, PM_{10}, and $PM_{2.5}$** Emission Limits [326 IAC 2-2]

The PM~~/~~**,** PM_{10}**, and $PM_{2.5}$** emissions from the cooling tower shall not exceed 0.38 pounds per hour, and it shall be designed with a drift rate of 0.0005% and circulation rate of ~~4,512,000 gallons of make up water per hour. Compliance with this limit in combination with the PM/PM10 emission limits from the other units in this NSR/Part 70 Permit No. 129-24836-00051, and the PM/PM10 emission limits in the Consolidated Grain & Barge Part 70 Permit No. 129-24928-00014 shall limit the PM/PM10 emissions from the entire source (Aventine's ethanol production plant and Consolidated Grain & Barge grain merchandising plant) to less than 250 tons per year, which renders the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable~~**2,256,000 gallons of make up water per hour**.

Compliance with the above PM, PM_{10}, and $PM_{2.5}$ emission limits and the PM, PM_{10}, and $PM_{2.5}$ emission limits in Conditions D.1.1, D.2.4, and D.3.2 in conjunction with the unrestricted PTE from this source, shall limit the PM, PM_{10}, and $PM_{2.5}$ emissions from the entire source to less than two hundred fifty (250) tons per year, each. Therefore, the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD), are not applicable to the source for PM, PM_{10}, or $PM_{2.5}$.

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

~~D.7.2~~**D.6.2** Record Keeping Requirements

(a) To document **the** compliance **status** with Condition ~~D.7.1~~**D.6.1**, the Permittee shall maintain on file vendor guarantees and/or certifications for the cooling tower drift rate and circulation rate.

(b) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements~~,~~ **contains the Permittee's obligation with regard to the record keeping requirements** of this permit.

Change No. 14 IDEM, OAQ has made the following changes to Section D.8 (now D.7):

- IDEM, OAQ decreased the natural gas usage limit since there are less boilers than were originally permitted.
- IDEM, OAQ updated the Particulate Emission Limitations for Sources of Indirect Heating under 326 IAC 6-2-4 to reflect a lower total source maximum operating capacity rating.
- Removed Condition D.8.3, Standards of Performance for Boilers, and other references to requirements under 40 CFR 60, Subpart Dc. These requirements are already incorporated into Section E of the permit. Retaining the requirements in two different sections of the permit could lead to confusion and unintended compliance burden.

SECTION ~~D.8~~**D.7** ~~FACILITY~~ **EMISSION UNIT** OPERATION CONDITIONS

~~Facility~~ **Emission Unit** Descriptions [326 IAC 2-7-5(~~15~~**14**)]:

(j) ~~Eight (8~~**Natural gas combustion sources, identified as P-11, consisting of four (4**) natural gas-fired **package** boilers, ~~each has~~**identified as EP-26 through EP-29, installed in 2008, with** a heat input capacity of 92.4 MMBtu/hr~~. These boilers are identified as process P-11~~**, each**.

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

~~Operation Conditions~~

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

~~D.8.1~~**D.7.1** Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

(a) The ~~eight (8~~**four (4**) package boilers shall only combust natural gas. The natural gas throughput to the ~~eight~~**four** package boilers shall be limited to ~~6,475~~**3,237.5** MMCF per twelve consecutive month period, with compliance determined at the end of each month.

(b) The ~~NOx~~**NO_X** emissions from the ~~eight (8~~**four (4**) package boilers shall not exceed 30.0 pounds per million cubic feet of natural gas.

(c) The CO emissions from the ~~eight (8~~**four (4**) package boilers shall not exceed 18 pounds per million cubic feet of natural gas.

Compliance with these NOx and CO limits shall limit the NO_X and CO emissions from the ~~eight (8~~**four (4**) package boilers to less than 100 tons per year, which renders the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.

Compliance with ~~these limits in conjunction with the~~ **the above** NOx and CO emission limits **and the NOx and CO emission limits in Conditions D.2.2 and D.2.3 in conjunction with the unrestricted PTE** from ~~the other units in~~ this ~~NSR/Part 70 129-24836-00051~~**source**, shall limit the NOx and CO emissions from the entire source ~~(Aventine's ethanol production plant, including the package boilers in this section and Consolidated Grain & Barge Co. grain merchandising plant)~~ to less than **two hundred fifty (**250**)** tons per year~~. Compliance with this condition shall render~~**, each. Therefore,** the requirements of 326 IAC 2-2**, Prevention of Significant Deterioration (** PSD**), are** not applicable **to the source for NOx and CO**.

~~D.8.2~~**D.7.2** Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the ~~eight (8~~**four (4**) package boilers shall be limited to 0.~~19~~**23** pound per million British thermal units (lb/MMBtu):

The limit shall be established using the following equation:

$$Pt = 1.09/(~~739.2~~^{9}\mathbf{Q}^{\mathbf{0}.26})$$

Where: Pt = Pounds of particulate matter emitted per million BTU (lb/~~mmBtu~~**MMBtu**) heat input
Q = Total source maximum operating capacity rating in million Btu per hour (~~mmBtu~~**MMBtu**/hr)
Q = ~~739.2~~ **369.6** MMBtu heat input

~~D.8.3 Standards of Performance for Boilers [40 CFR Part 60, Subpart Dc] [326 IAC12]~~

~~(a) Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall comply with the requirements of SECTION E.4 for the boilers.~~

~~D.8.4~~**D.7.3** Preventive Maintenance Plan [326 IAC 2-7-5(~~13~~**12**)]

A Preventive Maintenance Plan~~, in accordance with~~ **is required for these facilities.** Section B - Preventive Maintenance Plan~~, of~~ **contains the Permittee's obligation with regard to the preventive maintenance plan required by** this ~~permit, is required for these facilities.~~**condition.**

Compliance Determination Requirements

~~D.8.5~~**D.7.4** Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

~~Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the package boilers,~~ **In order to determine compliance with Conditions D.7.1, D.7.2,** the Permittee shall conduct performance tests to measure CO and NOx, from two (2) package boilers ~~in order to determine compliance with Conditions D.8.1, D.8.2,~~ utilizing methods as approved by the Commissioner ~~for the following sources:~~

~~The CO and NOx testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.~~**:** Testing of the package boilers shall be conducted such that every five (5) years a set of two (2) of the ~~eight (8~~**four (4**) package boilers is tested. ~~–~~**The source will test the two (2) boilers for which the longest period of time has passed since the last valid compliance test.** ~~Testing shall be conducted in accordance with Section C - Performance Testing.~~

Testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

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

~~D.8.6~~**D.7.5** Record Keeping Requirements

(a) To document **the** compliance **status** with ~~Conditions~~**Condition** ~~D.8.5~~ **D.7.4** ~~and §60.48c(g)(2)~~, the Permittee shall maintain monthly records of the amount of natural gas combusted in the boilers.

(b) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements~~,~~ **contains the Permittee's obligation with regard to the record keeping requirements** of this permit ~~and §60.48c(i)(2)~~.

~~D.8.7~~**D.7.6** Reporting Requirements

A monthly summary of the information to document **the** compliance **status** with Condition ~~D.8.1~~ **D.7.1**, shall be submitted quarterly ~~to the addresses 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~~**not later than** thirty (30) days ~~after~~**following** the end of the **each calendar** quarter ~~being reported~~. The report submitted by the Permittee does require ~~the~~**a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~**a** "responsible official" as defined by 326 IAC 2-7-1(~~34~~**35**). **Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting requirements of this permit.**

Change No. 15 IDEM, OAQ has made the following changes to Section E:

- Changed the Section Heading from "FACILITY OPERATION CONDITIONS" to the title of the applicable Federal Rule.
- Updated rule citation for 326 IAC 2-7-5 to reference (14), descriptive information, rather than (15), terms and conditions.
- Updated descriptions for all equipment that is subject to a federal rule such that the descriptions match those in Section A of the permit.
- Conditions E.X.1 were updated to remove paragraph (b) with the addresses for notifications. These addresses are included in Section C of the permit.
- Conditions E.X.2 were updated to remove the rule text and replace this with a listing of the applicable citations. The full text of each applicable rule is attached to the permit.

- The requirements for 40 CFR 60, Subpart DD, were removed. As explained in the Federal Rule Applicability section of this document, this rule is not applicable because the source does not meet the permanent storage capacity of more than 2.5 million U.S. bushels, and does not meet the definition of a grain storage elevator because the source is a dry corn milling source producing a product not for human consumption. All subsequent parts of the E section will be renumbered as needed.
- The requirements for 40 CFR 60, Subpart IIII, were moved from Section E.3 to Section E.4.
- The requirements for 40 CFR 60, Subpart Dc, were moved from Section E.4 to Section E.2.
- The requirements for 40 CFR 60, Subpart VV, were removed. As explained in the Federal Rule Applicability section of this document, the applicable rule is now 40 CFR 60, Subpart VVa.
- The requirements for 40 CFR 60, Subpart VVa, were added to the permit as Section E.3.
- The requirements for 40 CFR 63, Subpart FFFF, were removed. As explained in the Federal Rule Applicability section of this document, this rule is not applicable because the source has taken limits to make them an area source under 40 CFR 63.
- The requirements for 40 CFR 63, Subpart ZZZZ, were added to the permit as Section E.5.
- The requirements for 40 CFR 63, Subpart CCCCCC, were added to the permit as Section E.6.

~~SECTION E.1 FACILITY OPERATION CONDITIONS~~

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

~~(a) Grain receiving and handling operations, identified as process P-1, with a maximum capacity of 2,330,160 tons of grains per year (83,077,000 bushels of grain per year). The grain when received from various sources is already dried and cleaned. These operations include the following:~~

~~(1) Three (3) grain truck dump pits, EP-01, EP02 and EP-03, with three (3) conveyors and three (3) elevator systems. The particulate emissions from the three dump pits are controlled by three (3) baghouses C-1A, C-1B, and C-1C.~~

~~(2) One (1) rail dump pit, which will share the conveyor system and elevator system with third grain truck dump pit, EP-03. The particulate emissions from the dump pit are controlled by baghouse, C-1C.~~

~~(3) Seven (7) corn storage silos, EP-04 through EP-10, with a total storage capacity of 3,150,000 bushels with seven (7) conveyor systems. PM emissions from each storage silo are controlled by bin vent filters, C-1D through C1-J.~~

~~(4) Four (4) surge bins, EP-11 through EP-14, each is controlled by bin vent filters, C-1K through C-1N.~~

~~(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 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]~~

~~(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart DD.~~

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

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

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

E.1.2 Standard of Performance for Grain Elevators Requirements [40 CFR Part 60, Subpart DD] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart DD, the Permittee shall comply with the provisions of Standard of Performance for Grain Elevators, which are incorporated by reference as 326 IAC 12, as follows:

§ 60.300 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under §60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after August 3, 1978, is subject to the requirements of this part.

§ 60.301 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

(a) *Grain* means corn, wheat, sorghum, rice, rye, oats, barley, and soybeans.

(b) *Grain elevator* means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded.

(c) *Grain terminal elevator* means any grain elevator which has a permanent storage capacity of more than 88,100 m^3 (ca. 2.5 million U.S. bushels), except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.

(d) *Permanent storage capacity* means grain storage capacity which is inside a building, bin, or silo.

(e) *Railcar* means railroad hopper car or boxcar.

(f) *Grain storage elevator* means any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant which has a permanent grain storage capacity of 35,200 m^3 (ca. 1 million bushels).

(g) *Process emission* means the particulate matter which is collected by a capture system.

(h) *Fugitive emission* means the particulate matter which is not collected by a capture system and is released directly into the atmosphere from an affected facility at a grain elevator.

(i) *Capture system* means the equipment such as sheds, hoods, ducts, fans, dampers, etc. used to collect particulate matter generated by an affected facility at a grain elevator.

(j) *Grain unloading station* means that portion of a grain elevator where the grain is transferred from a truck, railcar, barge, or ship to a receiving hopper.

(k) *Grain loading station* means that portion of a grain elevator where the grain is transferred from the elevator to a truck, railcar, barge, or ship.

(l) *Grain handling operations* include bucket elevators or legs (excluding legs used to unload barges or ships), scale hoppers and surge bins (garners), turn heads, scalpers, cleaners, trippers, and the headhouse and other such structures.

(m) *Column dryer* means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in one or more continuous packed columns between two perforated metal sheets.

(n) *Rack dryer* means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in a cascading flow around rows of baffles (racks).

(o) *Unloading leg* means a device which includes a bucket type elevator which is used to remove grain from a barge or ship.

§ 60.302 Standard for particulate matter.

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

(1) Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

(2) Exhibits greater than 0 percent opacity.

(c) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from:

(1) Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

(2) Any grain handling operation which exhibits greater than 0 percent opacity.

(3) Any truck loading station which exhibits greater than 10 percent opacity.

(4) Any barge or ship loading station which exhibits greater than 20 percent opacity.

(d) The owner or operator of any barge or ship unloading station shall operate as follows:

(1) The unloading leg shall be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper.

(2) The total rate of air ventilated shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft^3/bu).

(3) Rather than meet the requirements of paragraphs (d)(1) and (2) of this section the owner or operator may use other methods of emission control if it is demonstrated to the Administrator's satisfaction that they would reduce emissions of particulate matter to the same level or less.

§ 60.303 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (c) of this section.

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.302 as follows:

~~(1) Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.~~

~~(2) Method 2 shall be used to determine the ventilation volumetric flow rate.~~

~~(3) Method 9 and the procedures in §60.11 shall be used to determine opacity.~~

~~(c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:~~

~~(1) For Method 5, Method 17 may be used.~~

SECTION E.2**1** ~~FACILITY OPERATION CONDITIONS~~ **Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)**

~~Facility~~ **Emission Unit** Descriptions [326 IAC 2-7-5(~~15~~**14**)]:

(i) Product Storage, identified as process P-10**, installed in 2008**, consisting of the following emission units:

(1) ~~Five (5~~ **Three (3)** 200 proof above ground storage tanks, identified as Tk001 through ~~Tk005~~**Tk003, installed in 2008**, each ~~has~~**with** a capacity of 172,000 gallons.

(2) One (1) denaturant storage tank, identified as ~~Tk006,~~ **Tk004, installed in 2008,** with a capacity of 105,000 gallons.

(3) ~~Four (4~~**Two (2**) denatured ethanol storage tanks, identified as ~~Tk007 through Tk010~~**Tk005 and Tk006, installed in 2008**, each ~~has~~**with** a capacity of 1,406,000 gallons.

(4) One (1) corrosion inhibitor storage tank, identified as ~~Tk011~~**Tk007, installed in 2008**, with a capacity of 6,392 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.2**1**.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

~~(a)~~ Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart Kb.

~~(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:~~

~~Indiana Department of Environmental Management~~
~~Compliance Branch, Office of Air Quality~~
~~100 North Senate Avenue, MC61-53 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~~

E.2**1**.2 Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) [40 CFR Part 60, Subpart Kb] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Kb, the Permittee shall comply with the provisions of Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), which are incorporated by reference as 326 IAC 12, as specified as follows:

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

~~*Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)*~~

~~*§ 60.110b - Applicability and designation of affected facility.*~~

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

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

~~(c) [Reserved]~~

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

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

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

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

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

~~(5) Vessels located at bulk gasoline plants.~~

~~(6) Storage vessels located at gasoline service stations.~~

~~(7) Vessels used to store beverage alcohol.~~

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

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

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

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

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

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

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

§ 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.~~

~~*§ 60.112b Standard for volatile organic compounds (VOC)*~~

~~(a) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with one of the following:~~

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SECTION ~~E.3~~**E.4** ~~FACILITY OPERATION CONDITIONS~~ **Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII] [326 IAC 12]**

~~Facility~~ **Emission Unit** Descriptions [326 IAC 2-7-5(~~15~~**14**)]:

~~(k) Two (2) diesel-fired emergency generators, each has a capacity of 3,740 HP. These generators are identified as process P-13.~~

Insignificant Activities:

(a) ~~Two (2~~**One (1**) diesel~~-~~fired emergency fire ~~pumps, each has~~**pump, identified as process P-12, installed in 2008, with** a capacity of ~~290~~**420** horsepower (HP).~~ These pumps are identified as process P-12.~~

(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.3.1~~ **E.4.1** General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

~~(a)~~ Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart IIII.

~~(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:~~

~~Indiana Department of Environmental Management~~
~~Compliance Branch, Office of Air Quality~~
~~100 North Senate Avenue, MC61-53 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~~

~~E.3.2~~ **E.4.2** Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart IIII, the Permittee shall comply with the provisions of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.40c(a)
(2) 40 CFR 60.40c(b)
(3) 40 CFR 60.41c
(4) 40 CFR 60.48c(a)(1)
(5) 40 CFR 60.48c(g)
(6) 40 CFR 60.48c(i)
(7) 40 CFR 60.48c(j)

~~Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines~~

~~*What This Subpart Covers*~~

~~*§ 60.4200 Am I subject to this subpart?*~~

~~(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.~~

~~(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.~~

~~*§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?*~~

~~(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.~~

~~(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.~~

~~(d) Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (d)(1) and (2) of this section.~~

~~(1) Reduce NO_x emissions by 90 percent or more, or limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to 1.6 grams per KW-hour (1.2 grams per HP-hour).~~

~~(2) Reduce PM emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).~~

~~*§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?*~~

~~Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.~~

~~*Fuel Requirements for Owners and Operators*~~

~~*§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?*~~

~~(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).~~

~~(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.~~

~~(c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.~~

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in the previous model year?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section.

(h) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

Compliance Requirements

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

~~(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.~~

~~(e) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone 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 ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under §60.4205 but not §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.~~

~~*Testing Requirements for Owners and Operators*~~

~~*§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?*~~

~~Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (d) of this section.~~

~~(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.~~

~~(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.~~

~~(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:~~

~~Where:~~

~~STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.~~

~~Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.~~

~~(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.~~

~~Where:~~

~~STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).~~

~~Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.~~

§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (d) of this section.

(a) Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

Where:

C_i = concentration of NO_X or PM at the control device inlet,

C_o = concentration of NO_X or PM at the control device outlet, and

R = percent reduction of NO_X or PM emissions.

(2) You must normalize the NO_X or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

Where:

C_{adj} = Calculated NO_X or PM concentration adjusted to 15 percent O_2.

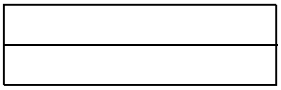
C_d = Measured concentration of NO_X or PM, uncorrected.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2 correction value, percent.

$\%O_2$ = Measured O_2 concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(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:



~~Where:~~

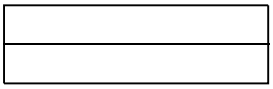
~~F_o = Fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.~~

~~0.209 = Fraction of air that is O_2, percent/100.~~

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

~~F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).~~

~~(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2, as follows:~~

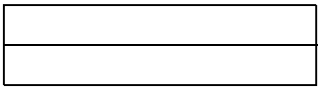


~~Where:~~

~~X_{CO2} = CO_2 correction factor, percent.~~

~~5.9 = 20.9 percent O_2 − 15 percent O_2, the defined O_2 correction value, percent.~~

~~(iii) Calculate the NO_X and PM gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:~~



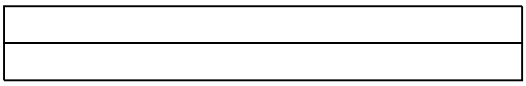
~~Where:~~

~~C_{adj} = Calculated NO_X or PM concentration adjusted to 15 percent O_2.~~

~~C_d = Measured concentration of NO_X or PM, uncorrected.~~

~~$\%CO_2$ = Measured CO_2 concentration, dry basis, percent.~~

~~(e) To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 7 of this section:~~



~~Where:~~

~~ER = Emission rate in grams per KW-hour.~~

~~C_d = Measured NO_X concentration in ppm.~~

~~$1.912x10^{-3}$ = Conversion constant for ppm NO_X to grams per standard cubic meter at 25 degrees Celsius.~~

~~Q = Stack gas volumetric flow rate, in standard cubic meter per hour.~~

~~T = Time of test run, in hours.~~

~~KW-hour = Brake work of the engine, in KW-hour.~~

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

Where:

ER = Emission rate in grams per KW-hour.

C_{adj} = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

Notification, Reports, and Records for Owners and Operators

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

Definitions

§ 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

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

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 number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

~~*Emergency stationary internal combustion engine* means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE 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 ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.~~

~~*Engine manufacturer* means the manufacturer of the engine. See the definition of "manufacturer" in this section.~~

~~*Fire pump engine* means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.~~

~~*Manufacturer* has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.~~

~~*Maximum engine power* means maximum engine power as defined in 40 CFR 1039.801.~~

~~*Model year* means either:~~

~~(1) The calendar year in which the engine was originally produced, or~~

~~(2) The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.~~

~~*Other internal combustion engine* means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.~~

~~*Reciprocating internal combustion engine* means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.~~

~~*Rotary internal combustion engine* means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.~~

~~*Spark ignition* means relating to a gasoline, natural gas, or liquefied petroleum gas 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 internal combustion engine* means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.~~

~~*Subpart* means 40 CFR part 60, subpart IIII.~~

~~*Useful life* means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for useful life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).~~

~~Tables to Subpart IIII of Part 60~~

~~Table 1 to Subpart IIII of Part 60.—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007–2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder~~

~~[As stated in §§60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]~~

~~Maximum engine power~~	~~Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007–2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)~~				
	~~NMHC + NO_x~~	~~HC~~	~~NO_x~~	~~CO~~	~~PM~~
~~225≤KW<450 (300≤HP<600)~~		~~1.3 (1.0)~~	~~9.2 (6.9)~~	~~11.4 (8.5)~~	~~0.54 (0.40)~~
~~KW>560 (HP>750)~~		~~1.3 (1.0)~~	~~9.2 (6.9)~~	~~11.4 (8.5)~~	~~0.54 (0.40)~~

~~Table 3 to Subpart IIII of Part 60.—Certification Requirements for Stationary Fire Pump Engines~~

~~[As stated in §60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:]~~

~~Engine power~~	~~Starting model year engine manufacturers must certify new stationary fire pump engines according to §60.4202(d)~~
~~130≤KW≤560 (175≤HP≤750)~~	~~2009~~

~~Table 4 to Subpart IIII of Part 60.—Emission Standards for Stationary Fire Pump Engines~~

~~[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]~~

~~Maximum engine power~~	~~Model year(s)~~	~~NMHC + NO_x~~	~~CO~~	~~PM~~
~~225≤KW<450 (300≤HP<600)~~	~~2008 and earlier~~	~~10.5 (7.8)~~	~~3.5 (2.6)~~	~~0.54 (0.40)~~
~~–~~	~~2009+[3]~~	~~4.0 (3.0)~~		~~0.20 (0.15)~~

~~[1]For model years 2011–2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.~~

~~[2]For model years 2010–2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.~~

~~[3]In model years 2009–2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.~~

~~Table 5 to Subpart IIII of Part 60.—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines~~

~~[You must comply with the labeling requirements in §60.4210(f) and the recordkeeping requirements in §60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]~~

~~Engine power~~	~~Starting model year~~

~~KW≥130 (HP≥175)~~	~~2011~~

~~Table 6 to Subpart IIII of Part 60.—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines~~

~~[As stated in §60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]~~

~~Mode No.~~	~~Engine speed[1]~~	~~Torque (percent)[2]~~	~~Weighting factors~~
~~1~~	~~Rated~~	~~100~~	~~0.30~~
~~2~~	~~Rated~~	~~75~~	~~0.50~~
~~3~~	~~Rated~~	~~50~~	~~0.20~~

~~[1]Engine speed: ±2 percent of point.~~

~~[2]Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.~~

~~Table 7 to Subpart IIII of Part 60.—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder~~

~~[As stated in §60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:]~~

~~For each~~	~~Complying with the requirement to~~	~~You must~~	~~Using~~	~~According to the following requirements~~

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of ≥30 liters per cylinder	a. Reduce NO_x emissions by 90 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
–		ii. Measure O_2 at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_x concentration.
–		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO_x concentration.
–		iv. Measure NO_x at the inlet and outlet of the control device	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(d) NO_x concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
–	b. Limit the concentration of NO_x in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
–		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location; and,	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2 concentration must be made at the same time as the measurement for NO_x concentration.
–		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(c) Measurements to determine moisture content must be made at the same time as the measurement for NO_x concentration.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		sampling port location; and,	(incorporated by reference, see §60.17)	
–		iv. Measure NO_x at the exhaust of the stationary internal combustion engine	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(d) NO_x concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
–	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
–		ii. Measure O_2 at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for PM concentration.
–		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
–		iv. Measure PM at the inlet and outlet of the control device	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
–	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
–		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location; and	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for PM concentration.
–		iii. If necessary,	(3) Method 4 of	(c) Measurements to

For each	Complying with the requirement to	You must	Using	According to the following requirements
		measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	40 CFR part 60, appendix A	determine moisture content must be made at the same time as the measurements for PM concentration.
–		iv. Measure PM at the exhaust of the stationary internal combustion engine	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

Table 8 to Subpart IIII of Part 60.—Applicability of General Provisions to Subpart IIII

[As stated in §60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation

~~General Provisions citation~~	~~Subject of citation~~	~~Applies to subpart~~	~~Explanation~~
~~§60.1~~	~~General applicability of the General Provisions~~	~~Yes~~	
~~§60.2~~	~~Definitions~~	~~Yes~~	~~Additional terms defined in §60.4219.~~
~~§60.3~~	~~Units and abbreviations~~	~~Yes~~	
~~§60.4~~	~~Address~~	~~Yes~~	
~~§60.5~~	~~Determination of construction or modification~~	~~Yes~~	
~~§60.6~~	~~Review of plans~~	~~Yes~~	
~~§60.7~~	~~Notification and Recordkeeping~~	~~Yes~~	~~Except that §60.7 only applies as specified in §60.4214(a).~~
~~§60.8~~	~~Performance tests~~	~~Yes~~	~~Except that §60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.~~
~~§60.9~~	~~Availability of information~~	~~Yes~~	
~~§60.10~~	~~State Authority~~	~~Yes~~	
~~§60.11~~	~~Compliance with standards and maintenance requirements~~	~~No~~	~~Requirements are specified in subpart IIII.~~
~~§60.12~~	~~Circumvention~~	~~Yes~~	
~~§60.13~~	~~Monitoring requirements~~	~~Yes~~	~~Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.~~
~~§60.14~~	~~Modification~~	~~Yes~~	
~~§60.15~~	~~Reconstruction~~	~~Yes~~	
~~§60.16~~	~~Priority list~~	~~Yes~~	
~~§60.17~~	~~Incorporations by reference~~	~~Yes~~	
~~§60.18~~	~~General control device requirements~~	~~No~~	
~~§60.19~~	~~General notification and reporting requirements~~	~~Yes~~	

SECTION ~~E.4~~**E.2** ~~FACILITY OPERATION CONDITIONS~~ **Standards of Performance for Small Industrial, Commercial, Institutional Steam Generating Units**

~~Facility~~ **Emission Unit** Descriptions [326 IAC 2-7-5(~~15~~**14**)]:

(j) ~~Eight (8~~**Natural gas combustion sources, identified as P-11, consisting of four (4**) natural gas-fired **package** boilers, ~~each has~~**identified as EP-26 through EP-29, installed in 2008, with** a heat input capacity of 92.4 MMBtu/hr~~. These boilers are identified as process P-11~~**, each**.

(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.4.1~~ **E.2.1** General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

~~(a)~~ Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart Dc.

~~(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:~~

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

~~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~~

~~E.4.2~~**E.2.2** Standards of Performance for Small Industrial, Commercial, Institutional Steam Generating Units [40 CFR Part 60, Subpart Dc] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall comply with the provisions of Standard of Performance for Small Industrial, Commercial, Institutional Steam Generating Units which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.40c(a)
(2) 40 CFR 60.40c(b)
(3) 40 CFR 60.41c
(4) 40 CFR 60.48c(a)(1)
(5) 40 CFR 60.48c(g)
(6) 40 CFR 60.48c(i)
(7) 40 CFR 60.48c(j)

~~Subpart Dc - Standards of Performance for Small Industrial, Commercial, Institutional Steam Generating Units~~

~~*§ 60.40c Applicability and delegation of authority*~~

~~(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).~~

~~(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.~~

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO_2) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

(e) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart GG or KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part).

(f) Any facility covered by subpart AAAA of this part is not covered by this subpart.

(g) Any facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not covered by this subpart.

§ 60.41c Definitions

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (*i.e.* , the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

~~*Distillate oil* means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).~~

~~*Dry flue gas desulfurization technology* means a SO_2 control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.~~

~~*Duct burner* means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.~~

~~*Emerging technology* means any SO_2 control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).~~

~~*Federally enforceable* means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.~~

~~*Fluidized bed combustion technology* means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.~~

~~*Fuel pretreatment* means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.~~

~~*Heat input* means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).~~

~~*Heat transfer medium* means any material that is used to transfer heat from one point to another point.~~

~~*Maximum design heat input capacity* means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.~~

~~*Natural gas* means: (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17).~~

~~*Noncontinental area* means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.~~

~~*Oil* means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.~~

~~*Potential sulfur dioxide emission rate* means the theoretical SO_2 emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.~~

~~*Process heater* means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.~~

~~*Residual oil* means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).~~

Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO_2 control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO_2.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

§ 60.48c Reporting and recordkeeping requirements

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

SECTION E.5 FACILITY OPERATION CONDITIONS

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

(d) Fermentation operation, identified as process P-5, with a maximum throughput of 24,700 gallons per hour, controlled by two (2) CO_2 scrubbers, C-5A and C-5B. The exhaust gas stream from the scrubbers may be sent to an offsite company for further processing of the CO_2 gas stream or vented directly to the atmosphere. The source has the option to use urea as well as sodium bisulfite in either of the CO_2 scrubbers. This operation includes the following:

(1) Fourteen (14) fermenters, with a combined processing rate of 24,700 gallon per hour.

(2) Two (2) beer well, #1 and #2, with a combined processing rate of 24,700 gallons per hour, controlled by the two (2) CO2 scrubbers, C3-5A and C3-5B.

(3) Slurry Tanks #1 and #2.

(4) Liquefaction Tanks #1 through #4.

(5) Yeast Tanks #1 and #2.

(6) Two (2) whole stillage tanks.

(e) Distillation and dehydration operations, identified as process P-6, with a throughput of 24,700 gallons per hour consisting of the following emission units:

(1) Two (2) beer column, #1 and #2, controlled by either of the four (4) RTOs, C-6A and C-6B or C-6C and C-6D.

(2) Two (2) side stripper, #1 and #2, controlled by either of the four (4) RTOs, C-6A and C-6B or C-6C and C-6D.

(3) Two (2) rectifier column, #1 and #2, controlled by either of the four (4) of RTOs, C-6A and C-6B or C-6C and C-6D.

(4) Four (4) molecular sieves.

(5) Two (2) 200 proof condensers.

(6) Two (2) whole stillage tanks.

(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, consisting of the following emission units:

(1) Eight (8) centrifuges.

(2) Two (2) thin stillage tanks.

(3) Two (2) evaporator systems.

(4) Two (2) syrup tanks

(5) One wet cake pad.

(h) Denatured ethanol loadout, identified as process P-9, consisting of one (1) truck loadout, one (1) rail loadout and one (1) barge loadout, with a total maximum throughput of 227.4 million gallons per year. These three (3) loading racks are controlled by enclosed Flare system C-9. The flare is fueled by natural gas and has a pilot gas flare heat input capacity of 0.092 MMBtu/hr.

(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.5.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart VV.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, MC61-53
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

~~E.5.2 Standard of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry [40 CFR Part 60, Subpart VV] [326 IAC 12]~~

~~Pursuant to 40 CFR Part 60, Subpart VV, the Permittee shall comply with the provisions of Standard of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, which are incorporated by reference as 326 IAC 12, as specified as follows unless the Permittee elects to comply with the requirements of 40 CFR Part 60, Subpart FFFF, pursuant to 40 CFR 63.2535(k):~~

~~§ 60.480 Applicability and designation of affected facility.~~

~~(a)(1) The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry.~~

~~(2) The group of all equipment (defined in §60.481) within a process unit is an affected facility.~~

~~(b) Any affected facility under paragraph (a) of this section that commences construction or modification after January 5, 1981, shall be subject to the requirements of this subpart.~~

~~(c) Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.~~

~~(d)(1) If an owner or operator applies for one or more of the exemptions in this paragraph, then the owner or operator shall maintain records as required in §60.486(i).~~

~~(2) Any affected facility that has the design capacity to produce less than 1,000 Mg/yr (1,102 ton/yr) is exempt from §60.482.~~

~~(3) If an affected facility produces heavy liquid chemicals only from heavy liquid feed or raw materials, then it is exempt from §60.482.~~

~~(4) Any affected facility that produces beverage alcohol is exempt from §60.482.~~

~~(5) Any affected facility that has no equipment in VOC service is exempt from §60.482.~~

~~(e) *Alternative means of compliance*—(1) *Option to comply with part 65.* Owners or operators may choose to comply with the provisions of 40 CFR part 65, subpart F, to satisfy the requirements of §§60.482 through 60.487 for an affected facility. When choosing to comply with 40 CFR part 65, subpart F, the requirements of §60.485(d), (e), and (f), and §60.486(i) and (j) still apply. Other provisions applying to an owner or operator who chooses to comply with 40 CFR part 65 are provided in 40 CFR 65.1.~~

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

~~§ 60.481 Definitions.~~

~~As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of part 60, and the following terms shall have the specific meanings given them.~~

~~*Capital expenditure* means, in addition to the definition in 40 CFR 60.2, an expenditure for a physical or operational change to an existing facility that:~~

~~(a) Exceeds P, the product of the facility's replacement cost, R, and an adjusted annual asset guideline repair allowance, A, as reflected by the following equation: $P = R \times A$, where~~

~~(1) The adjusted annual asset guideline repair allowance, A, is the product of the percent of the replacement cost, Y, and the applicable basic annual asset guideline repair allowance, B, divided by 100 as reflected by the following equation:~~

~~$A = Y \times (B \div 100)$;~~

~~(2) The percent Y is determined from the following equation: Y = 1.0 − 0.575 log X, where X is 1982 minus the year of construction; and~~

~~(3) The applicable basic annual asset guideline repair allowance, B, is selected from the following table consistent with the applicable subpart:~~

~~Table for Determining Applicable for B~~

Subpart applicable to facility	Value of B to be used in equation
VV	12.5
DDD	12.5
GGG	7.0
KKK	4.5

~~*Closed vent system* means a system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.~~

~~*Connector* means flanged, screwed, welded, or other joined fittings used to connect two pipe lines or a pipe line and a piece of process equipment.~~

~~*Control device* means an enclosed combustion device, vapor recovery system, or flare.~~

~~*Distance piece* means an open or enclosed casing through which the piston rod travels, separating the compressor cylinder from the crankcase.~~

~~*Double block and bleed system* means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.~~

~~*Duct work* means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.~~

~~*Equipment* means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart.~~

~~*First attempt at repair* means to take rapid action for the purpose of stopping or reducing leakage of organic material to atmosphere using best practices.~~

~~*Fuel gas* means gases that are combusted to derive useful work or heat.~~

~~*Fuel gas system* means the offsite and onsite piping and flow and pressure control system that gathers gaseous stream(s) generated by onsite operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in-process combustion equipment, such as furnaces and gas turbines, either singly or in combination.~~

~~*Hard-piping* means pipe or tubing that is manufactured and properly installed using good engineering judgment and standards such as ASME B31.3, Process Piping (available from the American Society of Mechanical Engineers, PO Box 2900, Fairfield, NJ 07007-2900).~~

~~*In gas/vapor service* means that the piece of equipment contains process fluid that is in the gaseous state at operating conditions.~~

~~*In heavy liquid service* means that the piece of equipment is not in gas/vapor service or in light liquid service.~~

~~*In light liquid service* means that the piece of equipment contains a liquid that meets the conditions specified in §60.485(e).~~

~~*In-situ sampling systems* means nonextractive samplers or in-line samplers.~~

~~*In vacuum service* means that equipment is operating at an internal pressure which is at least 5 kilopascals (kPa)(0.7 psia) below ambient pressure.~~

~~*In VOC service* means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight. (The provisions of §60.485(d) specify how to determine that a piece of equipment is not in VOC service.)~~

~~*Liquids dripping* means any visible leakage from the seal including spraying, misting, clouding, and ice formation.~~

~~*Open-ended valve or line* means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.~~

~~*Pressure release* means the emission of materials resulting from system pressure being greater than set pressure of the pressure relief device.~~

~~*Process improvement* means routine changes made for safety and occupational health requirements, for energy savings, for better utility, for ease of maintenance and operation, for correction of design deficiencies, for bottleneck removal, for changing product requirements, or for environmental control.~~

~~*Process unit* means components assembled to produce, as intermediate or final products, one or more of the chemicals listed in §60.489 of this part. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.~~

~~*Process unit shutdown* means a work practice or operational procedure that stops production from a process unit or part of a process unit. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.~~

~~*Quarter* means a 3-month period; the first quarter concludes on the last day of the last full month during the 180 days following initial startup.~~

~~*Repaired* means that equipment is adjusted, or otherwise altered, in order to eliminate a leak as indicated by one of the following: an instrument reading of 10,000 ppm or greater, indication of liquids dripping, or indication by a sensor that a seal or barrier fluid system has failed.~~

~~*Replacement cost* means the capital needed to purchase all the depreciable components in a facility.~~

~~*Sampling connection system* means an assembly of equipment within a process unit used during periods of representative operation to take samples of the process fluid. Equipment used to take nonroutine grab samples is not considered a sampling connection system.~~

~~*Sensor* means a device that measures a physical quantity or the change in a physical quantity such as temperature, pressure, flow rate, pH, or liquid level.~~

~~*Synthetic organic chemicals manufacturing industry* means the industry that produces, as intermediates or final products, one or more of the chemicals listed in §60.489.~~

~~*Volatile organic compounds* or VOC means, for the purposes of this subpart, any reactive organic compounds as defined in §60.2 Definitions.~~

~~§ 60.482-1 Standards: General.~~

~~(a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§60.482-1 through 60.482-10 or §60.480(e) for all equipment within 180 days of initial startup.~~

~~(b) Compliance with §§60.482-1 to 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in §60.485.~~

~~(c)(1) An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of §§60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, and 60.482-10 as provided in §60.484.~~

~~(2) If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of §§60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, or 60.482-10, an owner or operator shall comply with the requirements of that determination.~~

~~(d) Equipment that is in vacuum service is excluded from the requirements of §§60.482-2 to 60.482-10 if it is identified as required in §60.486(e)(5).~~

~~§ 60.482-2 Standards: Pumps in light liquid service.~~

~~(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485(b), except as provided in §60.482-1(c) and paragraphs (d), (e), and (f) of this section.~~

~~(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.~~

~~(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.~~

~~(2) If there are indications of liquids dripping from the pump seal, a leak is detected.~~

~~(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.~~

~~(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.~~

~~(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), *Provided* the following requirements are met:~~

~~(1) Each dual mechanical seal system is—~~

~~(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or~~

~~(ii) Equipment with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482–10; or~~

~~(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.~~

~~(2) The barrier fluid system is in heavy liquid service or is not in VOC service.~~

~~(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.~~

~~(4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.~~

~~(5)(i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm, and~~

~~(ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.~~

~~(6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii), a leak is detected.~~

~~(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.~~

~~(iii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.~~

~~(e) Any pump that is designated, as described in §60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump:~~

~~(1) Has no externally actuated shaft penetrating the pump housing,~~

~~(2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in §60.485(c), and~~

~~(3) Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.~~

~~(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of §60.482–10, it is exempt from paragraphs (a) through (e) of this section.~~

~~(g) Any pump that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:~~

~~(1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and~~

~~(2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.~~

~~(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.~~

~~§ 60.482-3 Standards: Compressors.~~

~~(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in §60.482–1(c) and paragraph (h) and (i) of this section.~~

~~(b) Each compressor seal system as required in paragraph (a) shall be:~~

~~(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or~~

~~(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482–10; or~~

~~(3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.~~

~~(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.~~

~~(d) Each barrier fluid system as described in paragraph (a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.~~

~~(e)(1) Each sensor as required in paragraph (d) shall be checked daily or shall be equipped with an audible alarm.~~

~~(2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.~~

~~(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e)(2), a leak is detected.~~

~~(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.~~

~~(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.~~

~~(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of §60.482–10, except as provided in paragraph (i) of this section.~~

~~(i) Any compressor that is designated, as described in §60.486(e) (1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a)–(h) if the compressor:~~

~~(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in §60.485(c); and~~

~~(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.~~

~~(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of §60.14 or §60.15 is exempt from §60.482(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of paragraphs (a) through (e) and (h) of this section.~~

~~§ 60.482-4 Standards: Pressure relief devices in gas/vapor service.~~

~~(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in §60.485(c).~~

~~(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in §60.482–9.~~

~~(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in §60.485(c).~~

~~(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in §60.482–10 is exempted from the requirements of paragraphs (a) and (b) of this section.~~

~~(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.~~

~~(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §60.482–9.~~

~~§ 60.482-5 Standards: Sampling connection systems.~~

~~(a) Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in §60.482–1(c). Gases displaced during filling of the sample container are not required to be collected or captured.~~

~~(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall comply with the requirements specified in paragraphs (b)(1) through (4) of this section:~~

~~(1) Return the purged process fluid directly to the process line; or~~

~~(2) Collect and recycle the purged process fluid to a process; or~~

~~(3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of §60.482–10; or~~

~~(4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:~~

~~(i) A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;~~

~~(ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or~~

~~(iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.~~

~~(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.~~

~~[60 FR 43258, Aug. 18, 1995, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000]~~

~~§ 60.482-6 Standards: Open-ended valves or lines.~~

~~(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482–1(c).~~

~~(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.~~

~~(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.~~

~~(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.~~

~~(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of this section.~~

~~(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.~~

~~§ 60.482-7 Standards: Valves in gas/vapor service and in light liquid service.~~

~~(a) Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485(b) and shall comply with paragraphs (b) through (e), except as provided in paragraphs (f), (g), and (h), §60.483–1, 2, and §60.482–1(c).~~

~~(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.~~

~~(c)(1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.~~

~~(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.~~

~~(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §60.482–9.~~

~~(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.~~

~~(e) First attempts at repair include, but are not limited to, the following best practices where practicable:~~

~~(1) Tightening of bonnet bolts;~~

~~(2) Replacement of bonnet bolts;~~

~~(3) Tightening of packing gland nuts;~~

~~(4) Injection of lubricant into lubricated packing.~~

~~(f) Any valve that is designated, as described in §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:~~

~~(1) Has no external actuating mechanism in contact with the process fluid,~~

~~(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in §60.485(c), and~~

~~(3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.~~

~~(g) Any valve that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:~~

~~(1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a), and~~

~~(2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.~~

~~(h) Any valve that is designated, as described in §60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:~~

~~(1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.~~

~~(2) The process unit within which the valve is located either becomes an affected facility through §60.14 or §60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and~~

~~(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.~~

~~§ 60.482-8 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.~~

~~(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures:~~

~~(1) The owner or operator shall monitor the equipment within 5 days by the method specified in §60.485(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.~~

~~(2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak.~~

~~(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.~~

~~(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482-9.~~

~~(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.~~

~~(d) First attempts at repair include, but are not limited to, the best practices described under §60.482-7(e).~~

~~§ 60.482-9 Standards: Delay of repair.~~

~~(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.~~

~~(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.~~

~~(c) Delay of repair for valves will be allowed if:~~

~~(1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and~~

~~(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with §60.482-10.~~

~~(d) Delay of repair for pumps will be allowed if:~~

~~(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and~~

~~(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.~~

~~(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.~~

~~§ 60.482-10 Standards: Closed vent systems and control devices.~~

~~(a) Owners or operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.~~

~~(b) Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.~~

~~(c) Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.~~

~~(d) Flares used to comply with this subpart shall comply with the requirements of §60.18.~~

~~(e) Owners or operators of control devices used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.~~

~~(f) Except as provided in paragraphs (i) through (k) of this section, each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2) of this section.~~

~~(1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the requirements specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this section:~~

~~(i) Conduct an initial inspection according to the procedures in §60.485(b); and~~

~~(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.~~

~~(2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:~~

~~(i) Conduct an initial inspection according to the procedures in §60.485(b); and~~

~~(ii) Conduct annual inspections according to the procedures in §60.485(b).~~

~~(g) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (h) of this section.~~

~~(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.~~

~~(2) Repair shall be completed no later than 15 calendar days after the leak is detected.~~

~~(h) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.~~

~~(i) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section.~~

~~(j) Any parts of the closed vent system that are designated, as described in paragraph (l)(1) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (j)(1) and (j)(2) of this section:~~

~~(1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (f)(1)(i) or (f)(2) of this section; and~~

~~(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.~~

~~(k) Any parts of the closed vent system that are designated, as described in paragraph (l)(2) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (k)(1) through (k)(3) of this section:~~

~~(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and~~

~~(2) The process unit within which the closed vent system is located becomes an affected facility through §§60.14 or 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and~~

~~(3) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.~~

~~(l) The owner or operator shall record the information specified in paragraphs (l)(1) through (l)(5) of this section.~~

~~(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.~~

~~(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.~~

~~(3) For each inspection during which a leak is detected, a record of the information specified in §60.486(c).~~

~~(4) For each inspection conducted in accordance with §60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.~~

~~(5) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.~~

~~(m) Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.~~

~~§ 60.483-1 Alternative standards for valves—allowable percentage of valves leaking.~~

~~(a) An owner or operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.~~

~~(b) The following requirements shall be met if an owner or operator wishes to comply with an allowable percentage of valves leaking:~~

~~(1) An owner or operator must notify the Administrator that the owner or operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in §60.487(d).~~

~~(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.~~

~~(3) If a valve leak is detected, it shall be repaired in accordance with §60.482-7(d) and (e).~~

~~(c) Performance tests shall be conducted in the following manner:~~

~~(1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in §60.485(b).~~

~~(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.~~

~~(3) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.~~

~~(d) Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent.~~

~~§ 60.483-2 Alternative standards for valves—skip period leak detection and repair.~~

~~(a)(1) An owner or operator may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.~~

~~(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in §60.487(d).~~

~~(b)(1) An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in §60.482–7.~~

~~(2) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.~~

~~(3) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.~~

~~(4) If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in §60.482–7 but can again elect to use this section.~~

~~(5) The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of this section.~~

~~(6) An owner or operator must keep a record of the percent of valves found leaking during each leak detection period.~~

~~§ 60.485 Test methods and procedures.~~

~~(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).~~

~~(b) The owner or operator shall determine compliance with the standards in §§60.482, 60.483, and 60.484 as follows:~~

~~(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:~~

~~(i) Zero air (less than 10 ppm of hydrocarbon in air); and~~

~~(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.~~

~~(c) The owner or operator shall determine compliance with the no detectable emission standards in §§60.482–2(e), 60.482–3(i), 60.482–4, 60.482–7(f), and 60.482–10(e) as follows:~~

~~(1) The requirements of paragraph (b) shall apply.~~

~~(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.~~

~~(d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:~~

~~(1) Procedures that conform to the general methods in ASTM E260–73, 91, or 96, E168–67, 77, or 92, E169–63, 77, or 93 (incorporated by reference – see §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.~~

~~(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.~~

~~(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d) (1) and (2) of this section shall be used to resolve the disagreement.~~

~~(e) The owner or operator shall demonstrate that equipment is in light liquid service by showing that all the following conditions apply:~~

~~(1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 °C (1.2 in. H_2O at 68 °F). Standard reference texts or ASTM D2879–83, 96, or 97 (incorporated by reference – see §60.17) shall be used to determine the vapor pressures.~~

~~(2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H_2O at 68 °F) is equal to or greater than 20 percent by weight.~~

~~(3) The fluid is a liquid at operating conditions.~~

~~(f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.~~

~~(g) The owner or operator shall determine compliance with the standards of flares as follows:~~

~~(1) Method 22 shall be used to determine visible emissions.~~

~~(2) A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.~~

~~(3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:~~

~~$$V_{max} = K_1 + K_2 H_T$$~~

~~Where:~~

~~V_{max} = Maximum permitted velocity, m/sec (ft/sec)~~

~~H_T = Net heating value of the gas being combusted, MJ/scm (Btu/scf).~~

~~K_1 = 8.706 m/sec (metric units)~~

~~= 28.56 ft/sec (English units)~~

~~K_2 = 0.7084 m^4/(MJ-sec) (metric units)~~

~~= 0.087 ft^4/(Btu-sec) (English units)~~

~~(4) The net heating value (HT) of the gas being combusted in a flare shall be computed using the following equation:~~

~~$$H_T = K \sum_{i=1}^{n} C_i H_i$$~~

~~Where:~~

~~K = Conversion constant, 1.740×10^{-7} (g-mole)(MJ)/ (ppm-scm-kcal) (metric units)~~

~~= 4.674×10^{-8} [(g-mole)(Btu)/(ppm-scf-kcal)] (English units)~~

~~C_i = Concentration of sample component "i," ppm~~

~~H_i = net heat of combustion of sample component "i" at 25 °C and 760 mm Hg (77 °F and 14.7 psi), kcal/g-mole~~

~~(5) Method 18 and ASTM D2504–67, 77, or 88 (Reapproved 1993) (incorporated by reference—see §60.17) shall be used to determine the concentration of sample component "i."~~

~~(6) ASTM D2382–76 or 88 or D4809–95 (incorporated by reference—see §60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.~~

~~(7) Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.~~

~~§ 60.486 Recordkeeping requirements.~~

~~(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.~~

~~(2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.~~

~~(b) When each leak is detected as specified in §§60.482–2, 60.482–3, 60.482–7, 60.482–8, and 60.483–2, the following requirements apply:~~

~~(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.~~

~~(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482–7(c) and no leak has been detected during those 2 months.~~

~~(3) The identification on equipment except on a valve, may be removed after it has been repaired.~~

~~(c) When each leak is detected as specified in §§60.482–2, 60.482–3, 60.482–7, 60.482–8, and 60.483–2, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:~~

~~(1) The instrument and operator identification numbers and the equipment identification number.~~

~~(2) The date the leak was detected and the dates of each attempt to repair the leak.~~

~~(3) Repair methods applied in each attempt to repair the leak.~~

~~(4) "Above 10,000" if the maximum instrument reading measured by the methods specified in §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.~~

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

~~(6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.~~

~~(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.~~

~~(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.~~

~~(9) The date of successful repair of the leak.~~

~~(d) The following information pertaining to the design requirements for closed vent systems and control devices described in §60.482–10 shall be recorded and kept in a readily accessible location:~~

~~(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.~~

~~(2) The dates and descriptions of any changes in the design specifications.~~

~~(3) A description of the parameter or parameters monitored, as required in §60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.~~

~~(4) Periods when the closed vent systems and control devices required in §§60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.~~

~~(5) Dates of startups and shutdowns of the closed vent systems and control devices required in §§60.482-2, 60.482-3, 60.482-4, and 60.482-5.~~

~~(e) The following information pertaining to all equipment subject to the requirements in §§60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:~~

~~(1) A list of identification numbers for equipment subject to the requirements of this subpart.~~

~~(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §§60.482-2(e), 60.482-3(i) and 60.482-7(f).~~

~~(ii) The designation of equipment as subject to the requirements of §60.482-2(e), §60.482-3(i), or §60.482-7(f) shall be signed by the owner or operator.~~

~~(3) A list of equipment identification numbers for pressure relief devices required to comply with §60.482-4.~~

~~(4)(i) The dates of each compliance test as required in §§60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).~~

~~(ii) The background level measured during each compliance test.~~

~~(iii) The maximum instrument reading measured at the equipment during each compliance test.~~

~~(5) A list of identification numbers for equipment in vacuum service.~~

~~(f) The following information pertaining to all valves subject to the requirements of §60.482-7(g) and (h) and to all pumps subject to the requirements of §60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:~~

~~(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.~~

~~(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.~~

~~(g) The following information shall be recorded for valves complying with §60.483-2:~~

~~(1) A schedule of monitoring.~~

~~(2) The percent of valves found leaking during each monitoring period.~~

~~(h) The following information shall be recorded in a log that is kept in a readily accessible location:~~

~~(1) Design criterion required in §§60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and~~

~~(2) Any changes to this criterion and the reasons for the changes.~~

~~(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in §60.480(d):~~

~~(1) An analysis demonstrating the design capacity of the affected facility,~~

~~(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and~~

~~(3) An analysis demonstrating that equipment is not in VOC service.~~

~~(j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.~~

~~(k) The provisions of §60.7 (b) and (d) do not apply to affected facilities subject to this subpart.~~

~~§ 60.487 Reporting requirements.~~

~~(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial startup date.~~

~~(b) The initial semiannual report to the Administrator shall include the following information:~~

~~(1) Process unit identification.~~

~~(2) Number of valves subject to the requirements of §60.482–7, excluding those valves designated for no detectable emissions under the provisions of §60.482–7(f).~~

~~(3) Number of pumps subject to the requirements of §60.482–2, excluding those pumps designated for no detectable emissions under the provisions of §60.482–2(e) and those pumps complying with §60.482–2(f).~~

~~(4) Number of compressors subject to the requirements of §60.482–3, excluding those compressors designated for no detectable emissions under the provisions of §60.482–3(i) and those compressors complying with §60.482–3(h).~~

~~(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in §60.486:~~

~~(1) Process unit identification.~~

~~(2) For each month during the semiannual reporting period,~~

~~(i) Number of valves for which leaks were detected as described in §60.482(7)(b) or §60.483–2,~~

~~(ii) Number of valves for which leaks were not repaired as required in §60.482–7(d)(1),~~

~~(iii) Number of pumps for which leaks were detected as described in §60.482–2(b) and (d)(6)(i),~~

~~(iv) Number of pumps for which leaks were not repaired as required in §60.482–2(c)(1) and (d)(6)(ii),~~

~~(v) Number of compressors for which leaks were detected as described in §60.482–3(f),~~

~~(vi) Number of compressors for which leaks were not repaired as required in §60.482–3(g)(1), and~~

~~(vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.~~

~~(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.~~

~~(4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.~~

~~(d) An owner or operator electing to comply with the provisions of §§60.483–1 or 60.483–2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.~~

~~(e) An owner or operator shall report the results of all performance tests in accordance with §60.8 of the General Provisions. The provisions of §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.~~

~~(f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of this section, provided that they comply with the requirements established by the State.~~

SECTION E.3 Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Emission Unit Description [326 IAC 2-7-5(14)]:

(d) Fermentation operation, identified as process P-5, installed in 2008, with a maximum throughput of 13,302 gallons per hour, controlled by one (1) CO_2 scrubber, C-5A, exhausting to stack S-5A. The maximum undenatured ethanol production rate is 116.5 million gallons per year. The exhaust gas stream from the scrubber may be sent to an offsite company for further processing of the CO_2 gas stream or vented directly to the atmosphere. The source has the option to use a supplemental additive, such as sodium bisulfite, in the CO_2 scrubber. This operation includes the following:

- **(1) Seven (7) fermenters, installed in 2008, with a combined processing rate of 13,302 gallons per hour.**
- **(2) One (1) beer well, #1, installed in 2008, with a processing rate of 13,302 gallons per hour, controlled by the CO_2 scrubber, C-5A, exhausting to stack S-5A.**

(e) Distillation and dehydration operations, identified as process P-6, installed in 2008, with a throughput of 13,302 gallons per hour (116.5 million gallons of undenatured ethanol per year) consisting of the following emission units:

- **(1) Two (2) beer columns, #1 and #2, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B. Each Thermal Oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).**
- **(2) One (1) acid reduction column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.**
- **(3) One (1) rectifier column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.**
- **(4) Two (2) molecular sieves, installed in 2008.**
- **(5) One (1) 200 proof condenser, installed in 2008.**
- **(6) One (1) whole stillage tank, installed in 2008.**

(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, installed in 2008, , with a maximum throughput of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), consisting of the following emission units:

- **(1) Four (4) centrifuges, installed in 2008.**
- **(2) One (1) thin stillage tank, installed in 2008.**

(3) Two (2) evaporator systems, installed in 2008.

(4) One (1) syrup tank, installed in 2008.

(5) One (1) wet cake pad, installed in 2008.

(6) DDGS drying, #1 and #2, installed in 2008, with a total drying rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), with two (2) DDGS dryers, each with a heat input capacity of 90 MMBtu/hr. Dryer #1 is controlled by Thermal Oxidizer #1, C-6A, exhausting to stack S-6A, and Dryer #2 is controlled by Thermal Oxidizer #2, C-6B, exhausting to stack S-6B.

(7) Two (2) DDGS coolers, identified as EP-22 (#1) and EP-23 (#2), installed in 2008, with a maximum throughput of 391,148 tons (dry basis) of DDGS per year. Cooler #1 is controlled by Cooler Baghouse #1, C-7A, installed in 2008, and may exhaust to stack S-7A when not being used as make-up air for DDGS Dryer #1. Cooler #2 is controlled by Cooler Baghouse #2, C-7B, installed in 2008, and may exhaust to stack S-7B when not being used as make-up air for DDGS Dryer #2.

(h) Denatured ethanol loadout, identified as P-9, installed in 2008, with a total maximum throughput of 122.1 million gallons per year (13,943 gallons per hour), consisting of the following emission units:

(1) One (1) truck loadout, identified as EP-24, installed in 2008, and

(2) One (1) rail loadout, identified as EP-25, installed in 2008,

These two (2) loading racks are controlled by enclosed Flare system C-9, installed in 2008. The flare is fueled by natural gas and has a pilot gas flare heat input capacity of 0.092 MMBtu/hr.

(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.3.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart VVa.

E.3.2 Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry [40 CFR Part 60, Subpart VVa] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart VVa, the Permittee shall comply with the provisions of Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, which are incorporated by reference as 326 IAC 12, as specified as follows unless the Permittee elects to comply with the requirements of 40 CFR Part 63, Subpart FFFF, pursuant to 40 CFR 63.2535(k):

(1) 40 CFR 60.480a(a), (b), (c), (d), and (f)
(2) 40 CFR 60.481a
(3) 40 CFR 60.482-1a
(4) 40 CFR 60.482-2a
(5) 40 CFR 60.482-3a
(6) 40 CFR 60.482-4a
(7) 40 CFR 60.482-5a
(8) 40 CFR 60.482-6a

(9) 40 CFR 60.482-7a
(10) 40 CFR 60.482-8a
(11) 40 CFR 60.482-9a
(12) 40 CFR 60.482-10a
(13) 40 CFR 60.482-11a
(14) 40 CFR 60.483-1a
(15) 40 CFR 60.483-2a
(16) 40 CFR 60.484a
(17) 40 CFR 60.485a
(18) 40 CFR 60.486a
(19) 40 CFR 60.487a
(20) 40 CFR 60.488a
(21) 40 CFR 60.489a

~~SECTION E.6 FACILITY OPERATION CONDITIONS~~

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

~~(c) Milled grain cooking operation, identified as process P-4, which includes the following:~~

~~(1) Milled grain cooking operation consisting of the following major components; Two (2) process condensate tanks, two (2) slurry mix tanks, four (4) liquification tanks, and two (2) yeast tanks. The emissions from these tanks will be controlled by four (4) Thermal Oxidizers, C-6A through C-6D. Each thermal oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).~~

~~(2) Two (2) ammonia tanks.~~

~~(d) Fermentation operation, identified as process P-5, with a maximum throughput of 24,700 gallons per hour, controlled by two (2) CO_2 scrubbers, C-5A and C-5B. The exhaust gas stream from the scrubbers may be sent to an offsite company for further processing of the CO_2 gas stream or vented directly to the atmosphere. The source has the option to use urea as well as sodium bisulfite in either of the CO_2 scrubbers. This operation includes the following:~~

~~(1) Fourteen (14) fermenters, with a combined processing rate of 24,700 gallon per hour.~~

~~(2) Two (2) beer well, #1 and #2, with a combined processing rate of 24,700 gallons per hour, controlled by the two (2) CO_2 scrubbers, C-5A and C-5B.~~

~~(e) Distillation and dehydration operations, identified as process P-6, with a throughput of 24,700 gallons per hour consisting of the following emission units:~~

~~(1) Two (2) beer columns, #1 and #2, controlled by either of the four (4) Thermal Oxidizers, C-6A through C-6D. Each Thermal Oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).~~

~~(2) Two (2) side strippers, #1 and #2, controlled by either of the four (4) Thermal Oxidizers, C-6A through C-6D.~~

~~(3) Two (2) rectifier columns, #1 and #2, controlled by either of the four (4) Thermal Oxidizers, C-6A through C-6D.~~

~~(4) Four (4) molecular sieves.~~

~~(5) Two (2) 200 proof condensers.~~

~~(6) Two (2) whole stillage tanks,~~

~~(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, consisting of~~

~~the following emission units:~~

~~(1) Eight (8) centrifuges.~~

~~(2) Two (2)Thin Stillage tanks.~~

~~(3) Two (2) evaporator systems.~~

~~(4) Two (2) syrup tanks~~

~~(g) DDGS handling, storage and loadout operations, identified as process P-8, with a rate of 726,930 tons (dry basis) of DDGS per year consisting of the following emission units:~~

~~(1) One (1) DDGS storage building, which includes supporting equipment; two (2) enclosed DDGS conveyors, EP-23 and EP-24, controlled by two (2) DDGS receiving filters, C-8A and C-8B.~~

~~(2) Three (3) truck loadouts, EP-25 through EP-27, with a total maximum rate of 165 tons (dry basis) per hour, controlled by three (3) baghouses (C-8C, C-8D and C-8E).~~

~~(3) One (1) rail loadout, EP-28, with a maximum rate of 400 tons (dry basis) per hour, controlled by one (1) baghouse (C-8F).~~

~~(h) Denatured ethanol loadout, identified as process P-9, consisting of one (1) truck loadout, one (1) rail loadout and one (1) barge loadout, with a total maximum throughput of 227.4 million gallons per year. These three (3) loading racks are controlled by enclosed Flare system C-9. The flare is fueled by natural gas and has a pilot gas flare heat input capacity of 0.092 MMBtu/hr.~~

~~(i) Product Storage, identified as process P-10, consisting of the following emission units:~~

~~(1) Five (5) 200 proof above ground storage tanks, identified as Tk 001 through Tk005, each has a capacity of 172,000 gallons.~~

~~(2) One (1) denaturant storage tank, identified as Tk006, with a capacity of 105,000 gallons.~~

~~(3) Four (4) denatured ethanol storage tanks, identified as Tk007 through Tk010, each has a capacity of 1,406,000 gallons.~~

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

~~National Emisions Standards for Hazardous Air Pollutants (NESHAP)~~

~~E.6.1 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]~~

~~(a) Pursuant to 40 CFR 63.3901, 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, except as otherwise specified in 40 CFR Part 63, Subpart .~~

~~(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:~~

~~Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, MC61-53 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

E.6.2 Miscellaneous Organic Chemical Manufacturing NESHAP [40 CFR Part 63, Subpart FFFF] [326 IAC 20-84]

Pursuant to 326 IAC 20-84-1 and 40 CFR Part 63, Subpart FFFF, the Permittee shall comply with the provisions of Standard of Performance for Miscellaneous Organic Chemical Manufacturing, which are incorporated by reference as 326 IAC 20-84, as specified as follows:

Subpart FFFF—National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

What This Subpart Covers

§ 63.2430 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous organic chemical manufacturing. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits, operating limits, and work practice standards.

§ 63.2435 Am I subject to the requirements in this subpart?

(a) You are subject to the requirements in this subpart if you own or operate miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source of hazardous air pollutants (HAP) emissions as defined in section 112(a) of the Clean Air Act (CAA).

(b) An MCPU includes equipment necessary to operate a miscellaneous organic chemical manufacturing process, as defined in §63.2550, that satisfies all of the conditions specified in paragraphs (b)(1) through (3) of this section. An MCPU also includes any assigned storage tanks and transfer racks; equipment in open systems that is used to convey or store water having the same concentration and flow characteristics as wastewater; and components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used to manufacture any material or family of materials described in paragraphs (b)(1)(i) through (v) of this section.

(1) The MCPU produces material or family of materials that is described in paragraph (b)(1)(i), (ii), (iii), (iv), or (v) of this section.

(i) An organic chemical(s) classified using the 1987 version of SIC code 282, 283, 284, 285, 286, 287, 289, or 386, except as provided in paragraph (c)(5) of this section.

(3) The MCPU is not an affected source or part of an affected source under another subpart of this part 63, except for process vents from batch operations within a chemical manufacturing process unit (CMPU), as identified in §63.100(j)(4). For this situation, the MCPU is the same as the CMPU as defined in §63.100, and you are subject only to the requirements for batch process vents in this subpart.

(d) If the predominant use of a transfer rack loading arm or storage tank (including storage tanks in series) is associated with a miscellaneous organic chemical manufacturing process, and the loading arm or storage tank is not part of an affected source under a subpart of this part 63, then you must assign the loading arm or storage tank to the MCPU for that miscellaneous organic chemical manufacturing process. If the predominant use cannot be determined, then you may assign the loading arm or storage tank to any MCPU that shares it and is subject to this subpart. If the use varies from year to year, then you must base the determination on the utilization that occurred during the year preceding November 10, 2003 or, if the loading arm or storage tank was not in operation during that year, you must base the use on the expected use for the first 5-year period after startup. You must include the determination in the notification of compliance status report specified in §63.2520(d). You must redetermine the primary use at least once every 5 years, or any time you implement emissions averaging or pollution prevention after the compliance date.

(e) For nondedicated equipment used to create at least one MCPU, you may elect to develop process unit groups (PUG), determine the primary product of each PUG, and comply with the requirements of the subpart in 40 CFR part 63 that applies to that primary product as specified in §63.2535(l).

§ 63.2440 What parts of my plant does this subpart cover?

(a) This subpart applies to each miscellaneous organic chemical manufacturing affected source.

(b) The miscellaneous organic chemical manufacturing affected source is the facilitywide collection of MCPU and heat exchange systems, wastewater, and waste management units that are associated with manufacturing materials described in §63.2435(b)(1).

(c) A new affected source is described by either paragraph (c)(1) or (2) of this section.

(1) Each affected source defined in paragraph (b) of this section for which you commenced construction or reconstruction after April 4, 2002, and you meet the applicability criteria at the time you commenced construction or reconstruction.

Compliance Dates

§ 63.2445 When do I have to comply with this subpart?

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

(2) If you startup your new affected source after November 10, 2003, then you must comply with the requirements for new sources in this subpart upon startup of your affected source.

(c) You must meet the notification requirements in §63.2515 according to the dates specified in that section and in subpart A of this part 63. Some of the notifications must be submitted before you are required to comply with the emission limits, operating limits, and work practice standards in this subpart.

(f) If you have a small control device for process vent or transfer rack emissions that becomes a large control device, as defined in §63.2550(i), you must comply with monitoring and associated recordkeeping and reporting requirements for large control devices beginning on the date the switch occurs. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.

Emission Limits, Work Practice Standards, and Compliance Requirements

§ 63.2450 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits and work practice standards in Tables 1 through 7 to this subpart at all times, except during periods of startup, shutdown, and malfunction (SSM), and you must meet the requirements specified in §§63.2455 through 63.2490 (or the alternative means of compliance in §63.2495, §63.2500, or §63.2505), except as specified in paragraphs (b) through (s) of this section. You must meet the notification, reporting, and recordkeeping requirements specified in §§63.2515, 63.2520, and 63.2525.

(b) *Determine halogenated vent streams.* You must determine if an emission stream is a halogenated vent stream, as defined in §63.2550, by calculating the mass emission rate of halogen atoms in accordance with §63.115(d)(2)(v). Alternatively, you may elect to designate the emission stream as halogenated.

(c) *Requirements for combined emission streams.* When organic HAP emissions from different emission types (*e.g.*, continuous process vents, batch process vents, storage tanks, transfer operations, and waste management units) are combined, you must comply with the requirements of either paragraph (c)(1) or (2) of this section.

(1) Comply with the applicable requirements of this subpart for each kind of organic HAP emissions in the stream (*e.g.*, the requirements of Table 1 to this subpart for continuous process vents and the requirements of Table 4 to this subpart for emissions from storage tanks).

~~(2) Determine the applicable requirements based on the hierarchy presented in paragraphs (c)(2)(i) through (vi) of this section. For a combined stream, the applicable requirements are specified in the highest-listed paragraph in the hierarchy that applies to any of the individual streams that make up the combined stream. For example, if a combined stream consists of emissions from Group 1 batch process vents and any other type of emission stream, then you must comply with the requirements in paragraph (c)(2)(i) of this section for the combined stream; compliance with the requirements in paragraph (c)(2)(i) of this section constitutes compliance for the other emission streams in the combined stream. Two exceptions are that you must comply with the requirements in Table 3 to this subpart and §63.2465 for all process vents with hydrogen halide and halogen HAP emissions, and recordkeeping requirements for Group 2 applicability or compliance are still required (*e.g.*, the requirement in §63.2525(f) to track the number of batches produced and calculate rolling annual emissions for processes with Group 2 batch process vents).~~

~~(i) The requirements of Table 2 to this subpart and §63.2460 for Group 1 batch process vents, including applicable monitoring, recordkeeping, and reporting.~~

~~(ii) The requirements of Table 1 to this subpart and §63.2455 for continuous process vents that are routed to a control device, as defined in §63.981, including applicable monitoring, recordkeeping, and reporting.~~

~~(iii) The requirements of Table 5 to this subpart and §63.2475 for transfer operations, including applicable monitoring, recordkeeping, and reporting.~~

~~(d) [Reserved]~~

~~(e) *Requirements for control devices.* (1) Except when complying with §63.2485, if you reduce organic HAP emissions by venting emissions through a closed vent system to any combination of control devices (except a flare) or recovery devices, you must meet the requirements of §63.982(c) and the requirements referenced therein.~~

~~(2) Except when complying with §63.2485, if you reduce organic HAP emissions by venting emissions through a closed vent system to a flare, you must meet the requirements of §63.982(b) and the requirements referenced therein.~~

~~(f) *Requirements for flare compliance assessments.* (1) As part of a flare compliance assessment required in §63.987(b), you have the option of demonstrating compliance with the requirements of §63.11(b) by complying with the requirements in either §63.11(b)(6)(i) or §63.987(b)(3)(ii).~~

~~(2) If you elect to meet the requirements in §63.11(b)(6)(i), you must keep flare compliance assessment records as specified in paragraphs (f)(2)(i) and (ii) of this section.~~

~~(i) Keep records as specified in §63.998(a)(1)(i), except that a record of the heat content determination is not required.~~

~~(ii) Keep records of the flare diameter, hydrogen content, exit velocity, and maximum permitted velocity. Include these records in the flare compliance report required in §63.999(a)(2).~~

~~(g) *Requirements for performance tests.* The requirements specified in paragraphs (g)(1) through (5) of this section apply instead of or in addition to the requirements specified in subpart SS of this part 63.~~

~~(1) Conduct gas molecular weight analysis using Method 3, 3A, or 3B in appendix A to part 60 of this chapter.~~

~~(2) Measure moisture content of the stack gas using Method 4 in appendix A to part 60 of this chapter.~~

~~4) As an alternative to using Method 18, Method 25/25A, or Method 26/26A of 40 CFR part 60, appendix A, to comply with any of the emission limits specified in Tables 1 through 7 to this subpart, you may use Method 320 of 40 CFR part 60, appendix A. When using Method 320, you must follow the analyte spiking procedures of section 13 of Method 320, unless you demonstrate that the complete spiking procedure has been conducted at a similar source.~~

~~(5) Section 63.997(e)(1) does not apply. For the purposes of this subpart, results of all initial compliance demonstrations must be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in §63.2520(d)(1).~~

(h) *Design evaluation.* To determine the percent reduction of a small control device that is used to comply with an emission limit specified in Table 1, 2, 3, or 5 to this subpart, you may elect to conduct a design evaluation as specified in §63.1257(a)(1) instead of a performance test as specified in subpart SS of this part 63. You must establish the value(s) and basis for the operating limits as part of the design evaluation. For continuous process vents, the design evaluation must be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions. For transfer racks, the design evaluation must demonstrate that the control device achieves the required control efficiency during the reasonably expected maximum transfer loading rate.

(i) *Outlet concentration correction for combustion devices.* When §63.997(e)(2)(iii)(C) requires you to correct the measured concentration at the outlet of a combustion device to 3 percent oxygen if you add supplemental combustion air, the requirements in either paragraph (i)(1) or (2) of this section apply for the purposes of this subpart.

(1) You must correct the concentration in the gas stream at the outlet of the combustion device to 3 percent oxygen if you add supplemental gases, as defined in §63.2550, to the vent stream, or;

(2) You must correct the measured concentration for supplemental gases using Equation 1 of §63.2460; you may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas.

(k) *Continuous parameter monitoring*. The provisions in paragraphs (k)(1) through (6) of this section apply in addition to the requirements for continuous parameter monitoring system (CPMS) in subpart SS of this part 63.

(1) You must record the results of each calibration check and all maintenance performed on the CPMS as specified in §63.998(c)(1)(ii)(A).

(2) When subpart SS of this part 63 uses the term "a range" or "operating range" of a monitored parameter, it means an "operating limit" for a monitored parameter for the purposes of this subpart.

(3) As an alternative to continuously measuring and recording pH as specified in §§63.994(c)(1)(i) and 63.998(a)(2)(ii)(D), you may elect to continuously monitor and record the caustic strength of the effluent. For halogen scrubbers used to control only batch process vents you may elect to monitor and record either the pH or the caustic strength of the scrubber effluent at least once per day.

(l) *Startup, shutdown, and malfunction.* Sections 63.152(f)(7)(ii) through (iv) and 63.998(b)(2)(iii) and (b)(6)(i)(A), which apply to the exclusion of monitoring data collected during periods of SSM from daily averages, do not apply for the purposes of this subpart.

(m) *Reporting*. (1) When §§63.2455 through 63.2490 reference other subparts in this part 63 that use the term "periodic report," it means "compliance report" for the purposes of this subpart. The compliance report must include the information specified in §63.2520(e), as well as the information specified in referenced subparts.

(2) When there are conflicts between this subpart and referenced subparts for the due dates of reports required by this subpart, reports must be submitted according to the due dates presented in this subpart.

(3) Excused excursions, as defined in subparts G and SS of this part 63, are not allowed.

(n) [Reserved]

(p) Opening a safety device, as defined in §63.2550, is allowed at any time conditions require it to avoid unsafe conditions.

(r) *Surge control vessels and bottoms receivers.* For each surge control vessel or bottoms receiver that meets the capacity and vapor pressure thresholds for a Group 1 storage tank, you must meet emission limits and work practice standards specified in Table 4 to this subpart.

(s) For the purposes of determining Group status for continuous process vents, batch process vents, and storage tanks in §§63.2455, 63.2460, and 63.2470, hydrazine is to be considered an organic HAP.

§ 63.2455 What requirements must I meet for continuous process vents?

(a) You must meet each emission limit in Table 1 to this subpart that applies to your continuous process vents, and you must meet each applicable requirement specified in paragraphs (b) through (c) of this section.

(b) For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in §63.115(d), except as specified in paragraphs (b)(1) through (3) of this section.

(1) You are not required to determine the Group status or the TRE index value for any continuous process vent that is combined with Group 1 batch process vents before a control device or recovery device because the requirements of §63.2450(e)(2)(i) apply to the combined stream.

(2) When a TRE index value of 4.0 is referred to in §63.115(d), TRE index values of 5.0 for existing affected sources and 8.0 for new and reconstructed affected sources apply for the purposes of this subpart.

(3) When §63.115(d) refers to "emission reductions specified in §63.113(a)," the reductions specified in Table 1 to this subpart apply for the purposes of this subpart.

§ 63.2460 What requirements must I meet for batch process vents?

(a) You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in paragraphs (b) and (c) of this section.

(b) *Group status.* If a process has batch process vents, as defined in §63.2550, you must determine the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process using the procedures specified in §63.1257(d)(2)(i) and (ii), except as specified in paragraphs (b)(1) through (7) of this section.

(1) To calculate emissions caused by the heating of a vessel without a process condenser to a temperature lower than the boiling point, you must use the procedures in §63.1257(d)(2)(i)(C)(*3*).

(2) To calculate emissions from depressurization of a vessel without a process condenser, you must use the procedures in §63.1257(d)(2)(i)(D)(*10*).

(3) To calculate emissions from vacuum systems for the purposes of this subpart, the receiving vessel is part of the vacuum system, and terms used in Equation 33 to 40 CFR part 63, subpart GGG, are defined as follows:

P_{system} = absolute pressure of the receiving vessel;

P_i = partial pressure of the HAP determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver;

P_j = partial pressure of condensables (including HAP) determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver;

MW_{HAP} = molecular weight of the HAP determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver.

(5) You may elect to designate the batch process vents within a process as Group 1 and not calculate uncontrolled emissions under either of the situations in paragraph (b)(5)(i), (ii), or (iii) of this section.

(i) If you comply with the alternative standard specified in §63.2505.

(ii) If all Group 1 batch process vents within a process are controlled; you conduct the performance test under hypothetical worst case conditions, as defined in §63.1257(b)(8)(i)(B); and the emission profile is based on capture and control system limitations as specified in §63.1257(b)(8)(ii)(C).

(iii) If you comply with an emission limit using a flare that meets the requirements specified in §63.987.

(6) You may change from Group 2 to Group 1 in accordance with either paragraph (b)(6)(i) or (ii) of this section. You must comply with the requirements of this section and submit the test report in the next Compliance report.

(i) You may switch at any time after operating as Group 2 for at least 1 year so that you can show compliance with the 10,000 pounds per year (lb/yr) threshold for Group 2 batch process vents for at least 365 days before the switch. You may elect to start keeping records of emissions from Group 2 batch process vents before the compliance date. Report a switch based on this provision in your next compliance report in accordance with §63.2520(e)(10)(i).

(ii) If the conditions in paragraph (b)(6)(i) of this section are not applicable, you must provide a 60-day advance notice in accordance with §63.2520(e)(10)(ii) before switching.

(7) As an alternative to determining the uncontrolled organic HAP emissions as specified in §63.1257(d)(2)(i) and (ii), you may elect to demonstrate that non-reactive organic HAP are the only HAP used in the process and non-reactive HAP usage in the process is less than 10,000 lb/yr. You must provide data and supporting rationale in your notification of compliance status report explaining why the non-reactive organic HAP usage will be less than 10,000 lb/yr. You must keep records of the non-reactive organic HAP usage as specified in §63.2525(e)(2) and include information in compliance reports as specified in §63.2520(e)(5)(iv).

§ 63.2470 What requirements must I meet for storage tanks?

(a) You must meet each emission limit in Table 4 to this subpart that applies to your storage tanks, and you must meet each applicable requirement specified in paragraphs (b) through (e) of this section.

(2) When the term "storage vessel" is used in subparts SS and WW of this part 63, the term "storage tank," as defined in §63.2550 applies for the purposes of this subpart.

(e) *Vapor balancing alternative.* As an alternative to the emission limits specified in Table 4 to this subpart, you may elect to implement vapor balancing in accordance with §63.1253(f), except as specified in paragraphs (e)(1) through (3) of this section.

(1) When §63.1253(f)(6)(i) refers to a 90 percent reduction, 95 percent applies for the purposes of this subpart.

(2) To comply with §63.1253(f)(6)(i), the owner or operator of an offsite cleaning or reloading facility must comply with §§63.2445 through 63.2550 instead of complying with §63.1253(f)(7)(ii), except as specified in paragraph (e)(2)(i) or (ii) of this section.

(i) The reporting requirements in §63.2520 do not apply to the owner or operator of the offsite cleaning or reloading facility.

(ii) As an alternative to complying with the monitoring, recordkeeping, and reporting provisions in §§63.2445 through 63.2550, the owner or operator of an offsite cleaning or reloading facility may comply as specified in §63.2535(a)(2) with any other subpart of this part 63 which has monitoring, recordkeeping, and reporting provisions as specified in §63.2535(a)(2).

(3) You may elect to set a pressure relief device to a value less than the 2.5 pounds per square inch gage pressure (psig) required in §63.1253(f)(5) if you provide rationale in your notification of compliance status report explaining why the alternative value is sufficient to prevent breathing losses at all times.

(4) You may comply with the vapor balancing alternative in §63.1253(f) when your storage tank is filled from a barge. All requirements for tank trucks and railcars specified in §63.1253(f) also apply to barges, except as specified in §63.2470(e)(4)(i).

(i) When §63.1253(f)(2) refers to pressure testing certifications, the requirements in 40 CFR 61.304(f) apply for barges.

(ii) [Reserved]

§ 63.2475 What requirements must I meet for transfer racks?

(a) You must comply with each emission limit and work practice standard in Table 5 to this subpart that applies to your transfer racks, and you must meet each applicable requirement in paragraphs (b) and (c) of this section.

(b) When the term "high throughput transfer rack" is used in subpart SS of this part 63, the term "Group 1 transfer rack," as defined in §63.2550, applies for the purposes of this subpart.

§ 63.2480 What requirements must I meet for equipment leaks?

(a) You must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section.

§ 63.2500 How do I comply with emissions averaging?

(b) The batch process vents in an MCPU collectively are considered one individual emission point for the purposes of emissions averaging, except that only individual batch process vents must be excluded to meet the requirements of §63.150(d)(5).

(c) References in §63.150 to §§63.112 through 63.130 mean the corresponding requirements in §§63.2450 through 63.2490, including applicable monitoring, recordkeeping, and reporting.

(d) References to "periodic reports" in §63.150 mean "compliance report" for the purposes of this subpart.

(e) For batch process vents, estimate uncontrolled emissions for a standard batch using the procedures in §63.1257(d)(2)(i) and (ii) instead of the procedures in §63.150(g)(2). Multiply the calculated emissions per batch by the number of batches per month when calculating the monthly emissions for use in calculating debits and credits.

(f) References to "storage vessels" in §63.150 mean "storage tank" as defined in §63.2550 for the purposes of this subpart.

§ 63.2505 How do I comply with the alternative standard?

As an alternative to complying with the emission limits and work practice standards for process vents and storage tanks in Tables 1 through 4 to this subpart and the requirements in §§63.2455 through 63.2470, you may comply with the emission limits in paragraph (a) of this section and demonstrate compliance in accordance with the requirements in paragraph (b) of this section.

(a) *Emission limits and work practice standards.* (1) You must route vent streams through a closed-vent system to a control device that reduces HAP emissions as specified in either paragraph (a)(1)(i) or (ii) of this section.

(i) If you use a combustion control device, it must reduce HAP emissions as specified in paragraphs (a)(1)(i)(A), (B), and (C) of this section.

(A) To an outlet TOC concentration of 20 parts per million by volume (ppmv) or less.

(b) *Compliance requirements.* To demonstrate compliance with paragraph (a) of this section, you must meet the requirements of §63.1258(b)(5) beginning no later than the initial compliance date specified in §63.2445, except as specified in paragraphs (b)(1) through (9) of this section.

(2) When §63.1258(b)(5)(i) refers to §§63.1253(d) and 63.1254(c), the requirements in paragraph (a) of this section apply for the purposes of this subpart FFFF.

Notification, Reports, and Records

§ 63.2515 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.

(2) As specified in §63.9(b)(3), if you startup your new affected source on or after November 10, 2003, you must submit an initial notification not later than 120 calendar days after you become subject to this subpart.

(c) *Notification of performance test.* If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1). For any performance test required as part of the initial compliance procedures for batch process vents in Table 2 to this subpart, you must also submit the test plan required by §63.7(c) and the emission profile with the notification of the performance test.

§ 63.2520 What reports must I submit and when?

(a) You must submit each report in Table 11 to 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 11 to this subpart and according to paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.2445 and ending on June 30 or December 31, whichever date is the first date following the end of the first 6 months after the compliance date that is specified for your affected source in §63.2445.

(2) The first compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the first reporting period specified in paragraph (b)(1) of this section.

(3) 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) Each subsequent compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 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 (4) of this section.

(c) *Precompliance report.* You must submit a precompliance report to request approval for any of the items in paragraphs (c)(1) through (7) of this section. We will either approve or disapprove the report within 90 days after we receive it. If we disapprove the report, you must still be in compliance with the emission limitations and work practice standards in this subpart by the compliance date. To change any of the information submitted in the report, you must notify us 60 days before the planned change is to be implemented.

(1) Requests for approval to set operating limits for parameters other than those specified in §§63.2455 through 63.2485 and referenced therein. Alternatively, you may make these requests according to §63.8(f).

(2) Descriptions of daily or per batch demonstrations to verify that control devices subject to §63.2460(c)(5) are operating as designed.

(3) A description of the test conditions, data, calculations, and other information used to establish operating limits according to §63.2460(c)(3).

(7) For fabric filters that are monitored with bag leak detectors, an operation and maintenance plan that describes proper operation and maintenance procedures, and a corrective action plan that describes corrective actions to be taken, and the timing of those actions, when the PM concentration exceeds the set point and activates the alarm.

(d) *Notification of compliance status report.* You must submit a notification of compliance status report according to the schedule in paragraph (d)(1) of this section, and the notification of compliance status report must contain the information specified in paragraph (d)(2) of this section.

(1) You must submit the notification of compliance status report no later than 150 days after the applicable compliance date specified in §63.2445.

(2) The notification of compliance status report must include the information in paragraphs (d)(2)(i) through (ix) of this section.

(i) The results of any applicability determinations, emission calculations, or analyses used to identify and quantify HAP usage or HAP emissions from the affected source.

(ii) The results of emissions profiles, performance tests, engineering analyses, design evaluations, flare compliance assessments, inspections and repairs, and calculations used to demonstrate initial compliance according to §§63.2455 through 63.2485. For performance tests, results must include descriptions of sampling and analysis procedures and quality assurance procedures.

~~(iii) Descriptions of monitoring devices, monitoring frequencies, and the operating limits established during the initial compliance demonstrations, including data and calculations to support the levels you establish.~~

~~(iv) All operating scenarios.~~

~~(v) Descriptions of worst-case operating and/or testing conditions for control devices.~~

~~(vi) Identification of parts of the affected source subject to overlapping requirements described in §63.2535 and the authority under which you will comply.~~

~~(vii) The information specified in §63.1039(a)(1) through (3) for each process subject to the work practice standards for equipment leaks in Table 6 to this subpart.~~

~~(viii) Identify storage tanks for which you are complying with the vapor balancing alternative in §63.2470(e).~~

~~(ix) Records as specified in §63.2535(l)(1) through (3) of process units used to create a PUG and calculations of the initial primary product of the PUG.~~

~~(e) *Compliance report*. The compliance report must contain the information specified in paragraphs (e)(1) through (10) 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) For each SSM during which excess emissions occur, the compliance report must include records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP, and include a brief description of each malfunction.~~

~~(5) The compliance report must contain the information on deviations, as defined in §63.2550, according to paragraphs (e)(5)(i), (ii), (iii), and (iv) of this section.~~

~~(i) If there are no deviations from any emission limit, operating limit or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.~~

~~(ii) For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply with the emission limit or work practice standard in this subpart, you must include the information in paragraphs (e)(5)(ii)(A) through (C) of this section. This includes periods of SSM.~~

~~(A) The total operating time of the affected source during the reporting period.~~

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

~~(C) Operating logs of processes with batch vents from batch operations for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks.~~

~~(iii) For each deviation from an emission limit or operating limit occurring at an affected source where you are using a CMS to comply with an emission limit in this subpart, you must include the information in paragraphs (e)(5)(iii)(A) through (L) of this section. This includes periods of SSM.~~

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

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

~~(C) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.~~

~~(D) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total operating time of the affected source during that reporting period.~~

~~(E) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.~~

~~(F) 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 affected source during that reporting period.~~

~~(G) An identification of each HAP that is known to be in the emission stream.~~

~~(H) A brief description of the process units.~~

~~(I) A brief description of the CMS.~~

~~(J) The date of the latest CMS certification or audit.~~

~~(K) Operating logs of processes with batch vents from batch operations for each day(s) during which the deviation occurred.~~

~~(L) The operating day or operating block average values of monitored parameters for each day(s) during which the deviation occurred.~~

~~(iv) If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive HAP is the only HAP and usage is less than 10,000 lb/yr, the total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, or total uncontrolled hydrogen halide and halogen HAP emissions from all batch process vents and continuous process vents in a process are less than 1,000 lb/yr, include the records associated with each calculation required by §63.2525(e) that exceeds an applicable HAP usage or emissions threshold.~~

~~(6) If you use a CEMS, and there were no periods during which it was out-of-control as specified in §63.8(c)(7), include a statement that there were no periods during which the CEMS was out-of-control during the reporting period.~~

~~(7) Include each new operating scenario which has been operated since the time period covered by the last compliance report and has not been submitted in the notification of compliance status report or a previous compliance report. For each new operating scenario, you must provide verification that the operating conditions for any associated control or treatment device have not been exceeded and that any required calculations and engineering analyses have been performed. For the purposes of this paragraph, a revised operating scenario for an existing process is considered to be a new operating scenario.~~

~~(8) Records of process units added to a PUG as specified in §63.2525(i)(4) and records of primary product redeterminations as specified in §63.2525(i)(5).~~

~~(9) Applicable records and information for periodic reports as specified in referenced subparts F, G, H, SS, UU, WW, and GGG of this part and subpart F of 40 CFR part 65.~~

~~(10) *Notification of process change*. (i) Except as specified in paragraph (e)(10)(ii) of this section, whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. The notification must include all of the information in paragraphs (e)(10)(i)(A) through (C) of this section.~~

~~(A) A description of the process change.~~

~~(B) Revisions to any of the information reported in the original notification of compliance status report under paragraph (d) of this section.~~

~~(C) Information required by the notification of compliance status report under paragraph (d) of this section for changes involving the addition of processes or equipment at the affected source.~~

~~(ii) You must submit a report 60 days before the scheduled implementation date of any of the changes identified in paragraph (e)(10)(ii)(A), (B), or (C) of this section.~~

~~(A) Any change to the information contained in the precompliance report.~~

~~(B) A change in the status of a control device from small to large.~~

~~(C) A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in §63.2460(b)(6)(i).~~

~~[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38560, July 1, 2005; 71 FR 40336, July 14, 2006]~~

~~*§ 63.2525 What records must I keep?*~~

~~You must keep the records specified in paragraphs (a) through (k) of this section.~~

~~(a) Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.~~

~~(b) Records of each operating scenario as specified in paragraphs (b)(1) through (8) of this section.~~

~~(1) A description of the process and the type of process equipment used.~~

~~(2) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in §63.2505; wastewater point of determination (POD); storage tanks; and transfer racks.~~

~~(3) The applicable control requirements of this subpart, including the level of required control, and for vents, the level of control for each vent.~~

~~(4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device.~~

~~(5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s).~~

~~(6) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process.~~

~~(7) Calculations and engineering analyses required to demonstrate compliance.~~

~~(8) For reporting purposes, a change to any of these elements not previously reported, except for paragraph (b)(5) of this section, constitutes a new operating scenario.~~

~~(c) A schedule or log of operating scenarios for processes with batch vents from batch operations updated each time a different operating scenario is put into effect.~~

~~(d) The information specified in paragraphs (d)(1) and (2) of this section for Group 1 batch process vents in compliance with a percent reduction emission limit in Table 2 to this subpart if some of the vents are controlled to less the percent reduction requirement.~~

~~(1) Records of whether each batch operated was considered a standard batch.~~

~~(2) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.~~

~~(e) The information specified in paragraph (e)(2), (3), or (4) of this section, as applicable, for each process with Group 2 batch process vents or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. No records are required for situations described in paragraph (e)(1) of this section.~~

~~(1) No records are required if you documented in your notification of compliance status report that the MCPU meets any of the situations described in paragraph (e)(1)(i), (ii), or (iii) of this section.~~

~~(i) The MCPU does not process, use, or generate HAP.~~

~~(ii) You control the Group 2 batch process vents using a flare that meets the requirements of §63.987.~~

~~(iii) You control the Group 2 batch process vents using a control device for which your determination of worst case for initial compliance includes the contribution of all Group 2 batch process vents.~~

~~(2) If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive organic HAP is the only HAP and usage is less than 10,000 lb/yr, as specified in §63.2460(b)(7), you must keep records of the amount of HAP material used, and calculate the daily rolling annual sum of the amount used no less frequently than monthly. If a record indicates usage exceeds 10,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only usage if the usage during the year is less than 10,000 lb.~~

~~(3) If you documented in your notification of compliance status report that total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, then you must keep records of the number of batches operated and calculate a daily rolling annual sum of batches operated no less frequently than monthly. If the number of batches operated results in organic HAP emissions that exceed 1,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only the number of batches if the number of batches operated during the year results in less than 1,000 lb of organic HAP emissions.~~

~~(4) If you meet none of the conditions specified in paragraphs (e)(1) through (3) of this section, you must keep records of the information specified in paragraphs (e)(4)(i) through (iv) of this section.~~

~~(i) A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.~~

~~(ii) A record of whether each batch operated was considered a standard batch.~~

~~(iii) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.~~

~~(iv) Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.~~

~~(f) A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.2450(s).~~

~~(g) Records of the results of each CPMS calibration check and the maintenance performed, as specified in §63.2450(k)(1).~~

~~(h) For each CEMS, you must keep records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.~~

~~(i) For each PUG, you must keep records specified in paragraphs (i)(1) through (5) of this section.~~

~~(1) Descriptions of the MCPU and other process units in the initial PUG required by §63.2535(l)(1)(v).~~

~~(2) Rationale for including each MCPU and other process unit in the initial PUG (*i.e.*, identify the overlapping equipment between process units) required by §63.2535(l)(1)(v).~~

~~(3) Calculations used to determine the primary product for the initial PUG required by §63.2535(l)(2)(iv).~~

~~(4) Descriptions of process units added to the PUG after the creation date and rationale for including the additional process units in the PUG as required by §63.2535(l)(1)(v).~~

~~(5) The calculation of each primary product redetermination required by §63.2535(l)(2)(iv).~~

(j) In the SSMP required by §63.6(e)(3), you are not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.

(k) For each bag leak detector used to monitor PM HAP emissions from a fabric filter, maintain records of any bag leak detection alarm, including the date and time, with a brief explanation of the cause of the alarm and the corrective action taken.

Other Requirements and Information

§ 63.2535 What compliance options do I have if part of my plant is subject to both this subpart and another subpart?

For any equipment, emission stream, or wastewater stream subject to the provisions of both this subpart and another rule, you may elect to comply only with the provisions as specified in paragraphs (a) through (l) of this section. You also must identify the subject equipment, emission stream, or wastewater stream, and the provisions with which you will comply, in your notification of compliance status report required by §63.2520(d).

(a) *Compliance with other subparts of this part 63.* (1) If you have an MCPU that includes a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63, you must comply with the emission limits; operating limits; work practice standards; and the compliance, monitoring, reporting, and recordkeeping requirements for batch process vents in this subpart, and you must continue to comply with the requirements in subparts F, G, and H of this part 63 that are applicable to the CMPU and associated equipment.

(2) After the compliance dates specified in §63.2445, at an offsite reloading or cleaning facility subject to §63.1253(f), as referenced from §63.2470(e), compliance with the monitoring, recordkeeping, and reporting provisions of any other subpart of this part 63 constitutes compliance with the monitoring, recordkeeping, and reporting provisions of §63.1253(f)(7)(ii) or §63.1253(f)(7)(iii). You must identify in your notification of compliance status report required by §63.2520(d) the subpart of this part 63 with which the owner or operator of the offsite reloading or cleaning facility complies.

(b) *Compliance with 40 CFR parts 264 and 265, subparts AA, BB, and/or CC.* (1) After the compliance dates specified in §63.2445, if a control device that you use to comply with this subpart is also subject to monitoring, recordkeeping, and reporting requirements in 40 CFR part 264, subpart AA, BB, or CC; or the monitoring and recordkeeping requirements in 40 CFR part 265, subpart AA, BB, or CC; and you comply with the periodic reporting requirements under 40 CFR part 264, subpart AA, BB, or CC that would apply to the device if your facility had final permitted status, you may elect to comply either with the monitoring, recordkeeping, and reporting requirements of this subpart; or with the monitoring and recordkeeping requirements in 40 CFR part 264 or 265 and the reporting requirements in 40 CFR part 264, as described in this paragraph (b)(1), which constitute compliance with the monitoring, recordkeeping, and reporting requirements of this subpart. If you elect to comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR parts 264 and/or 265, you must report the information described in §63.2520(e).

(2) After the compliance dates specified in §63.2445, if you have an affected source with equipment that is also subject to 40 CFR part 264, subpart BB, or to 40 CFR part 265, subpart BB, then compliance with the recordkeeping and reporting requirements of 40 CFR parts 264 and/or 265 may be used to comply with the recordkeeping and reporting requirements of this subpart, to the extent that the requirements of 40 CFR parts 264 and/or 265 duplicate the requirements of this subpart.

(c) *Compliance with 40 CFR part 60, subpart Kb and 40 CFR part 61, subpart Y.* After the compliance dates specified in §63.2445, you are in compliance with the provisions of this subpart FFFF for any storage tank that is assigned to an MCPU and that is both controlled with a floating roof and in compliance with the provisions of either 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y. You are in compliance with this subpart FFFF if you have a storage tank with a fixed roof, closed vent system, and control device in compliance with the provisions of either 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, except that you must comply with the monitoring, recordkeeping, and reporting requirements in this subpart FFFF. Alternatively, if a storage tank assigned to an MCPU is subject to control under 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, you may elect to comply only with the requirements for Group 1 storage tanks in this subpart FFFF.

(d) *Compliance with subpart I, GGG, or MMM of this part 63.* After the compliance dates specified in §63.2445, if you have an affected source with equipment subject to subpart I, GGG, or MMM of this part 63, you may elect to comply with the provisions of subpart H, GGG, or MMM of this part 63, respectively, for all such equipment.

(e) *Compliance with subpart GGG of this part 63 for wastewater.* After the compliance dates specified in §63.2445, if you have an affected source subject to this subpart and you have an affected source that generates wastewater streams that meet the applicability thresholds specified in §63.1256, you may elect to comply with the provisions of this subpart FFFF for all such wastewater streams.

(f) *Compliance with subpart MMM of this part 63 for wastewater.* After the compliance dates specified in §63.2445, if you have an affected source subject to this subpart, and you have an affected source that generates wastewater streams that meet the applicability thresholds specified in §63.1362(d), you may elect to comply with the provisions of this subpart FFFF for all such wastewater streams (except that the 99 percent reduction requirement for streams subject to §63.1362(d)(10) still applies).

(g) *Compliance with other regulations for wastewater.* After the compliance dates specified in §63.2445, if you have a Group 1 wastewater stream that is also subject to provisions in 40 CFR parts 260 through 272, you may elect to determine whether this subpart or 40 CFR parts 260 through 272 contain the more stringent control requirements (*e.g.*, design, operation, and inspection requirements for waste management units; numerical treatment standards; etc.) and the more stringent testing, monitoring, recordkeeping, and reporting requirements. Compliance with provisions of 40 CFR parts 260 through 272 that are determined to be more stringent than the requirements of this subpart constitute compliance with this subpart. For example, provisions of 40 CFR parts 260 through 272 for treatment units that meet the conditions specified in §63.138(h) constitute compliance with this subpart. You must identify in the notification of compliance status report required by §63.2520(d) the information and procedures that you used to make any stringency determinations.

(h) *Compliance with 40 CFR part 60, subpart DDD, III, NNN, or RRR.* After the compliance dates specified in §63.2445, if you have an MCPU that contains equipment subject to the provisions of this subpart that are also subject to the provisions of 40 CFR part 60, subpart DDD, III, NNN, or RRR, you may elect to apply this subpart to all such equipment in the MCPU. If an MCPU subject to the provisions of this subpart has equipment to which this subpart does not apply but which is subject to a standard in 40 CFR part 60, subpart DDD, III, NNN, or RRR, you may elect to comply with the requirements for Group 1 process vents in this subpart for such equipment. If you elect any of these methods of compliance, you must consider all total organic compounds, minus methane and ethane, in such equipment for purposes of compliance with this subpart, as if they were organic HAP. Compliance with the provisions of this subpart, in the manner described in this paragraph (h), will constitute compliance with 40 CFR part 60, subpart DDD, III, NNN, or RRR, as applicable.

(i) *Compliance with 40 CFR part 61, subpart BB.* (1) After the compliance dates specified in §63.2445, a Group 1 transfer rack, as defined in §63.2550, that is also subject to the provisions of 40 CFR part 61, subpart BB, you are required to comply only with the provisions of this subpart.

(2) After the compliance dates specified in §63.2445, a Group 2 transfer rack, as defined in §63.2550, that is also subject to the provisions of 40 CFR part 61, subpart BB, is required to comply with the provisions of either paragraph (l)(2)(i) or (ii) of this section.

(i) If the transfer rack is subject to the control requirements specified in §61.302 of 40 CFR part 61, subpart BB, then you may elect to comply with either the requirements of 40 CFR part 61, subpart BB, or the requirements for Group 1 transfer racks under this subpart FFFF.

(ii) If the transfer rack is subject only to reporting and recordkeeping requirements under 40 CFR part 61, subpart BB, then you are required to comply only with the reporting and recordkeeping requirements specified in this subpart for Group 2 transfer racks, and you are exempt from the reporting and recordkeeping requirements in 40 CFR part 61, subpart BB.

(j) *Compliance with 40 CFR part 61, subpart FF.* After the compliance date specified in §63.2445, for a Group 1 or Group 2 wastewater stream that is also subject to the provisions of 40 CFR 61.342(c) through (h), and is not exempt under 40 CFR 61.342(c)(2) or (3), you may elect to comply only with the requirements for Group 1 wastewater streams in this subpart FFFF. If a Group 2 wastewater stream is exempted from 40 CFR 61.342(c)(1) under 40 CFR 61.342(c)(2) or (3), then you are required to comply only with the reporting and recordkeeping requirements specified in this subpart for Group 2 wastewater streams, and you are exempt from the requirements in 40 CFR part 61, subpart FF.

(k) *Compliance with 40 CFR part 60, subpart VV, and 40 CFR part 61, subpart V.* After the compliance date specified in §63.2445, if you have an affected source with equipment that is also subject to the requirements of 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, you may elect to apply this subpart to all such equipment. After the compliance date specified in §63.2445, if you have an affected source with equipment to which this subpart does not apply, but which is subject to the requirements of 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, you may elect to apply this subpart to all such equipment. If you elect either of these methods of compliance, you must consider all total organic compounds, minus methane and ethane, in such equipment for purposes of compliance with this subpart, as if they were organic HAP. Compliance with the provisions of this subpart, in the manner described in this paragraph (k), will constitute compliance with 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V, as applicable.

(l) *Applicability of process units included in a process unit group.* You may elect to develop and comply with the requirements for PUG in accordance with paragraphs (l)(1) through (3) of this section.

(1) *Procedures to create process unit groups.* Develop and document changes in a PUG in accordance with the procedures specified in paragraphs (l)(1)(i) through (v) of this section.

(i) Initially, identify an MCPU that is created from nondedicated equipment that will operate on or after November 10, 2003 and identify all processing equipment that is part of this MCPU, based on descriptions in operating scenarios.

(ii) Add to the group any other nondedicated MCPU and other nondedicated process units expected to be operated in the 5 years after the date specified in paragraph (l)(1)(i) of this section, provided they satisfy the criteria specified in paragraphs (l)(1)(ii)(A) through (C) of this section. Also identify all of the processing equipment used for each process unit based on information from operating scenarios and other applicable documentation.

(A) Each process unit that is added to a group must have some processing equipment that is also part of one or more process units in the group.

(B) No process unit may be part of more than one PUG.

(C) The processing equipment used to satisfy the requirement of paragraph (l)(1)(ii)(A) of this section may not be a storage tank or control device.

(iii) The initial PUG consists of all of the processing equipment for the process units identified in paragraphs (l)(1)(i) and (ii) of this section. As an alternative to the procedures specified in paragraphs (l)(1)(i) and (ii) of this section, you may use a PUG that was developed in accordance with §63.1360(h) as your initial PUG.

(iv) Add process units developed in the future in accordance with the conditions specified in paragraphs (l)(1)(ii)(A) and (B) of this section.

(v) Maintain records that describe the process units in the initial PUG, the procedure used to create the PUG, and subsequent changes to each PUG as specified in §63.2525(i). Submit the records in reports as specified in §63.2520(d)(2)(ix) and (e)(8).

(2) *Determine primary product.* You must determine the primary product of each PUG created in paragraph (l)(1) of this section according to the procedures specified in paragraphs (l)(2)(i) through (iv) of this section.

(i) The primary product is the type of product (*e.g.*, organic chemicals subject to §63.2435(b)(1), pharmaceutical products subject to §63.1250, or pesticide active ingredients subject to §63.1360) expected to be produced for the greatest operating time in the 5-year period specified in paragraph (l)(1)(ii) of this section.

(ii) If the PUG produces multiple types of products equally based on operating time, then the primary product is the type of product with the greatest production on a mass basis over the 5-year period specified in paragraph (l)(1)(ii) of this section.

(iii) At a minimum, you must redetermine the primary product of the PUG following the procedure specified in paragraphs (l)(2)(i) and (ii) of this section every 5 years.

(iv) You must record the calculation of the initial primary product determination as specified in §63.2525(i)(3) and report the results in the notification of compliance status report as specified in §63.2520(d)(8)(ix). You must record the calculation of each redetermination of the primary product as specified in §63.2525(i)(5) and report the calculation in a compliance report submitted no later than the report covering the period for the end of the 5th year after cessation of production of the previous primary product, as specified in §63.2520(e)(8).

(3) *Compliance requirements.* (i) If the primary product of the PUG is determined according to paragraph (l)(2) of this section to be material described in §63.2435(b)(1), then you must comply with this subpart for each MCPU in the PUG. You may also elect to comply with this subpart for all other process units in the PUG, which constitutes compliance with other part 63 rules.

(ii) If the primary product of the PUG is determined according to paragraph (l)(2) of this section to be material not described in §63.2435(b)(1), then you must comply with paragraph (l)(3)(ii)(A), (B), or (C) of this section, as applicable.

(A) If the primary product is subject to subpart GGG of this part 63, then comply with the requirements of subpart GGG for each MCPU in the PUG.

(B) If the primary product is subject to subpart MMM of this part 63, then comply with the requirements of subpart MMM for each MCPU in the PUG.

(C) If the primary product is subject to any subpart in this part 63 other than subpart GGG or subpart MMM, then comply with the requirements of this subpart for each MCPU in the PUG.

(iii) The requirements for new and reconstructed sources in the alternative subpart apply to all MCPU in the PUG if and only if the affected source under the alternative subpart meets the requirements for construction or reconstruction.

§ 63.2540 What parts of the General Provisions apply to me?

Table 12 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.2545 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (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 also has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if 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 paragraphs (b)(1) through (4) of this section are retained by the Administrator of U.S. EPA and are not delegated to the State, local, or tribal agency.

(1) Approval of alternatives to the non-opacity emission limits and work practice standards in §63.2450(a) 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.

§ 63.2550 What definitions apply to this subpart?

(a) For an affected source complying with the requirements in subpart SS of this part 63, the terms used in this subpart and in subpart SS of this part 63 have the meaning given them in §63.981, except as specified in §§63.2450(k)(2) and (m), 63.2470(e)(2), 63.2475(b), and paragraph (i) of this section.

(b) For an affected source complying with the requirements in 40 CFR part 65, subpart F, the terms used in this subpart and in 40 CFR part 65, subpart F have the meaning given to them in §65.2.

(c) For an affected source complying with the requirements in subpart UU of this part 63, the terms used in this subpart and in subpart UU of this part 63 have the meaning given them in §63.1020.

(d) For an affected source complying with the requirements in subpart WW of this part 63, the terms used in this subpart and subpart WW of this part 63 have the meaning given them in §63.1061, except as specified in §§63.2450(m), 63.2470(e)(2), and paragraph (i) of this section.

(e) For an affected source complying with the requirements in §§63.132 through 63.149, the terms used in this subpart and §§63.132 through 63.149 have the meaning given them in §§63.101 and 63.111, except as specified in §63.2450(m) and paragraph (i) of this section.

(f) For an affected source complying with the requirements in §§63.104 and 63.105, the terms used in this subpart and in §§63.104 and 63.105 of this subpart have the meaning given them in §63.101, except as specified in §§63.2450(m), 63.2490(b), and paragraph (i) of this section.

(g) For an affected source complying with requirements in §§63.1253, 63.1257, and 63.1258, the terms used in this subpart and in §§63.1253, 63.1257, and 63.1258 have the meaning given them in §63.1251, except as specified in §63.2450(m) and paragraph (i) of this section.

(h) For an affected source complying with the requirements in 40 CFR part 65, subpart F, the terms used in this subpart and in 40 CFR part 65, subpart F, have the meaning given them in 40 CFR 65.2.

(i) All other terms used in this subpart are defined in the Clean Air Act (CAA), in 40 CFR 63.2, and in this paragraph (i). If a term is defined in §63.2, §63.101, §63.111, §63.981, §63.1020, §63.1061, §63.1251, or §65.2 and in this paragraph (i), the definition in this paragraph (i) applies for the purposes of this subpart.

Ancillary activities means boilers and incinerators (not used to comply with the emission limits in Tables 1 through 7 to this subpart), chillers and refrigeration systems, and other equipment and activities that are not directly involved (*i.e.*, they operate within a closed system and materials are not combined with process fluids) in the processing of raw materials or the manufacturing of a product or isolated intermediate.

Batch operation means a noncontinuous operation involving intermittent or discontinuous feed into equipment, and, in general, involves the emptying of the equipment after the operation ceases and prior to beginning a new operation. Addition of raw material and withdrawal of product do not occur simultaneously in a batch operation.

Batch process vent means a vent from a unit operation or vents from multiple unit operations within a process that are manifolded together into a common header, through which a HAP-containing gas stream is, or has the potential to be, released to the atmosphere. Examples of batch process vents include, but are not limited to, vents on condensers used for product recovery, reactors, filters, centrifuges, and process tanks. The following are not batch process vents for the purposes of this subpart:

(1) Continuous process vents;

(2) Bottoms receivers;

(3) Surge control vessels;

(4) Gaseous streams routed to a fuel gas system(s);

(5) Vents on storage tanks, wastewater emission sources, or pieces of equipment subject to the emission limits and work practice standards in Tables 4, 6, and 7 to this subpart;

~~(6) Drums, pails, and totes;~~

~~(7) Flexible elephant trunk systems that draw ambient air (*i.e.*, the system is not ducted, piped, or otherwise connected to the unit operations) away from operators when vessels are opened; and~~

~~(8) Emission streams from emission episodes that are undiluted and uncontrolled containing less than 50 ppmv HAP are not part of any batch process vent. A vent from a unit operation, or a vent from multiple unit operations that are manifolded together, from which total uncontrolled HAP emissions are less than 200 lb/yr is not a batch process vent; emissions for all emission episodes associated with the unit operation(s) must be included in the determination of the total mass emitted. The HAP concentration or mass emission rate may be determined using any of the following: process knowledge that no HAP are present in the emission stream; an engineering assessment as discussed in §63.1257(d)(2)(ii), except that you do not need to demonstrate that the equations in §63.1257(d)(2)(i) do not apply, and the precompliance reporting requirements specified in §63.1257(d)(2)(ii)(E) do not apply for the purposes of this demonstration; equations specified in §63.1257(d)(2)(i), as applicable; test data using Method 18 of 40 CFR part 60, appendix A; or any other test method that has been validated according to the procedures in Method 301 of appendix A of this part.~~

~~*Biofilter* means an enclosed control system such as a tank or series of tanks with a fixed roof that contact emissions with a solid media (such as bark) and use microbiological activity to transform organic pollutants in a process vent stream to innocuous compounds such as carbon dioxide, water, and inorganic salts. Wastewater treatment processes such as aeration lagoons or activated sludge systems are not considered to be biofilters.~~

~~*Bottoms receiver* means a tank that collects bottoms from continuous distillation before the stream is sent for storage or for further downstream processing.~~

~~*Construction* means the onsite fabrication, erection, or installation of an affected source or MCPU. Addition of new equipment to an MCPU subject to existing source standards does not constitute construction, but it may constitute reconstruction of the affected source or MCPU if it satisfies the definition of reconstruction in §63.2.~~

~~*Consumption* means the quantity of all HAP raw materials entering a process in excess of the theoretical amount used as reactant, assuming 100 percent stoichiometric conversion. The raw materials include reactants, solvents, and any other additives. If a HAP is generated in the process as well as added as a raw material, consumption includes the quantity generated in the process.~~

~~*Continuous operation* means any operation that is not a batch operation.~~

~~*Continuous process vent* means the point of discharge to the atmosphere (or the point of entry into a control device, if any) of a gas stream if the gas stream has the characteristics specified in §63.107(b) through (h), or meets the criteria specified in §63.107(i), except:~~

~~(1) The reference in §63.107(e) to a chemical manufacturing process unit that meets the criteria of §63.100(b) means an MCPU that meets the criteria of §63.2435(b);~~

~~(2) The reference in §63.107(h)(4) to §63.113 means Table 1 to this subpart;~~

~~(3) The references in §63.107(h)(7) to §§63.119 and 63.126 mean Tables 4 and 5 to this subpart; and~~

~~(4) For the purposes of §63.2455, all references to the characteristics of a process vent (*e.g.*, flowrate, total HAP concentration, or TRE index value) mean the characteristics of the gas stream.~~

~~(5) The reference to "total organic HAP" in §63.107(d) means "total HAP" for the purposes of this subpart FFFF.~~

~~(6) The references to an "air oxidation reactor, distillation unit, or reactor" in §63.107 mean any continuous operation for the purposes of this subpart.~~

~~(7) A separate determination is required for the emissions from each MCPU, even if emission streams from two or more MCPU are combined prior to discharge to the atmosphere or to a control device.~~

~~*Dedicated MCPU* means an MCPU that consists of equipment that is used exclusively for one process, except that storage tanks assigned to the process according to the procedures in §63.2435(d) also may be shared by other processes.~~

~~*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 limit, operating limit, or work practice standard; or~~

~~(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 limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.~~

~~*Emission point* means each continuous process vent, batch process vent, storage tank, transfer rack, and wastewater stream.~~

~~*Energetics* means propellants, explosives, and pyrotechnics and include materials listed at 49 CFR 172.101 as Hazard Class I Hazardous Materials, Divisions 1.1 through 1.6.~~

~~*Equipment* means each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in organic HAP service; and any control devices or systems used to comply with Table 6 to this subpart.~~

~~*Excess emissions* means emissions greater than those allowed by the emission limit.~~

~~*Family of materials* means a grouping of materials with the same basic composition or the same basic end use or functionality produced using the same basic feedstocks with essentially identical HAP emission profiles (primary constituent and relative magnitude on a pound per product basis) and manufacturing equipment configuration. Examples of families of materials include multiple grades of the same product or different variations of a product (*e.g.*, blue, black, and red resins).~~

~~*Group 1 batch process vent* means each of the batch process vents in a process for which the collective uncontrolled organic HAP emissions from all of the batch process vents are greater than or equal to 10,000 lb/yr at an existing source or greater than or equal to 3,000 lb/yr at a new source.~~

~~*Group 2 batch process vent* means each batch process vent that does not meet the definition of Group 1 batch process vent.~~

~~*Group 1 continuous process vent* means a continuous process vent for which the flow rate is greater than or equal to 0.005 standard cubic meter per minute, and the total resource effectiveness index value, calculated according to §63.2455(b), is less than or equal to 1.9 at an existing source and less than or equal to 5.0 at a new source.~~

~~*Group 2 continuous process vent* means a continuous process vent that does not meet the definition of a Group 1 continuous process vent.~~

~~*Group 1 storage tank* means a storage tank with a capacity greater than or equal to 10,000 gal storing material that has a maximum true vapor pressure of total HAP greater than or equal to 6.9 kilopascals at an existing source or greater than or equal to 0.69 kilopascals at a new source.~~

~~*Group 2 storage tank* means a storage tank that does not meet the definition of a Group 1 storage tank.~~

~~*Group 1 transfer rack* means a transfer rack that loads more than 0.65 million liters/year of liquids that contain organic HAP with a rack weighted average partial pressure, as defined in §63.111, greater than or equal to 1.5 pound per square inch absolute.~~

~~*Group 2 transfer rack* means a transfer rack that does not meet the definition of a Group 1 transfer rack.~~

~~*Group 1 wastewater stream* means a wastewater stream consisting of process wastewater at an existing or new source that meets the criteria for Group 1 status in §63.2485(c) for compounds in Tables 8 and 9 to this subpart and/or a wastewater stream consisting of process wastewater at a new source that meets the criteria for Group 1 status in §63.132(d) for compounds in Table 8 to subpart G of this part 63.~~

~~*Group 2 wastewater stream* means any process wastewater stream that does not meet the definition of a Group 1 wastewater stream.~~

~~*Halogenated vent stream* means a vent stream determined to have a mass emission rate of halogen atoms contained in organic compounds of 0.45 kilograms per hour or greater determined by the procedures presented in §63.115(d)(2)(v).~~

~~*Halogen atoms* mean chlorine and fluorine.~~

~~*HAP metals* means the metal portion of antimony compounds, arsenic compounds, beryllium compounds, cadmium compounds, chromium compounds, cobalt compounds, lead compounds, manganese compounds, mercury compounds, nickel compounds, and selenium compounds.~~

~~*Hydrogen halide and halogen HAP* means hydrogen chloride, hydrogen fluoride, and chlorine.~~

~~*In organic HAP service* means that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP as determined according to the provisions of §63.180(d). The provisions of §63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.~~

~~*Isolated intermediate* means a product of a process that is stored before subsequent processing. An isolated intermediate is usually a product of a chemical synthesis, fermentation, or biological extraction process. Storage of an isolated intermediate marks the end of a process. Storage occurs at any time the intermediate is placed in equipment used solely for storage. The storage equipment is part of the MCPU that produces the isolated intermediate and is not assigned as specified in §63.2435(d).~~

~~*Large control device* means a control device that controls total HAP emissions of greater than or equal to 10 tpy, before control.~~

~~*Maintenance wastewater* means wastewater generated by the draining of process fluid from components in the MCPU into an individual drain system in preparation for or during maintenance activities. Maintenance wastewater can be generated during planned and unplanned shutdowns and during periods not associated with a shutdown. Examples of activities that can generate maintenance wastewater include descaling of heat exchanger tubing bundles, cleaning of distillation column traps, draining of pumps into an individual drain system, and draining of portions of the MCPU for repair. Wastewater from routine cleaning operations occurring as part of batch operations is not considered maintenance wastewater.~~

~~*Maximum true vapor pressure* has the meaning given in §63.111, except that it applies to all HAP rather than only organic HAP.~~

~~*Miscellaneous organic chemical manufacturing process* means all equipment which collectively function to produce a product or isolated intermediate that are materials described in §63.2435(b). For the purposes of this subpart, process includes any, all or a combination of reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which are used to produce a product or isolated intermediate. A process is also defined by the following:~~

~~(1) Routine cleaning operations conducted as part of batch operations are considered part of the process;~~

~~(2) Each nondedicated solvent recovery operation is considered a single process;~~

~~(3) Each nondedicated formulation operation is considered a single process that is used to formulate numerous materials and/or products;~~

~~(4) Quality assurance/quality control laboratories are not considered part of any process; and~~

~~(5) Ancillary activities are not considered a process or part of any process.~~

(6) The end of a process that produces a solid material is either up to and including the dryer or extruder, or for a polymer production process without a dryer or extruder, it is up to and including the extruder, die plate, or solid-state reactor, except in two cases. If the dryer, extruder, die plate, or solid-state reactor is followed by an operation that is designed and operated to remove HAP solvent or residual HAP monomer from the solid, then the solvent removal operation is the last step in the process. If the dried solid is diluted or mixed with a HAP-based solvent, then the solvent removal operation is the last step in the process.

Nondedicated solvent recovery operation means a distillation unit or other purification equipment that receives used solvent from more than one MCPU.

Nonstandard batch means a batch process that is operated outside of the range of operating conditions that are documented in an existing operating scenario but is still a reasonably anticipated event. For example, a nonstandard batch occurs when additional processing or processing at different operating conditions must be conducted to produce a product that is normally produced under the conditions described by the standard batch. A nonstandard batch may be necessary as a result of a malfunction, but it is not itself a malfunction.

On-site or on site means, with respect to records required to be maintained by this subpart or required by another subpart referenced by this subpart, that records are stored at a location within a major source which encompasses the affected source. On-site includes, but is not limited to, storage at the affected source or MCPU to which the records pertain, or storage in central files elsewhere at the major source.

Operating scenario means, for the purposes of reporting and recordkeeping, any specific operation of an MCPU as described by records specified in §63.2525(b).

Organic group means structures that contain primarily carbon, hydrogen, and oxygen atoms.

Organic peroxides means organic compounds containing the bivalent -o-o-structure which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

Point of determination means each point where process wastewater exits the MCPU or control device.

Note to definition for point of determination: The regulation allows determination of the characteristics of a wastewater stream: At the point of determination; or downstream of the point of determination if corrections are made for changes in flow rate and annual average concentration of soluble HAP and partially soluble HAP compounds as determined according to procedures in §63.144 of subpart G in this part 63. Such changes include losses by air emissions; reduction of annual average concentration or changes in flow rate by mixing with other water or wastewater streams; and reduction in flow rate or annual average concentration by treating or otherwise handling the wastewater stream to remove or destroy HAP.

Predominant HAP means as used in calibrating an analyzer, the single organic HAP that constitutes the largest percentage of the total organic HAP in the analyzed gas stream, by volume.

Process condenser means a condenser whose primary purpose is to recover material as an integral part of an MCPU. All condensers recovering condensate from an MCPU at or above the boiling point or all condensers in line prior to a vacuum source are considered process condensers. Typically, a primary condenser or condensers in series are considered to be integral to the MCPU if they are capable of and normally used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse or for sale for fuel value, use, or reuse. This definition does not apply to a condenser that is used to remove materials that would hinder performance of a downstream recovery device as follows:

(1) To remove water vapor that would cause icing in a downstream condenser, or

(2) To remove water vapor that would negatively affect the adsorption capacity of carbon in a downstream carbon adsorber, or

(3) To remove high molecular weight organic compounds or other organic compounds that would be difficult to remove during regeneration of a downstream carbon adsorber.

~~*Process tank* means a tank or vessel that is used within a process to collect material discharged from a feedstock storage tank or equipment within the process before the material is transferred to other equipment within the process or a product storage tank. A process tank has emissions that are related to the characteristics of the batch cycle, and it does not accumulate product over multiple batches. Surge control vessels and bottoms receivers are not process tanks.~~

~~*Production-indexed HAP consumption factor (HAP factor)* means the result of dividing the annual consumption of total HAP by the annual production rate, per process.~~

~~*Production-indexed VOC consumption factor (VOC factor)* means the result of dividing the annual consumption of total VOC by the annual production rate, per process.~~

~~*Quaternary ammonium compounds* means a type of organic nitrogen compound in which the molecular structure includes a central nitrogen atom joined to four organic groups as well as an acid radical of some sort.~~

~~*Recovery device* means an individual unit of equipment used for the purpose of recovering chemicals from process vent streams and from wastewater streams for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse. For the purposes of meeting requirements in Table 2 to this subpart, the recovery device must not be a process condenser and must recover chemicals to be reused in a process on site. Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units. To be a recovery device for a wastewater stream, a decanter and any other equipment based on the operating principle of gravity separation must receive only multi-phase liquid streams.~~

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

~~*Safety device* means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purposes of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.~~

~~*Shutdown* means the cessation of operation of a continuous operation for any purpose. Shutdown also means the cessation of a batch operation, or any related individual piece of equipment required or used to comply with this subpart, if the steps taken to cease operation differ from those described in a standard batch or nonstandard batch. Shutdown also applies to emptying and degassing storage vessels. Shutdown does not apply to cessation of batch operations at the end of a campaign or between batches within a campaign when the steps taken are routine operations.~~

~~*Small control device* means a control device that controls total HAP emissions of less than 10 tpy, before control.~~

~~*Standard batch* means a batch process operated within a range of operating conditions that are documented in an operating scenario. Emissions from a standard batch are based on the operating conditions that result in highest emissions. The standard batch defines the uncontrolled and controlled emissions for each emission episode defined under the operating scenario.~~

~~*Startup* means the setting in operation of a continuous operation for any purpose; the first time a new or reconstructed batch operation begins production; for new equipment added, including equipment required or used to comply with this subpart, the first time the equipment is put into operation; or for the introduction of a new product/process, the first time the product or process is run in equipment. For batch operations, startup applies to the first time the equipment is put into operation at the start of a campaign to produce a product that has been produced in the past if the steps taken to begin production differ from those specified in a standard batch or nonstandard batch. Startup does not apply when the equipment is put into operation as part of a batch within a campaign when the steps taken are routine operations.~~

~~*Storage tank* means a tank or other vessel that is used to store liquids that contain organic HAP and/or hydrogen halide and halogen HAP and that has been assigned to an MCPU according to the procedures in §63.2435(d). The following are not considered storage tanks for the purposes of this subpart:~~

~~(1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;~~

~~(2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;~~

~~(3) Vessels storing organic liquids that contain HAP only as impurities;~~

~~(4) Wastewater storage tanks;~~

~~(5) Bottoms receivers;~~

~~(6) Surge control vessels; and~~

~~(7) Process tanks.~~

~~*Supplemental gases* means the air that is added to a vent stream after the vent stream leaves the unit operation. Air that is part of the vent stream as a result of the nature of the unit operation is not considered supplemental gases. Air required to operate combustion device burner(s) is not considered supplemental gases.~~

~~*Surge control vessel* means feed drums, recycle drums, and intermediate vessels as part of any continuous operation. Surge control vessels are used within an MCPU when in-process storage, mixing, or management of flowrates or volumes is needed to introduce material into continuous operations.~~

~~*Total organic compounds or (TOC)* means the total gaseous organic compounds (minus methane and ethane) in a vent stream.~~

~~*Transfer rack* means the collection of loading arms and loading hoses, at a single loading rack, that are assigned to an MCPU according to the procedures specified in §63.2435(d) and are used to fill tank trucks and/or rail cars with organic liquids that contain one or more of the organic HAP listed in section 112(b) of the CAA of this subpart. Transfer rack includes the associated pumps, meters, shutoff valves, relief valves, and other piping and valves.~~

~~*Unit operation* means those processing steps that occur within distinct equipment that are used, among other things, to prepare reactants, facilitate reactions, separate and purify products, and recycle materials. Equipment used for these purposes includes, but is not limited to, reactors, distillation columns, extraction columns, absorbers, decanters, dryers, condensers, and filtration equipment.~~

~~*Waste management* unit means the equipment, structure(s), and/or device(s) used to convey, store, treat, or dispose of wastewater streams or residuals. Examples of waste management units include wastewater tanks, air flotation units, surface impoundments, containers, oil-water or organic-water separators, individual drain systems, biological wastewater treatment units, waste incinerators, and organic removal devices such as steam and air stripper units, and thin film evaporation units. If such equipment is being operated as a recovery device, then it is part of a miscellaneous organic chemical manufacturing process and is not a waste management unit.~~

~~*Wastewater* means water that is discarded from an MCPU or control device through a POD and that contains either: an annual average concentration of compounds in Tables 8 and 9 to this subpart of at least 5 ppmw and has an annual average flowrate of 0.02 liters per minute or greater; or an annual average concentration of compounds in Tables 8 and 9 to this subpart of at least 10,000 ppmw at any flowrate. Wastewater means process wastewater or maintenance wastewater. The following are not considered wastewater for the purposes of this subpart:~~

~~(1) Stormwater from segregated sewers;~~

~~(2) Water from fire-fighting and deluge systems, including testing of such systems;~~

~~(3) Spills;~~

~~(4) Water from safety showers;~~

~~(5) Samples of a size not greater than reasonably necessary for the method of analysis that is used;~~

~~(6) Equipment leaks;~~

~~(7) Wastewater drips from procedures such as disconnecting hoses after cleaning lines; and~~

~~(8) Noncontact cooling water.~~

~~*Wastewater stream* means a stream that contains only wastewater as defined in this paragraph (i).~~

~~*Work practice standard* means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.~~

~~*Table 1 to Subpart FFFF of Part 63—Emission Limits and Work Practice Standards for Continuous Process Vents*~~

~~As required in §63.2455, you must meet each emission limit and work practice standard in the following table that applies to your continuous process vents:~~

~~For each . . .~~	~~For which . . .~~	~~Then you must . . .~~
~~1. Group 1 continuous process vent~~	~~a. Not applicable~~	~~i. Reduce emissions of total organic HAP by ≥98 percent by weight or to an outlet process concentration ≤20 ppmv as organic HAP or TOC by venting emissions through a closed vent system to any combination of control devices (except a flare); or~~
~~–~~		~~ii. Reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare; or~~
~~–~~		~~iii. Use a recovery device to maintain the TRE above 1.9 for an existing source or above 5.0 for a new source.~~
~~4. Group 2 continuous process vent at a new source~~	~~You use a recovery device to maintain the TRE level >5.0 but ≤8.0~~	~~Comply with the requirements in §63.993 and the requirements referenced therein.~~

~~*Table 2 to Subpart FFFF of Part 63—Emission Limits and Work Practice Standards for Batch Process Vents*~~

~~As required in §63.2460, you must meet each emission limit and work practice standard in the following table that applies to your batch process vents:~~

~~For each . . .~~	~~Then you must . . .~~	~~And you must . . .~~

For each . . .	Then you must . . .	And you must . . .
1. Process with Group 1 batch process vents	a. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥98 percent by weight by venting emissions from a sufficient number of the vents through one or more closed vent systems to any combination of control devices (except a flare); or	Not applicable.
–	b. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥95 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of recovery devices or a biofilter, except you may elect to comply with the requirements of subpart WW of this part for any process tank; or	Not applicable.
–	c. Reduce uncontrolled organic HAP emissions from one or more batch process vents within the process by venting through a closed-vent system to a flare or by venting through one or more closed vent systems to any combination of control devices (excluding a flare) that reduce organic HAP to an outlet concentration ≤20 ppmv as TOC or total organic HAP.	For all other batch process vents within the process, reduce collective organic HAP emissions as specified in item 1.a and/or item 1.b of this table.

Table 4 to Subpart FFFF of Part 63—Emission Limits for Storage Tanks

As required in §63.2470, you must meet each emission limit in the following table that applies to your storage tanks:

For each . . .	For which . . .	Then you must . . .
1. Group 1 storage tank	b. The maximum true vapor pressure of total HAP at the storage temperature is <76.6 kilopascals	i. Comply with the requirements of subpart WW of this part, except as specified in §63.2470; or

Table 5 to Subpart FFFF of Part 63—Emission Limits and Work Practice Standards for Transfer Racks

As required in §63.2475, you must meet each emission limit and work practice standard in the following table that applies to your transfer racks:

For each . . .	You must . . .
1. Group 1 transfer rack	b. Reduce emissions of total organic HAP by venting emissions through a closed-vent system to a flare;

Table 6 to Subpart FFFF of Part 63—Requirements for Equipment Leaks

As required in §63.2480, you must meet each requirement in the following table that applies to your equipment leaks:

For all . . .	And that is part of . . .	You must . . .
2. Equipment that is in organic HAP service at a new source	a. Any MCPU	i. Comply with the requirements of subpart UU of this part 63 and the requirements referenced therein; or ii. Comply with the requirements of 40 CFR part 65, subpart F.

Table 11 to Subpart FFFF of Part 63—Requirements for Reports

As required in §63.2520(a) and (b), you must submit each report that applies to you on the schedule shown in the following table:

You must submit a(n)	The report must	You must submit the report . . .

	~~contain . . .~~	
~~1. Precompliance report~~	~~The information specified in §63.2520(c)~~	~~At least 6 months prior to the compliance date; or for new sources, with the application for approval of construction or reconstruction.~~
~~2. Notification of compliance status report~~	~~The information specified in §63.2520(d)~~	~~No later than 150 days after the compliance date specified in §63.2445.~~
~~3. Compliance report~~	~~The information specified in §63.2520(e)~~	~~Semiannually according to the requirements in §63.2520(b).~~

~~*Table 12 to Subpart FFFF of Part 63—Applicability of General Provisions to Subpart FFFF*~~

~~As specified in §63.2540, the parts of the General Provisions that apply to you are shown in the following table:~~

~~Citation~~	~~Subject~~	~~Explanation~~
~~§63.1~~	~~Applicability~~	~~Yes.~~
~~§63.2~~	~~Definitions~~	~~Yes.~~
~~§63.3~~	~~Units and Abbreviations~~	~~Yes.~~
~~§63.4~~	~~Prohibited Activities~~	~~Yes.~~
~~§63.5~~	~~Construction/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)(7)~~	~~Compliance Dates for New and Reconstructed Area Sources That Become Major~~	~~Yes.~~
~~§63.6(e)(1)–(2)~~	~~Operation & Maintenance~~	~~Yes.~~
~~§63.6(e)(3)(i), (ii), and (v) through (viii)~~	~~Startup, Shutdown, Malfunction Plan (SSMP)~~	~~Yes, except information regarding Group 2 emission points and equipment leaks is not required in the SSMP, as specified in §63.2525(j).~~
~~§63.6(e)(3)(iii) and (iv)~~	~~Recordkeeping and Reporting During SSM~~	~~No, §63.998(d)(3) and 63.998(c)(1)(ii)(D) through (G) specify the recordkeeping requirement for SSM events, and §63.2520(e)(4) specifies reporting requirements.~~
~~§63.6(e)(3)(ix)~~	~~SSMP incorporation into title V permit~~	~~Yes.~~
~~§63.6(f)(1)~~	~~Compliance Except During SSM~~	~~Yes.~~
~~§63.6(f)(2)–(3)~~	~~Methods for Determining Compliance~~	~~Yes.~~
~~§63.6(g)(1)–(3)~~	~~Alternative Standard~~	~~Yes.~~
~~§63.6(h)~~	~~Opacity/Visible Emission (VE)~~	~~Only for flares for which Method 22~~

Citation	Subject	Explanation
	Standards	observations are required as part of a flare compliance assessment.
§63.6(i)(1)-(14)	Compliance Extension	Yes.
§63.6(j)	Presidential Compliance Exemption	Yes.
§63.7(a)(1)-(2)	Performance Test Dates	Yes, except substitute 150 days for 180 days.
§63.7(a)(3)	Section 114 Authority	Yes, and this paragraph also applies to flare compliance assessments as specified under §63.997(b)(2).
§63.7(b)(1)	Notification of Performance Test	Yes.
§63.7(b)(2)	Notification of Rescheduling	Yes.
§63.7(c)	Quality Assurance/Test Plan	Yes, except the test plan must be submitted with the notification of the performance test if the control device controls batch process vents.
§63.7(d)	Testing Facilities	Yes.
§63.7(e)(1)	Conditions for Conducting Performance Tests	Yes, except that performance tests for batch process vents must be conducted under worst-case conditions as specified in §63.2460.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Yes.
§63.7(e)(3)	Test Run Duration	Yes.
§63.7(f)	Alternative Test Method	Yes.
§63.7(g)	Performance Test Data Analysis	Yes.
§63.7(h)	Waiver of Tests	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Yes.
§63.8(a)(2)	Performance Specifications	Yes.
§63.8(a)(3)	[Reserved]	
§63.8(a)(4)	Monitoring with Flares	Yes.
§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	Yes.
§63.8(c)(1)(ii)	SSM not in SSMP	Yes.

Citation	Subject	Explanation
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	Yes.
§63.8(c)(2)–(3)	Monitoring System Installation	Yes.
§63.8(f)(1)–(5)	Alternative Monitoring Method	Yes, except you may also request approval using the precompliance report.
§63.9(a)	Notification Requirements	Yes.
§63.9(b)(1)–(5)	Initial Notifications	Yes.
§63.9(c)	Request for Compliance Extension	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Source	Yes.
§63.9(e)	Notification of Performance Test	Yes.
§63.9(i)	Adjustment of Submittal Deadlines	Yes.
§63.9(j)	Change in Previous Information	No, §63.2520(e) specifies reporting requirements for process changes.
§63.10(a)	Recordkeeping/Reporting	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	Yes.
§63.10(b)(2)(i)–(ii), (iv), (v)	Records related to SSM	No, §§63.998(d)(3) and 63.998(c)(1)(ii)(D) through (G) specify recordkeeping requirements for periods of SSM.
§63.10(b)(2)(iii)	Records related to maintenance of air pollution control equipment	Yes.
§63.10(b)(2)(vii)–(ix)	Records	Yes.
§63.10(b)(2)(xii)	Records	Yes.
§63.10(b)(2)(xiv)	Records	Yes.
§63.10(b)(3)	Records	Yes.
§63.10(d)(1)	General Reporting Requirements	Yes.
§63.10(d)(2)	Report of Performance Test Results	Yes.
§63.10(d)(4)	Progress Reports	Yes.
§63.10(e)(1)	Additional CEMS Reports	Yes.
§63.10(e)(3)	Reports	No. Reporting requirements are specified in §63.2520.
§63.10(e)(3)(i)–(iii)	Reports	No. Reporting requirements are specified in §63.2520.
§63.10(e)(3)(iv)–(v)	Excess Emissions Reports	No. Reporting requirements are specified in §63.2520.
§63.10(e)(3)(iv)–(v)	Excess Emissions Reports	No. Reporting requirements are specified in §63.2520.

~~Citation~~	~~Subject~~	~~Explanation~~
~~§63.10(e)(3)(vi)-(viii)~~	~~Excess Emissions Report and Summary Report~~	~~No. Reporting requirements are specified in §63.2520.~~
~~§63.10(f)~~	~~Waiver for Recordkeeping/Reporting~~	~~Yes.~~
~~§63.11~~	~~Flares~~	~~Yes.~~
~~§63.12~~	~~Delegation~~	~~Yes.~~
~~§63.13~~	~~Addresses~~	~~Yes.~~
~~§63.14~~	~~Incorporation by Reference~~	~~Yes.~~
~~§63.15~~	~~Availability of Information~~	~~Yes.~~

SECTION E.5 National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

(a) One (1) diesel-fired emergency fire pump, identified as process P-12, installed in 2008, with a capacity of 420 horsepower (HP).

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

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

E.5.1 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 63.6665, 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, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

E.5.2 National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

Pursuant to 326 IAC 20-82-1 and 40 CFR Part 63, Subpart ZZZZ, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, which are incorporated by reference as 326 IAC 20-82, as specified as follows:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585, (a), (c), and (d)
(3) 40 CFR 63.6590, (a), (a)(2)(iii), and (c)(1)
(4) 40 CFR 63.6595(a)(6), (b)
(5) 40 CFR 63.6665
(6) 40 CFR 636.6670
(7) 40 CFR 63.6675

SECTION E.6 National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities [40 CFR 63, Subpart CCCCCC]

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

(c) Fuel dispensing activities, as follows:

(1) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

(A) One (1) gasoline dispensing operation for plant vehicles, installed in 2008, with a maximum throughput of 75 gallons per month [40 CFR 63, Subpart CCCCCC]

(B) Vapor collection-equipped gasoline cargo tanks, installed in 2008.

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

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

E.6.1 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 63.11130, 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, except as otherwise specified in 40 CFR Part 63, Subpart CCCCCC.

E.6.2 National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities [40 CFR 63, Subpart CCCCCC]

Pursuant to 40 CFR Part 63, Subpart CCCCCC, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities, as specified as follows:

(1) 40 CFR 63.11110
(2) 40 CFR 63.11111 (a), (b), (e), (f), (h), (i), (j), and (k)
(3) 40 CFR 63.11112(a) and (b)
(4) 40 CFR 63.11113(a), (a)(1), (d), (d)(1), (e), and (e)(1)
(5) 40 CFR 63.11115
(6) 40 CFR 63.11116
(7) 40 CFR 63.11125(d)
(8) 40 CFR 63.11126(b)
(9) 40 CFR 63.11130
(10) 40 CFR 63.11131
(11) 40 CFR 63.11132
(12) Table 3 to 40 CFR 63 Subpart CCCCCC

Change No. 16 IDEM, OAQ has made the following changes to reporting forms:

All Reports:

- Updated the location address.
- Removed the mailing address.
- Removed the County identification. This information does not need to be included on the report because the permit number already identifies the county location.
- Updated the permit number to reference the current operating permit upon issuance of this renewal.

Emergency Occurrence Report:

- Updated the Branch name to be Compliance and Enforcement Branch.
- Clarified the notification deadlins to be "no later than" rather than "within".
- Clarified that business hours are "daytime" hours only.
- Removed the statement: "A certification is not required for this report."

Quarterly Reports:

- Removed "Compliance Data Section" and replaced it with "Compliance and Enforcement Branch". The Compliance Data Section is part of the Compliance and Enforcement Branch.
- Updated the Facilities for the reports to reflect that half of the equipment that was permitted was never constructed.
- Updated the limits stated on the reports to match the new limits contained in Section D of the permit.
- Clarified that the compliance period is a 12 consecutive month period for each report.
- Clarified the units for the parameters to be reported in each table.
- Removed the statement: "Attach a signed certification to complete this report."
- The reporting forms for emergency generators and emergency fire pumps have been removed. There is no longer a requirement in the permit to report this information.

Quarterly Deviation and Compliance Monitoring Report

- The phrase "of this permit" has been added to the paragraph of the Quarterly Deviation and Compliance Monitoring Report to match the underlying rule.
- IDEM, OAQ has clarified the interaction of the Quarterly Deviation and Compliance Monitoring Report and the Emergency Provisions.
- IDEM, OAQ has clarified the language regarding deviations.

Affidavit of Construction

- This report is removed. It is only required for initial construction of a facility.

Source Name: Aventine Renewable Energy **-** Mt. Vernon LLC
Source Location: ~~2751 Bluff~~**7201 Port** Road, ~~Mt.~~**Mount** Vernon, Indiana 47620
~~Mailing Address: 1300 South Second Street, Pekin, Illinois 61554~~
~~County: Posey~~
~~NSR/~~ Part 70 Operating Permit No.: 129~~-24836~~**-31281-**00051

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: Aventine Renewable Energy **-** Mt. Vernon LLC
Source Location: ~~2751 Bluff~~**7201 Port** Road, ~~Mt.~~**Mount** Vernon, Indiana 47620
~~Mailing Address: 1300 South Second Street, Pekin, Illinois 61554~~
~~County: Posey~~
~~NSR/~~ Part 70 Operating Permit No.: 129~~-24836~~**-31281-**00051

This form consists of 2 pages Page 1 of 2

☐ ~~⊟~~ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), ~~within~~**no later than** four (**4**) **daytime** business hours (1-800-451-6027 or 317-233-0178, ask for Compliance ~~Section~~**and Enforcement Branch**); and
- The Permittee must submit notice in writing or by facsimile ~~within~~**no later than** two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

If any of the following are not applicable, mark N/A Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? ☐ Y ☐ N Describe:

Type of Pollutants Emitted: ☐ TSP ☐, PM-10 ☐, SO_2 ☐, VOC ☐, NO_X ☐, CO ☐, Pb ☐, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed By: _____

Title / Position: _____

Date: _____

Phone: _____

~~A certification is not required for this report.~~

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
~~Compliance Data Section~~
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Aventine Renewable Energy - Mt. Vernon LLC

Source Location: ~~2751 Bluff~~**7201 Port** Road, ~~Mt.~~**Mount** Vernon, Indiana 47620
~~Mailing Address: 1300 South Second Street, Pekin, Illinois 61554~~
~~County: Posey~~
~~NSR/~~ Part 70 Operating Permit No.: 129~~-24836~~**-31281-**00051
Facility: ~~Four~~ **Two (2)** Dryers and ~~Four~~ **Two (2)** Thermal Oxidizers
Parameter: Natural Gas Usage
Total Limit: ~~Condition D.2.2(b) - 3,784~~ **1,892** million cubic feet of natural gas usage per twelve **(12) consecutive** month period, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	Column 1 Natural Gas Usage **for** This Month ~~(cubic feet)~~ **(MMCF)**	Column 2 Natural Gas Usage **for** Previous 11 Months ~~(cubic feet~~ **(MMCF**)	Column 1 + 2 Natural Gas Usage ~~Total~~ **for** 12 ~~Months~~ ~~(cubic feet~~**-Month Period (MMCF**)
~~Month 1~~			
~~Month 2~~			
~~Month 3~~			

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.

Deviation has been reported on: _____

Submitted By: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

~~Attach a signed certification to complete this report~~

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
~~Compliance Data Section~~

COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Aventine Renewable Energy **-** Mt. Vernon LLC
Source Location: ~~2751 Bluff~~**7201 Port** Road, ~~Mt.~~**Mount** Vernon, Indiana 47620
~~Mailing Address: 1300 South Second Street, Pekin, Illinois 61554~~
~~County: Posey~~
~~NSR/~~ Part 70 Operating Permit No.: 129~~-24836~~**-31281-**00051
Facility: ~~Four~~ **Two (2)** DDGS Dryers
Parameter: SO_2 - DDGS Throughput
Limit: ~~Condition D.2.5 - Shall not exceed 726,930~~ **391,148** tons of DDGS throughput to the four dryers per twelve **(12) consecutive** month period, with compliance determined at the end of each month.

QUARTER: _____YEAR:_____

Month	Column 1	Column 2	Column 1 + 2
	DDGS Throughput This Month (tons)	DDGS Throughput Previous 11 Months (tons)	DDGS Throughput Total 12 Months (tons)
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:.

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

~~Attach a signed certification to complete this report~~

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
~~Compliance Data Section~~

COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Aventine Renewable Energy **-** Mt. Vernon LLC
Source Location: ~~2751 Bluff~~**7201 Port** Road, ~~Mt.~~**Mount** Vernon, Indiana 47620
~~Mailing Address: 1300 South Second Street, Pekin, Illinois 61554~~
~~County: Posey~~
~~NSR/~~ Part 70 Operating Permit No.: 129~~-24836-~~**31281-**00051
Facility: Truck~~s,~~ **and** rail and ~~barge~~ loading racks
Parameter: Denatured ethanol loaded out
Limit: ~~Condition D.4.1(b) -~~ Combined limit of ~~227,368,000~~ gallons of denatured ethanol per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____YEAR:_____

Month	Column 1	Column 2	Column 1 + 2
	Denatured Ethanol Loaded Out This Month (gallons)	Denatured Ethanol Loaded Out Previous 11 Months (gallons)	Denatured Ethanol Loaded Out Total 12 Months (gallons)
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.
Deviation/s occurred in this quarter.
Deviation has been reported on:.

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

~~Attach a signed certification to complete this report~~

~~INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT~~
~~OFFICE OF AIR QUALITY~~
~~Compliance Data Section~~

~~Part 70 Quarterly Report~~

Source Name: Aventine Renewable Energy - Mt. Vernon LLC
Source Location: 2751 Bluff Road, Mt. Vernon, Indiana 47620
Mailing Address: 1300 South Second Street, Pekin, Illinois 61554
County: Posey
NSR/ Part 70 Operating Permit No.: 129-24836-00051
Facility: Two Emergency Generators
Parameter: Hours of Operation and diesel fuel usage
Limit: Condition D.6.1(a) - Each generator shall be limited to 99 operating hours per twelve consecutive twelve month period with compliance at the end of each month.

Diesel fuel usage shall not exceed 38,469 gallons per twelve consecutive twelve month period with compliance at the end of each month.

QUARTER: YEAR:

Month	Column 1		Column 2		Column 1 + 2	
	Hours Operated This Month	Diesel Fuel Usage This Month	Hours Operated Previous 11 Months	Diesel Fuel Usage Previous 11 Months	Hours Operated Total 12 Months	Diesel Fuel Usage Previous 11 Months
Month 1						
Month 2						
Month 3						

No deviation occurred in this quarter.
Deviation/s occurred in this quarter.
Deviation has been reported on:.

Submitted by:

Title / Position:

Signature:

Date:

Phone:

Attach a signed certification to complete this report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

Source Name: Aventine Renewable Energy - Mt. Vernon LLC
Source Location: 2751 Bluff Road, Mt. Vernon, Indiana 47620
Mailing Address: 1300 South Second Street, Pekin, Illinois 61554
County: Posey
NSR/ Part 70 Operating Permit No.: 129-24836-00051
Facility: Two Emergency Fire Pumps
Parameter: Hours of Operation
Limit: Condition D.6.1(b) - Each fire pump shall be limited to 99 operating hours per twelve consecutive twelve month period with compliance at the end of each month.

Diesel fuel usage shall not exceed 2,984 gallons per twelve consecutive twelve month period with compliance at the end of each month.

QUARTER: YEAR:

Month	Column 1		Column 2		Column 1 + 2	
	Hours Operated This Month	Diesel Fuel Usage This Month	Hours Operated Previous 11 Months	Diesel Fuel Usage Previous 11 Months	Hours Operated Total 12 Months	Diesel Fuel Usage Previous 11 Months
Month 1						
Month 2						
Month 3						

No deviation occurred in this quarter.
Deviation/s occurred in this quarter.
Deviation has been reported on.

Submitted by:

Title / Position:

Signature:

Date:

Phone:

Attach a signed certification to complete this report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Aventine Renewable Energy - Mt. Vernon LLC

Source Location: ~~2751 Bluff~~**7201 Port** Road, ~~Mt.~~**Mount** Vernon, Indiana 47620
~~Mailing Address: 1300 South Second Street, Pekin, Illinois 61554~~
~~County: Posey~~
~~NSR/~~ Part 70 Operating Permit No.: 129~~-24836~~**-31281-**00051
Facility: ~~Eight~~ **Four (4)** Package Boilers
Parameter: Natural gas usage to limit NOx and CO
Limit: ~~Condition D.8.1 - 6,475~~ **3,237.5** million cubic feet of natural gas usage per twelve **(12) consecutive** month period, with compliance determined at the end of each month.

QUARTER: _____YEAR:_____

Month	Column 1	Column 2	Column 1 + 2
	Natural Gas Usage This Month (~~cubic feet~~ **MMCF**)	Natural Gas Usage Previous 11 Months (~~cubic feet~~ **MMCF**)	Natural Gas Usage Total 12 Months (~~cubic feet~~ **MMCF**)
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on.

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

~~Attach a signed certification to complete this report~~

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
~~Compliance Data Section~~
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Aventine Renewable Energy **-** Mt. Vernon LLC

Source Location: ~~2751 Bluff~~**7201 Port** Road, ~~Mt.~~**Mount** Vernon, Indiana 47620
~~Mailing Address: 1300 South Second Street, Pekin, Illinois 61554~~
~~County: Posey~~
~~NSR/~~ Part 70 Operating Permit No.: 129~~-24836-~~**-31281-**00051

Months: _____ _____ Year: _____

Page 1 of 2

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. ~~Deviations that are~~ **A deviation** required to be reported ~~by~~**pursuant to** an applicable requirement **that exists independent of the permit** shall be reported according to the schedule stated in the applicable requirement and ~~do~~**does** not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation: Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation: Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Page 2 of 2

Permit Requirement (specify permit condition #)

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

Form Completed By: _____

Title / Position: _____

Date: _____

Phone: _____

~~Attach a signed certification to complete this report.~~

~~Mail to: Permit Administration & Development Section~~
~~Office Of Air Quality~~
~~MC 61-53 IGCN 1003~~
~~100 North Senate Avenue~~
~~Indianapolis, Indiana 46204~~

~~Aventine Renewable Energy - Mt. Vernon LLC~~
~~1300 South Second Street~~
~~Pekin, Illinois 61554~~

~~Affidavit of Construction~~

~~I, _____, being duly sworn upon my oath, depose and say:~~
~~(Name of the Authorized Representative)~~

~~1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.~~

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____,I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)

4. I hereby certify that Aventine Renewable Energy - Mt. Vernon LLC, 2751 Bluff Road, Mt. Vernon, Indiana 47620, completed construction of the Ethanol Manufacturing Plant on _____(DATE)____in conformity with the requirements and intent of the New Source Construction/Part 70 Permit application received by the Office of Air Quality on May 30, 2007 and as permitted pursuant to NSR/Part 70 Permit No. 129-24836, Plant ID No. 129-00051 issued on_____(DATE)_____.

5. Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the NSR/Part 70. (Delete this statement if it does not apply.)

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

_____
Signature

_____
Date

STATE OF INDIANA)
_____)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on this _____ day of _____, 20 _____.

My Commission expires:

_____
Signature

_____
Name (typed or printed)

***

Changes to draft permits subsequent to first public notification dated May 8, 2013 through June 7, 2013

The following changes have been made to draft permits Significant Source Modification No. 129-31693-00051 and Part 70 Operating Permit Renewal No. T129-31281-00051 subsequent to the first public notification period dated May 8, 2013 through June 7, 2013 based on public comments submitted May 20, 2013. These changes involve the addition of a NESHAP that requires a re-public notification to give the public a chance to make comments to these changes:

On May 20, 2013, David Boggs submitted comments on the proposed Significant Source Modification and Part 70 Operating Permit Renewal. Additions are **bolded** and deletions are ~~struck through~~ for emphasis. A summary of the comments is as follows:

Comment 1:

IDEM's documents are inconsistent when referencing identification of the Permittee; the correct identity should be affirmed and consistently used.

Response 1:

Documents have been updated with consistent use of 'Aventine Renewable Energy - Mt. Vernon LLC' to identify the Permittee.

Comment 2:

Exclusion of 40 CFR 63 Subpart FFFF requirements from the Draft Permit requires reconsideration and additional justification. The initial Part 70 Operating Permit No. 129-24836-00051 was issued for operation of a major source of HAP, and the permit included 40 CFR 63, Subpart FFFF applicable requirements. The TSD addresses removal of those requirements.

Response 2:

IDEM, OAQ will include the requirements of 40 CFR 63, Subpart FFFF (National Emission Standards for Hazardous Air Pollutants (NESHAP): Miscellaneous Organic Chemical Manufacturing) as described in new Section E.7. Additionally, the NESHAP will be will included in its entirety as Attachment G to the permits.

Section E.7 has been added to the permits as follows:

SECTION E.7 National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing [40 CFR 63, Subpart FFFF]

Emission Unit Descriptions [326 IAC 2-7-5(14)]:

(c) Milled grain cooking operation, identified as process P-4, installed in 2008, which includes the following:

(1) Milled grain cooking operation, consisting of the following major components:

(A) One (1) process condensate tank, installed in 2008,

(B) One (1) slurry mix tank, installed in 2008,

(C) Two (2) liquification tanks, installed in 2008, and

(D) One (1) yeast tank, installed in 2008.

The emissions from these tanks will be controlled by two (2) Thermal Oxidizers, C-6A and C-6B, exhausting to stacks S-6A and S-6B. Each thermal oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) One (1) ammonia tank, installed in 2008.

(d) Fermentation operation, identified as process P-5, installed in 2008, with a maximum throughput of 87,000 gallons of beer per hour or 13,302 gallons of ethanol per hour, controlled by one (1) CO_2 scrubber, C-5A, exhausting to stack S-5A. The maximum undenatured ethanol production rate is 13,302 gallons per hour or 116.5 million gallons per year. The exhaust gas stream from the scrubber may be sent to an offsite company for further processing of the CO_2 gas stream or vented directly to the atmosphere. The source has the option to use a supplemental additive, such as sodium bisulfite, in the CO_2 scrubber. This operation includes the following:

(1) Seven (7) fermenters tanks, installed in 2008.

(2) One (1) beer well tank, installed in 2008, controlled by the CO_2 scrubber, C-5A, exhausting to stack S-5A.

(e) Distillation and dehydration operations, identified as process P-6, installed in 2008, with a throughput of 13,302 gallons of undenatured ethanol per hour (116.5 million gallons of undenatured ethanol per year) consisting of the following emission units:

(1) Two (2) beer columns, #1 and #2, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B. Each Thermal Oxidizer has a heat input capacity of 18 million British thermal units per hour (MMBtu/hr).

(2) One (1) acid reduction column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(3) One (1) rectifier column, #1, installed in 2008, controlled by either of the two (2) Thermal Oxidizers, C-6A, exhausting to stack S-6A, or C-6B, exhausting to stack S-6B.

(4) Two (2) molecular sieves, installed in 2008.

(5) One (1) 200 proof condenser, installed in 2008.

(6) One (1) whole stillage tank, installed in 2008.

(f) Non fermentable, Dry Distillers Grain Solubles (DDGS) operation, identified as process P-7, installed in 2008, , with a maximum throughput of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), consisting of the following emission units:

(1) Four (4) centrifuges, installed in 2008.

(2) One (1) thin stillage tank, installed in 2008.

(3) Two (2) evaporator systems, installed in 2008.

(4) One (1) syrup tank, installed in 2008.

(5) One (1) wet cake pad, installed in 2008.

(6) DDGS drying, #1 and #2, installed in 2008, with a total drying rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour), with two (2) DDGS dryers, each with a heat input capacity of 90 MMBtu/hr. Dryer #1 is controlled by Thermal Oxidizer #1, C-6A, exhausting to stack S-6A, and Dryer #2 is controlled by Thermal Oxidizer #2, C-6B, exhausting to stack S-6B.

(7) Two (2) DDGS coolers, identified as EP-22 (#1) and EP-23 (#2), installed in 2008, with a maximum throughput of 391,148 tons (dry basis) of DDGS per year. Cooler #1 is controlled by Cooler Baghouse #1, C-7A, installed in 2008, and may exhaust to stack S-7A when not being used as make-up air for DDGS Dryer #1. Cooler #2 is controlled by Cooler Baghouse #2, C-7B, installed in 2008, and may exhaust to stack S-7B when not being used as make-up air for DDGS Dryer #2.

(g) DDGS handling, storage and loadout operations, identified as process P-8, installed in 2008, with a rate of 391,148 tons (dry basis) of DDGS per year (44.65 tons per hour) consisting of the following emission units:

(1) One (1) DDGS storage building, installed in 2008, which includes supporting equipment; one (1) enclosed DDGS conveyor, identified as EP-09, with a maximum throughput capacity of 44.65 tons per hour. Particulate emissions between the DDGS storage building and DDGS loadout are controlled by one (1) baghouse, C-8,

exhausting to stack S-8.

(2) One (1) truck loadout, identified as EP-10, installed in 2008, with a maximum rate of 55 tons (dry basis) per hour. Particulate emissions from truck loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(3) One (1) rail loadout, identified as EP-11, installed in 2008, with a maximum rate of 180 tons (dry basis) per hour. Particulate emissions from rail loadout are controlled by one (1) baghouse, C-8, exhausting to stack S-8.

(h) Denatured ethanol loadout, identified as P-9, installed in 2008, with a total maximum throughput of 36,000 gallons per hour or an average throughput of 13,943 gallons per hour (122.1 million gallons per year) consisting of the following emission units:

(1) One (1) truck loadout, identified as EP-24, installed in 2008, and

(2) One (1) rail loadout, identified as EP-25, installed in 2008,

These two (2) loading racks are controlled by enclosed Flare system C-9, installed in 2008. The flare is fueled by natural gas and has a pilot gas flare heat input capacity of 0.092 MMBtu/hr.

(i) Product Storage, identified as process P-10, installed in 2008, consisting of the following emission units:

(1) Three (3) 200 proof above ground storage tanks, identified as Tk001 through Tk003, installed in 2008, each with a capacity of 172,000 gallons.

(2) One (1) denaturant storage tank, identified as Tk004, installed in 2008, with a capacity of 105,000 gallons, and a maximum design capacity less than 20,000 gallons per day throughput.

(3) Two (2) denatured ethanol storage tanks, identified as Tk005 and Tk006, installed in 2008, each storing a denatured ethanol with a Reid Vapor Pressure less than 27.6 kilopascals, each with a capacity of 1,406,000 gallons.

(4) One (1) corrosion inhibitor storage tank, identified as Tk007, installed in 2008, with a capacity of 6,392 gallons.

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

National Emissions Standards for Hazardous Air Pollutants (NESHAP)

E.7.1 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 63.11130, 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, except as otherwise specified in 40 CFR Part 63, Subpart FFFF.

E.7.2 National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing [40 CFR 63, Subpart FFFF]

Pursuant to 40 CFR Part 63, Subpart FFFF, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (included as Attachment G), as specified as follows:

(1) 40 CFR 63.2430
(2) 40 CFR 63.2435 (a), (b)(1)(i), (b)(3), (d), (e)

(3) 40 CFR 63.2440 (a), (b), (c)(1)
(4) 40 CFR 63.2445 (a)(2), (c), (f)
(5) 40 CFR 63.2450 (a), (b), (c)(1), (c)(2)(i-iii), (e)(1-2), (f), (g)(1), (g)(2), (g)(4), (g)(5), (h), (i), (k)(1-3), (l), (m), (p), (r), (s)
(6) 40 CFR 63.2455 (a), (b)(1-3)
(7) 40 CFR 63.2460 (a), (b)(1-3), (b)(5), (b)(6), (b)(7)
(8) 40 CFR 63.2470 (a), (c), (e),
(9) 40 CFR 63.2475 (a), (b)
(10) 40 CFR 63.2480 (a)
(11) 40 CFR 63.2500 (b), (c), (d), (e), (f)
(12) 40 CFR 63.2505 (a)(i)(A), (b)(2)
(13) 40 CFR 63.2515 (a), (b)(2), (c)
(14) 40 CFR 63.2520 (a), (b), (c), (d), (e)
(15) 40 CFR 63.2525 (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k)
(16) 40 CFR 63.2535 (a), (c)
(17) 40 CFR 63.2540
(18) 40 CFR 63.2545
(19) 40 CFR 63.2550
(20) 40 CFR 63.25
Table 1, 2, 4, 5, 6, 11, 12

Comment 3:

The source is not subject to 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); therefore, draft permit condition E.3.2 should not include an election option pursuant to 40 CFR 63.2535(k).

Response 3:

IDEM, OAQ concurs. Condition E.3.2 has been revised as follows:

E.3.2 Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry [40 CFR Part 60, Subpart VVa] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart VVa, the Permittee shall comply with the provisions of Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (included as Attachment C), which are incorporated by reference as 326 IAC 12, as specified as follows ~~unless the Permittee elects to comply with the requirements of 40 CFR Part 63, Subpart FFFF, pursuant to 40 CFR 63.2535(k)~~:

Comment 4:

The compliance monitoring requirements in draft permit condition D.3.8 - Scrubber Parametric Monitoring provide requirements for monitoring and recording scrubber flow rate and pressure drop; however, they lack requirements to monitor and record addition of sodium bisulfite into the scrubber, or otherwise monitor HAP emissions.

Response 4:

Condition D.3.8 has been revised as follows:

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

D.3.8 **Complaince Assurance Monitoring (CAM)** Scrubber Parametric Monitoring [326 IAC 8-5-6] **[40 CFR 64]**

(a) The Permittee shall monitor and record the flow rate of Scrubber C-5A at least once per day when the associated processes are in operation.

(1) The Permittee shall determine the minimum flow rate **and sodium bisulfite injection rate** from the latest valid stack test that demonstrates compliance with the PSD minor limits in Condition D.3.1 and the requirements of 326 IAC 8-5-6 in Condition D.3.2.

(2) On and after the date the stack test results are available, the Permittee shall maintain a flow rate at or above the minimum rate as observed during the latest compliant stack test. When for any one reading, the flow rate is below the above mentioned minimum, the Permittee shall take a reasonable response.

(3) On and after the date the stack test results are available, the Permittee shall maintain a sodium bisulfite injection rate at or above the minimum rate as observed during the latest compliant stack test. When for any one reading, the injection rate is below the above mentioned minimum, the Permittee shall take a reasonable response.

***

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

D.3.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.8, the Permittee shall maintain once per day records of the scrubbing liquid, pressure drop**,** ~~and~~ scrubbing liquid flow rate**, and sodium bisulfite injection rate** from scrubber C-5A. The Permittee shall include in its daily record when scrubbing liquid, pressure drop**,** ~~and~~ scrubbing liquid flow rate**, and sodium bisulfite injection rate** notations are not taken and the reason for the lack of ~~scrubbing liquid, pressure drop and scrubbing liquid flow rate~~ notations (e.g. the process did not operate that day, etc.).

***

Comment 5:

The acetaldehyde outlet concentrations were measured in the range of 26-28 ppm. If control devices achieve 98% control efficiency with an outlet concentration of 27 ppm; back calculation indicates an acetaldehyde inlet concentration of [(27 ppm)/(1.00-0.98) = 1350 ppm] or 0.135%. This may indicate process fluid exists with acetaldehyde concentration greater than 0.1%. Therefore, IDEM must include the requirements of 40 CFR, Subpart VVVVVV in the renewed Part 70 Permit.

Response 5:

It is not appropriate to use the above derived outlet concentration of acetaldehyde in the emissions exhaust stream as a proxy for the acetaldehyde concentration in the feedstock. The source has submitted that the process fluid acetaldehyde concentration is significantly lower than the 0.1% level. Therefore, the source is not subject to the requirements of 40 CFR, Subpart VVVVVV as explained in the TSD.

Comment 6:

IDEM should include compliance assurance monitoring requirements in accordance with 40 CFR Part 64.

Response 6:

The permit has been revised as follows:

D.1.6 **Compliance Assurance Monitoring (CAM)** Visible Emissions Notations **[40 CFR 64]**

***

D.1.7 **Compliance Assurance Monitoring (CAM)** Baghouses Parametric Monitoring **[40 CFR 64]**

***

D.2.13 **Compliance Assurance Monitoring (CAM)** Visible Emissions Notations **[40 CFR 64]**

***

D.2.14 **Compliance Assurance Monitoring (CAM)** Thermal Oxidizers Parametric Monitoring [326 IAC 8-5-6] **[40 CFR 64]**

***

D.2.16 **Compliance Assurance Monitoring (CAM)** Baghouses Parametric Monitoring **[40 CFR 64]**

***

Recommendation

The staff recommends to the Commissioner that the Significant Source Modification and 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 December 19, 2011. Additional information was received on April 20, 2012, April 26, 2012, May 22, 2012, May 23, 2012, May 25, 2012, May 29, 2012, July 23, 2012, July 31, 2012, August 6, 2012, October 26, 2012, and December 4, 2012.

Conclusion

The construction and operation of this stationary ethanol production plant with a maximum undenatured ethanol production rate of 116.325 million gallons per year shall be subject to the conditions of the attached Significant Source Modification No. 129-31693-00051 and Part 70 Operating Permit Renewal No. T129-31281-00051.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Joshua Levering 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) 234-6543 or toll free at 1-800-451-6027 extension 3-0870.

(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

Indiana Department of Environmental Management
Office of Air Quality

Appendix A – Emission Calculations
Technical Support Document (TSD)
Significant Source Modification and
Part 70 Operating Permit Renewal

Source Description and Location

Company Name:	Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip:	7201 Port Road, Mount Vernon, Indiana, 47620
County:	Posey
SIC / NAICS Code:	2869
Significant Source Modification No.:	129-31693-00051
Part 70 Operating Permit Renewal No.:	T129-31281-00051
Permit Reviewer:	Joshua Levering
Date:	April 1, 2013

Summary of Potential to Emit

The tables below summarizes the potential to emit calculations for Aventine Renewable Energy. IDEM has reviewed these calculations and verified their accuracy.

Potential to Emit After Issuance of Modification in tons per year (SSM 129-31693-00051)

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Process	Unit ID	Control Device	Stack ID	Description	CO	NO_X	PM	PM_{10}	$PM_{2.5}$	SO_2	VOC	CO_2e	Acet.	Acr.	Form.	Meth.	Total HAP
P-1	EP-03a	BH C-1B	S-1B	Grain Scalper	--	--	1.95	1.95	1.95	--	--	--	--	--	--	--	--
P-7	EP-20	BH C-7A	S-7A	DDGS Cooler	--	--	2.44	2.44	2.44	--	7.47	--	0.29	0.0964	0.05	0.05	0.48
	EP-21	BH C-7B	S-7B	DDGS Cooler	--	--	2.13	2.13	2.13	--	7.47	--	0.58	0.0964	0.05	0.05	0.77
P-12	EP-30	na	S-12	Fire Pump	0.70	0.69	0.03	0.03	0.03	0.0004	0.26	43.12	6.8E-04	8.2E-05	1.1E-03	--	5.7E-03
F-1		na	S-12	Cooling Tower	--	--	0.82	0.82	0.82	--	--	--	--	--	--	--	--
Total PTE for Modification (ton/yr)					**0.70**	**0.69**	**7.38**	**7.38**	**7.38**	**0.0004**	**15.20**	**43.12**	**0.87**	**0.19**	**0.10**	**0.10**	**1.26**
PSD Major Source Threshold					250	250	250	250	250	250	250	100,000	NA	NA	NA	NA	NA

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Potential to Emit After Issuance

Process	Unit ID	Control Device	Stack ID	Description	CO	NO_X	PM	PM_{10}	$PM_{2.5}$	SO_2	VOC	CO_2e	Acet.	Acr.	Form.	Hex.	Mn	Meth.	Methyl-cyclo-hexane	Total HAP
P-1	EP-01a	BH C-1A	S-1A	Grain Receiving truck dump pit (conveyors & elevators)	--	--	2.02	2.02	2.02	--	--	--	--	--	--	--	--	--	--	--
	EP-01b			Grain Receiving rail dump pit (conveyor & elevator)	--	--				--	--	--	--	--	--	--	--	--	--	--
	EP-02a	na	na	Corn Storage Silo	--	--	15.66	3.95	0.69	--	--	--	--	--	--	--	--	--	--	--
	EP-02b	na	na	Corn Storage Silo	--	--				--	--	--	--	--	--	--	--	--	--	--
	na	na	na	EU-02a/EU02b Storage Silo Conveyors	--	--	38.21	21.30	3.63	--	--	--	--	--	--	--	--	--	--	--
	EP-03a	BH C-1B	S-1B	Grain Scalper	--	--	1.95	1.95	1.95	--	--	--	--	--	--	--	--	--	--	--
	EP-03b			Grain Scalper Surge Bin	--	--				--	--	--	--	--	--	--	--	--	--	--
P-2	EP-05	BH C-2A	S-2A	Hammermill	--	--	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--
	EP-06	BH C-2B	S-2B	Hammermill	--	--	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--
	EP-07	BH C-2C	S-2C	Hammermill	--	--	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--
	EP-08	BH C-2D	S-2D	Hammermill	--	--	1.23	1.23	1.23	--	--	--	--	--	--	--	--	--	--	--

Normal Operating Scenario - DDGS Coolers exhausting to baghouses and baghouse exhaust used as make-up air for DDGS Dryers

P-4	(2)	RTO C-6A	S-6	Milled Grain Cooking (RTO C-6A)	--	--	--	--	--	--	35.51	--	1.06	0.63	0.19	--	--	0.14	--	2.02
P-6	(2)			Distillation & Dehydration (RTO C-6A)	--	--	--	--	--	--		--				--	--		--	
P-7	EP-20			Baghouse C-7A Exhaust (DDGS Cooler #1)	--	--	51.49	51.49	51.49	--		--				--	--		--	
	EP-22			DDGS Dryer (process emissions)	31.10	40.87				19.26		--				--	--		--	
				DDGS Dryer (NG combustion)								61,009				0.83	1.8E-04		--	
	RTO #1			Thermal Oxidizer C-6A (NG combustion)															--	
P-4	(2)	RTO C-6B		Milled Grain Cooking (RTO C-6B)	--	--	--	--	--	--	35.51	--	1.45	0.67	0.19	--	--	0.14	--	2.46
P-6	(2)			Distillation & Dehydration (RTO C-6B)	--	--	--	--	--	--		--				--	--		--	
P-7	EP-21			Baghouse C-7B Exhaust (DDGS Cooler #2)	--	--	51.19	51.19	51.19	--		--				--	--		--	
	EP-23			DDGS Dryer (process emissions)	31.10	40.87				19.26		--				--	--		--	
				DDGS Dryer (NG combustion)								61,009				0.83	1.8E-04		--	
	RTO #2			Thermal Oxidizer C-6B (NG combustion)															--	
				Subtotal (Normal Operating Scenario)	***62.20***	***81.74***	***102.68***	***102.68***	***102.68***	***38.53***	***71.03***	***122,019***	***2.51***	***1.30***	***0.39***	***1.67***	***3.5E-04***	***0.29***	***0***	***4.48***
P-5	EP-15	SC C-5A	V-5	Fermentation Beer Well[1]	--	--	1.05	1.05	1.05	--	36.05	366,487	7.32	0.14	0.05	--	--	0.14	--	7.66
P-7	*EP-19*	*na*	*na*	*Wet Distillers Grain Solubles (WDGS)*	*The Distillers Grains and Solubles (DGS) is either being dried (Dry Distillers Grains Solubles (DDGS) or is not dried (Wet Distillers Grains Solubles (WDGS). The worse case emission rate is DDGS; therefore, no emissions are shown for WDGS.*															
P-8	EP-09	BH C-8B	S-8B	Enclosed DDGS Conveyor (DDGS Storage BLDG)	--	--	0.35	0.35	0.35	--	--	--	--	--	--	--	--	--	--	--
	EP-10			DDGS Truck Loadout																
	EP-11			DDGS Rail Loadout																
	EP-09a	na	S-8A	DDGS Reclaim Conveyor #1	--	--	11.93	0.0091	0.00086	--	--	--	--	--	--	--	--	--	--	--
	EP-09b			DDGS Reclaim Conveyor #2																
P-9	EP-24 & EP-25	F C-9	na	Denatured Ethanol Loading Rack Emissions - Truck/Railcar Loading	5.10	2.04	0.018	0.018	0.018	--	8.87	--	--	--	--	0.11	--	--	*0.02*	0.19
	F C-9	na	na	Flare Pilot Flame (NG combustion)	3.4E-02	4.0E-02	7.7E-04	3.1E-03	3.1E-03	2.4E-04	2.2E-03	51.97	--	--	3.0E-05	7.1E-04	1.5E-07	--	--	7.5E-04
P-11	EP-26	na	S-13	Boiler (NG Combustion)	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	--	--	0.03	0.71	1.5E-04	--	--	0.75
	EP-27			Boiler (NG Combustion)	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	--	--	0.03	0.71	1.5E-04	--	--	0.75
	EP-28			Boiler (NG Combustion)	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	--	--	0.03	0.71	1.5E-04	--	--	0.75
	EP-29			Boiler (NG Combustion)	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	--	--	0.03	0.71	1.5E-04	--	--	0.75
P-12	EP-30	na	S-12	Fire Pump	0.70	0.69	0.03	0.03	0.03	0.0004	0.26	43.12	6.8E-04	8.2E-05	1.1E-03	--	--	--	--	5.7E-03
Total PTE (excluding fugitives & Biogenic CO_2e)					**97.17**	**133.08**	**187.13**	**146.59**	**125.66**	**39.48**	**119.45**	**330,902**	**9.83**	**1.45**	**0.55**	**4.64**	**9.6E-04**	**0.43**	**0.02**	**15.33**
P-1	FS002	na	na	Grain Receiving TRUCK dump pit	--	--	2.68	0.60	0.60	--	--	--	--	--	--	--	--	--	--	--
				Grain Receiving RAIL dump pit																
P-8	FS003 - EP-09	na	na	DDGS Storage Building - Fugitive	--	--	0.032	0.0078	0.0078	--	--	--	--	--	--	--	--	--	--	--
	FS004 - EP-10 & EP-11	na	na	DDGS TRUCK Loadout - Fugitives	--	--	0.108	0.026	0.026	--	--	--	--	--	--	--	--	--	--	--
				DDGS RAIL Loadout Station 1 - Fugitives																
				DDGS RAIL Loadout Station 2 - Fugitives																
Total PTE (including NSPS fugitives)					**97.17**	**133.08**	**189.96**	**147.22**	**126.30**	**39.48**	**119.45**	**330,902**	**9.83**	**1.45**	**0.55**	**4.64**	**9.6E-04**	**0.43**	**0.02**	**15.33**
F-1		na	S-12	Cooling Tower	--	--	0.82	0.82	0.82	--	--	--	--	--	--	--	--	--	--	--
		na	na	Gasoline Distribution	--	--	--	--	--	--	0.0053	--	--	--	--	--	--	--	--	--
F-3		na	na	Equipment Leaks	--	--	--	--	--	--	19.15	--	--	--	--	--	--	--	--	--
P-10	TK001	na	S-10	Ethanol Day Tank	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--
	TK002			Ethanol Day Tank	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--
	TK003			Ethanol Day Tank	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--
	TK004			Denaturant tank	--	--	--	--	--	--	1.37	--	--	--	--	--	--	--	--	--
	TK005			Denatured Ethanol Tank	--	--	--	--	--	--	0.57	--	--	--	--	--	--	--	--	--
	TK006			Denatured Ethanol Tank																
	TK007			Corrosion Inhibitor Tank	--	--	--	--	--	--	1.2E-02	--	--	--	--	--	--	--	--	--
F-2		na	na	Vehicle Traffic - Paved Roads (in plant only)	--	--	11.11	2.22	0.55	--	--	--	--	--	--	--	--	--	--	--
Total PTE (including all fugitives)					**97.17**	**133.08**	**201.89**	**150.27**	**127.67**	**39.48**	**141.16**	**330,902**	**9.83**	**1.45**	**0.55**	**4.64**	**9.6E-04**	**0.43**	**0.02**	**15.33**

1. CO_2 emissions from fermentation are not counted toward the total greenhouse gases at this time.

2. Emissions from Milled Grain Cooking and Distillation and Dehydration are included in the calculations from the DDGS Drying/Cooling operations since all units are controlled by the same RTO systems.

Part 70 Major Source Threshold	100	100	100	100	100	100	100	100,000	10	10	10	10	10	10	10	25
PSD Major Source Threshold	250	250	250	250	250	250	250	100,000	NA	NA	NA	NA	NA	NA	NA	NA

Nested Activity:	*Boilers are 1 of 28 listed source categories*																			
Boilers	29.14	48.57	8.09	8.09	8.09	0.95	3.24	208,788	0	0	0.12	2.86	6.0E-04	0	0	3.00
Part 70 Major Source Threshold	100	100	100	100	100	100	100	100,000	10	10	10	10	10	10	10	25

Alternate Operating Scenario - DDGS Coolers exhausting to baghouses and stacks S-7A and S-7B

P-4	(2)	RTO C-6A	S-6	Milled Grain Cooking (RTO C-6A)	--	--	--	--	--	--	28.05	--	0.77	0.53	0.14	--	--	0.10	--	1.54
P-6	(2)			Distillation & Dehydration (RTO C-6A)	--	--	--	--	--	--		--				--	--		--	
P-7	EP-22			DDGS Dryer (process emissions)	31.10	40.87	49.06	49.06	49.06	19.26		--				--	--		--	
				DDGS Dryer (NG combustion)								61,009				0.83	1.8E-04		--	
	RTO #1			Thermal Oxidizer C-6A (NG combustion)															--	
P-4	(2)	RTO C-6B		Milled Grain Cooking (RTO C-6B)	--	--	--	--	--	--	28.05	--	0.87	0.58	0.14	--	--	0.10	--	1.69
P-6	(2)			Distillation & Dehydration (RTO C-6B)	--	--	--	--	--	--		--				--	--		--	
P-7	EP-23			DDGS Dryer (process emissions)	31.10	40.87	49.06	49.06	49.06	19.26		--				--	--		--	
				DDGS Dryer (NG combustion)								61,009				0.83	1.8E-04		--	
	RTO #2			Thermal Oxidizer C-6B (NG combustion)															--	
P-7	EP-20	BH C-7A	S-7A	DDGS Cooler	--	--	2.44	2.44	2.44	--	7.47	--	0.29	0.10	0.05	--	--	0.05	--	0.48
	EP-21	BH C-7B	S-7B	DDGS Cooler	--	--	2.13	2.13	2.13	--	7.47	--	0.58	0.10	0.05	--	--	0.05	--	0.77
				Subtotal for AOS	***62.20***	***81.74***	***102.68***	***102.68***	***102.68***	***38.53***	***71.03***	***122,019***	***2.51***	***1.30***	***0.39***	***1.67***	***3.5E-04***	***0.29***	***0***	***4.48***

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Summary of Controlled Emissions

Process	Unit ID	Control Device	Stack ID	Description	CO	NO_X	PM	PM_{10}	$PM_{2.5}$	SO_2	VOC	CO_2e	Acet.	Acr.	Form.	Hex.	Mn	Meth.	cyclo-hexane	Total HAP
P-1	EP-01a	BH C-1A	S-1A	Grain Receiving truck dump pit (conveyors & elevators)	--	--	1.84	1.84	1.84	--	--	--	--	--	--	--	--	--	--	--
	EP-01b			Grain Receiving rail dump pit (conveyor & elevator)	--	--				--	--	--	--	--	--	--	--	--	--	--
	EP-02a	na	na	Corn Storage Silo	--	--	38.33	9.66	1.69	--	--	--	--	--	--	--	--	--	--	--
	EP-02b	na	na	Corn Storage Silo	--	--				--	--	--	--	--	--	--	--	--	--	--
	na	na	na	EU-02a/EU02b Storage Silo Conveyors	--	--	93.51	52.12	8.89	--	--	--	--	--	--	--	--	--	--	--
	EP-03a	BH C-1B	S-1B	Grain Scalper	--	--	1.77	1.77	1.77	--	--	--	--	--	--	--	--	--	--	--
	EP-03b			Grain Scalper Surge Bin	--	--				--	--	--	--	--	--	--	--	--	--	--
P-2	EP-05	BH C-2A	S-2A	Hammermill	--	--	1.18	1.18	1.18	--	--	--	--	--	--	--	--	--	--	--
	EP-06	BH C-2B	S-2B	Hammermill	--	--	1.18	1.18	1.18	--	--	--	--	--	--	--	--	--	--	--
	EP-07	BH C-2C	S-2C	Hammermill	--	--	1.18	1.18	1.18	--	--	--	--	--	--	--	--	--	--	--
	EP-08	BH C-2D	S-2D	Hammermill	--	--	1.12	1.12	1.12	--	--	--	--	--	--	--	--	--	--	--

Normal Operating Scenario - DDGS Coolers exhausting to baghouses and baghouse exhaust used as make-up air for DDGS Dryers

P-4	(2)	RTO C-6A	S-6	Milled Grain Cooking (RTO C-6A)	--	--	--	--	--	--	34.83	--	1.06	0.63	0.19	--	--	0.14	--	2.02
P-6	(2)			Distillation & Dehydration (RTO C-6A)	--	--	--	--	--	--		--				--	--		--	
P-7	EP-20			Baghouse C-7A Exhaust (DDGS Cooler #1)	--	--	51.09	51.09	51.09	--		--				--	--		--	
	EP-22			DDGS Dryer (process emissions)	31.10	40.87				19.26		--				--	--		--	
				DDGS Dryer (NG combustion)								61,009				0.83	1.8E-04		--	
	RTO #1			Thermal Oxidizer C-6A (NG combustion)															--	
P-4	(2)	RTO C-6B		Milled Grain Cooking (RTO C-6B)	--	--	--	--	--	--	34.83	--	1.45	0.67	0.19	--	--	0.14	--	2.46
P-6	(2)			Distillation & Dehydration (RTO C-6B)	--	--	--	--	--	--		--				--	--		--	
P-7	EP-21			Baghouse C-7B Exhaust (DDGS Cooler #2)	--	--	50.83	50.83	50.83	--		--				--	--		--	
	EP-23			DDGS Dryer (process emissions)	31.10	40.87				19.26		--				--	--		--	
				DDGS Dryer (NG combustion)								61,009				0.83	1.8E-04		--	
	RTO #2			Thermal Oxidizer C-6B (NG combustion)															--	
				Subtotal	***62.20***	***81.74***	***101.92***	***101.92***	***101.92***	***38.53***	***69.67***	***122,019***	***2.51***	***1.30***	***0.39***	***1.67***	***3.5E-04***	***0.29***	***0***	***4.48***

P-5	EP-15	SC C-5A	V-5	Fermentation Beer Well[1]	--	--	1.05	1.05	1.05	--	36.05	366,487	7.32	0.14	0.05	--	--	0.14	--	7.66
P-7	*EP-19*	*na*	*na*	*Wet Distillers Grain Solubles (WDGS)*	*The Distillers Grains and Solubles (DGS) is either being dried (Dry Distillers Grains Solubles (DDGS) or is not dried (Wet Distillers Grains Solubles (WDGS). The worse case emission rate is DDGS; therefore, no emissions are shown for WDGS.*															
P-8	EP-09	BH C-8B	S-8B	Enclosed DDGS Conveyor (DDGS Storage BLDG)	--	--	0.32	0.32	0.32	--	--	--	--	--	--	--	--	--	--	--
	EP-10			DDGS Truck Loadout																
	EP-11			DDGS Rail Loadout																
	EP-09a	na	S-8A	DDGS Reclaim Conveyor #1	--	--	11.93	0.0091	0.00086	--	--	--	--	--	--	--	--	--	--	--
	EP-09b			DDGS Reclaim Conveyor #2																
P-9	EP-24 & EP-25	F C-9	na	Denatured Ethanol Loading Rack Emissions - Truck/Railcar Loading	5.10	2.04	0.018	0.018	0.018	--	8.87	--	--	--	--	0.11	--	--	*0.02*	0.19
	F C-9	na	na	Flare Pilot Flame (NG combustion)	3.4E-02	4.0E-02	7.7E-04	3.1E-03	3.1E-03	2.4E-04	2.2E-03	51.97	--	--	3.0E-05	7.1E-04	1.5E-07	--	--	7.5E-04
P-11	EP-26	na	S-13	Boiler (NG Combustion)	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	--	--	0.03	0.71	1.5E-04	--	--	0.75
	EP-27			Boiler (NG Combustion)	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	--	--	0.03	0.71	1.5E-04	--	--	0.75
	EP-28			Boiler (NG Combustion)	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	--	--	0.03	0.71	1.5E-04	--	--	0.75
	EP-29			Boiler (NG Combustion)	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	--	--	0.03	0.71	1.5E-04	--	--	0.75
P-12	EP-30	na	S-12	Fire Pump	0.70	0.69	0.03	0.03	0.03	0.0004	0.26	43.12	3.5E-05	6.8E-04	8.3E-04	--	--	--	--	2.5E-04
Total PTE (excluding fugitives & Biogenic CO_2e)					**97.17**	**133.08**	**263.49**	**181.51**	**130.30**	**39.48**	**118.09**	**330,902**	**9.83**	**1.45**	**0.55**	**4.64**	**9.6E-04**	**0.43**	**0.02**	**15.32**

P-1	FS002	na	na	Grain Receiving TRUCK dump pit	--	--	2.68	0.60	0.60	--	--	--	--	--	--	--	--	--	--	--
				Grain Receiving RAIL dump pit																
P-8	FS003 - EP-09	na	na	DDGS Storage Building - Fugitive	--	--	0.032	0.0078	0.0078	--	--	--	--	--	--	--	--	--	--	--
	FS004 - EP-10 & EP-11	na	na	DDGS TRUCK Loadout - Fugitives	--	--	0.108	0.026	0.026	--	--	--	--	--	--	--	--	--	--	--
				DDGS RAIL Loadout Station 1 - Fugitives																
				DDGS RAIL Loadout Station 2 - Fugitives																
Total PTE (including NSPS fugitives)					**97.17**	**133.08**	**266.31**	**182.14**	**130.93**	**39.48**	**118.09**	**330,902**	**9.83**	**1.45**	**0.55**	**4.64**	**9.6E-04**	**0.43**	**0.02**	**15.32**

F-1		na	S-12	Cooling Tower	--	--	0.82	0.82	0.82	--	--	--	--	--	--	--	--	--	--	--
		na	na	Gasoline Distribution	--	--	--	--	--	--	0.0053	--	--	--	--	--	--	--	--	--
F-3		na	na	Equipment Leaks	--	--	--	--	--	--	6.73	--	--	--	--	--	--	--	--	--
P-10	TK001	na	S-10	Ethanol Day Tank	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--
	TK002			Ethanol Day Tank	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--
	TK003			Ethanol Day Tank	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--
	TK004			Denaturant tank	--	--	--	--	--	--	1.37	--	--	--	--	--	--	--	--	--
	TK005			Denatured Ethanol Tank	--	--	--	--	--	--	0.57	--	--	--	--	--	--	--	--	--
	TK006			Denatured Ethanol Tank																
	TK007			Corrosion Inhibitor Tank	--	--	--	--	--	--	1.2E-02	--	--	--	--	--	--	--	--	--
F-2		na	na	Vehicle Traffic - Paved Roads (in plant only)	--	--	10.20	2.04	0.50	--	--	--	--	--	--	--	--	--	--	--
Total PTE (including all fugitives)					**97.17**	**133.08**	**277.33**	**185.01**	**132.26**	**39.48**	**127.37**	**330,902**	**9.83**	**1.45**	**0.55**	**4.64**	**9.6E-04**	**0.43**	**0.02**	**15.32**

1. CO_2 emissions from fermentation are not counted toward the total greenhouse gases at this time.
2. Emissions from Milled Grain Cooking and Distillation and Dehydration are included in the calculations from the DDGS Drying/Cooling operations since all units are controlled by the same RTO systems.

Part 70 Major Source Threshold					100	100	100	100	100	100	100	100,000	10	10	10	10	10	10	10	25
PSD Major Source Threshold					250	250	250	250	250	250	250	100,000	NA	NA	NA	NA	NA	NA	NA	NA

Nested Activity:				*Boilers are 1 of 28 listed source categories*																
Boilers					29.14	48.57	8.09	8.09	8.09	0.95	3.24	208,788	0	0	0.12	2.86	6.0E-04	0	0	3.00
Part 70 Major Source Threshold					100	100	100	100	100	100	100	100,000	10	10	10	10	10	10	10	25

Alternate Operating Scenario - DDGS Coolers exhausting to baghouses and stacks S-7A and S-7B

P-4	(2)	RTO C-6A	S-6	Milled Grain Cooking (RTO C-6A)	--	--	--	--	--	--	28.05	--	0.77	0.53	0.14	--	--	0.10	--	1.54
P-6	(2)			Distillation & Dehydration (RTO C-6A)	--	--	--	--	--	--		--				--	--		--	
P-7	EP-22			DDGS Dryer (process emissions)	31.10	40.87	49.06	49.06	49.06	19.26		--				--	--		--	
				DDGS Dryer (NG combustion)								61,009				0.83	1.8E-04		--	
	RTO #1			Thermal Oxidizer C-6A (NG combustion)															--	
P-4	(2)	RTO C-6B		Milled Grain Cooking (RTO C-6B)	--	--	--	--	--	--	28.05	--	0.87	0.58	0.14	--	--	0.10	--	1.69
P-6	(2)			Distillation & Dehydration (RTO C-6B)	--	--	--	--	--	--		--				--	--		--	
P-7	EP-23			DDGS Dryer (process emissions)	31.10	40.87	49.06	49.06	49.06	19.26		--				--	--		--	
				DDGS Dryer (NG combustion)								61,009				0.83	1.8E-04		--	
	RTO #2			Thermal Oxidizer C-6B (NG combustion)															--	
P-7	EP-20	BH C-7A	S-7A	DDGS Cooler	--	--	2.44	2.44	2.44	--	6.79	--	0.29	0.10	0.05	--	--	0.05	--	0.48
	EP-21	BH C-7B	S-7B	DDGS Cooler	--	--	2.13	2.13	2.13	--	6.79	--	0.58	0.10	0.05	--	--	0.05	--	0.77
				Subtotal for AOS	***62.20***	***81.74***	***102.68***	***102.68***	***102.68***	***38.53***	***69.67***	***122,019***	***2.51***	***1.30***	***0.39***	***1.67***	***3.5E-04***	***0.29***	***0***	***4.48***

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Summary of Unrestricted Emissions

Process	Unit ID	Control Device	Stack ID	Description	CO	NO_X	PM	PM_{10}	$PM_{2.5}$	SO_2	VOC	CO_2e	Acet.	Acr.	Form.	Hex.	Mn	Meth.	Methyl-cyclo-hexane	Total HAP
P-1	EP-01a	BH C-1A	S-1A	Grain Receiving truck dump pit (conveyors & elevators)	--	--	183.89	183.89	183.89	--	--	--	--	--	--	--	--	--	--	--
	EP-01b			Grain Receiving rail dump pit (conveyor & elevator)	--	--				--	--	--	--	--	--	--	--	--	--	--
	EP-02a	na	na	Corn Storage Silo	--	--	38.33	9.66	1.69	--	--	--	--	--	--	--	--	--	--	--
	EP-02b	na	na	Corn Storage Silo	--	--				--	--	--	--	--	--	--	--	--	--	--
	na	na	na	EU-02a/EU02b Storage Silo Conveyors	--	--	93.51	52.12	8.89	--	--	--	--	--	--	--	--	--	--	--
	EP-03a	BH C-1B	S-1B	Grain Scalper	--	--	176.86	176.86	176.86	--	--	--	--	--	--	--	--	--	--	--
	EP-03b			Grain Scalper Surge Bin	--	--				--	--	--	--	--	--	--	--	--	--	--
P-2	EP-05	BH C-2A	S-2A	Hammermill	--	--	118.40	118.40	118.40	--	--	--	--	--	--	--	--	--	--	--
	EP-06	BH C-2B	S-2B	Hammermill	--	--	118.40	118.40	118.40	--	--	--	--	--	--	--	--	--	--	--
	EP-07	BH C-2C	S-2C	Hammermill	--	--	118.40	118.40	118.40	--	--	--	--	--	--	--	--	--	--	--
	EP-08	BH C-2D	S-2D	Hammermill	--	--	111.71	111.71	111.71	--	--	--	--	--	--	--	--	--	--	--

Normal Operating Scenario - DDGS Coolers exhausting to baghouses and baghouse exhaust used as make-up air for DDGS Dryers

P-4	(2)	RTO C-6A	S-6	Milled Grain Cooking (RTO C-6A)	--	--	--	--	--	--	1,409	--	35.33	24.19	6.62	--	--	4.43	--	70.56
P-6	(2)			Distillation & Dehydration (RTO C-6A)	--	--	--	--	--	--		--				--	--		--	
P-7	EP-20			Baghouse C-7A Exhaust (DDGS Cooler #1)	--	--	252.10	252.10	252.10	--		--				--	--		--	
	EP-22			DDGS Dryer (process emissions)	31.10	40.87				19.26		--				--	--		--	
				DDGS Dryer (NG combustion)								61,009				0.83	1.8E-04		--	
	RTO #1			Thermal Oxidizer C-6A (NG combustion)															--	
P-4	(2)	RTO C-6B		Milled Grain Cooking (RTO C-6B)	--	--	--	--	--	--	1,409	--	40.00	26.38	6.62	--	--	4.43	--	77.42
P-6	(2)			Distillation & Dehydration (RTO C-6B)	--	--	--	--	--	--		--				--	--		--	
P-7	EP-21			Baghouse C-7B Exhaust (DDGS Cooler #2)	--	--	226.91	226.91	226.91	--		--				--	--		--	
	EP-23			DDGS Dryer (process emissions)	31.10	40.87				19.26		--				--	--		--	
				DDGS Dryer (NG combustion)								61,009				0.83	1.8E-04		--	
	RTO #2			Thermal Oxidizer C-6B (NG combustion)															--	
				Subtotal	***62.20***	***81.74***	***479.01***	***479.01***	***479.01***	***38.53***	***2,818***	***122,019***	***75.33***	***50.56***	***13.24***	***1.67***	***3.5E-04***	***8.86***	***0***	***147.98***
P-5	EP-15	SC C-5A	V-5	Fermentation Beer Well[1]	--	--	17.52	17.52	17.52	--	1,802	366,487	332.88	6.57	2.19	--	--	6.57	--	348.21
P-7	*EP-19*	*na*	*na*	*Wet Distillers Grain Solubles (WDGS)*	*The Distillers Grains and Solubles (DGS) is either being dried (Dry Distillers Grains Solubles (DDGS) or is not dried (Wet Distillers Grains Solubles (WDGS). The worse case emission rate is DDGS; therefore, no emissions are shown for WDGS.*															
P-8	EP-09	BH C-8B	S-8B	Enclosed DDGS Conveyor (DDGS Storage BLDG)	--	--	32.13	32.13	32.13	--	--	--	--	--	--	--	--	--	--	--
	EP-10			DDGS Truck Loadout																
	EP-11			DDGS Rail Loadout																
	EP-09a	na	S-8A	DDGS Reclaim Conveyor #1	--	--	11.93	0.0091	0.00086	--	--	--	--	--	--	--	--	--	--	--
	EP-09b			DDGS Reclaim Conveyor #2																
P-9	EP-24 & EP-25	F C-9	na	Denatured Ethanol Loading Rack Emissions - Truck/Railcar Loading	5.10	2.04	0.018	0.018	0.018	--	8.87	--	--	--	--	0.11	--	--	*0.02*	0.19
	F C-9	na	na	Flare Pilot Flame (NG combustion)	3.4E-02	4.0E-02	7.7E-04	3.1E-03	3.1E-03	2.4E-04	2.2E-03	51.97	--	--	3.0E-05	7.1E-04	1.5E-07	--	--	7.5E-04
P-11	EP-26	na	S-13	Boiler (NG Combustion)	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	--	--	0.03	0.71	1.5E-04	--	--	0.75
	EP-27			Boiler (NG Combustion)	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	--	--	0.03	0.71	1.5E-04	--	--	0.75
	EP-28			Boiler (NG Combustion)	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	--	--	0.03	0.71	1.5E-04	--	--	0.75
	EP-29			Boiler (NG Combustion)	7.28	12.14	2.02	2.02	2.02	0.24	0.81	52,197	--	--	0.03	0.71	1.5E-04	--	--	0.75
P-12	EP-30	na	S-12	Fire Pump	0.70	0.69	0.03	0.03	0.03	0.0004	0.26	43.12	3.5E-05	6.8E-04	8.3E-04	--	--	--	--	2.5E-04
Total PTE (excluding fugitives & Biogenic CO_2e)					**97.17**	**133.08**	**1,508**	**1,426**	**1,375**	**39.48**	**4,633**	**330,902**	**408.21**	**57.13**	**15.55**	**4.64**	**9.6E-04**	**15.43**	**0.02**	**499.38**
P-1	FS002	na	na	Grain Receiving TRUCK dump pit	--	--	53.66	11.96	11.96	--	--	--	--	--	--	--	--	--	--	--
				Grain Receiving RAIL dump pit																
P-8	FS003 - EP-09	na	na	DDGS Storage Building - Fugitive	--	--	0.647	0.157	0.157	--	--	--	--	--	--	--	--	--	--	--
	FS004 - EP-10 & EP-11	na	na	DDGS TRUCK Loadout - Fugitives	--	--	2.168	0.526	0.526	--	--	--	--	--	--	--	--	--	--	--
				DDGS RAIL Loadout Station 1 - Fugitives																
				DDGS RAIL Loadout Station 2 - Fugitives																
Total PTE (including NSPS fugitives)					**97.17**	**133.08**	**1,565**	**1,439**	**1,388**	**39.48**	**4,633**	**330,902**	**408.21**	**57.13**	**15.55**	**4.64**	**9.6E-04**	**15.43**	**0.02**	**499.38**
F-1		na	S-12	Cooling Tower	--	--	0.82	0.82	0.82	--	--	--	--	--	--	--	--	--	--	--
		na	na	Gasoline Distribution	--	--	--	--	--	--	0.0053	--	--	--	--	--	--	--	--	--
F-3		na	na	Equipment Leaks	--	--	--	--	--	--	19.15	--	--	--	--	--	--	--	--	--
P-10	TK001	na	S-10	Ethanol Day Tank	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--
	TK002			Ethanol Day Tank	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--
	TK003			Ethanol Day Tank	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--
	TK004			Denaturant tank	--	--	--	--	--	--	1.37	--	--	--	--	--	--	--	--	--
	TK005			Denatured Ethanol Tank	--	--	--	--	--	--	0.57	--	--	--	--	--	--	--	--	--
	TK006			Denatured Ethanol Tank																
	TK007			Corrosion Inhibitor Tank	--	--	--	--	--	--	1.2E-02	--	--	--	--	--	--	--	--	--
F-2		na	na	Vehicle Traffic - Paved Roads (in plant only)	--	--	11.11	2.22	0.55	--	--	--	--	--	--	--	--	--	--	--
Total PTE (including all fugitives)					**97.17**	**133.08**	**1,577**	**1,442**	**1,389**	**39.48**	**4,655**	**330,902**	**408.21**	**57.13**	**15.55**	**4.64**	**9.6E-04**	**15.43**	**0.02**	**499.38**

1. CO_2 emissions from fermentation are not counted toward the total greenhouse gases at this time.
2. Emissions from Milled Grain Cooking and Distillation and Dehydration are included in the calculations from the DDGS Drying/Cooling operations since all units are controlled by the same RTO systems.

Part 70 Major Source Threshold	100	100	100	100	100	100	100	100,000	10	10	10	10	10	10	10	25
PSD Major Source Threshold	250	250	250	250	250	250	250	100,000	NA	NA	NA	NA	NA	NA	NA	NA

Nested Activity:	*Boilers are 1 of 28 listed source categories*																			
Boilers	29.14	48.57	8.09	8.09	8.09	0.95	3.24	208,788	0	0	0.12	2.86	6.0E-04	0	0	3.00
Part 70 Major Source Threshold	100	100	100	100	100	100	100	100,000	10	10	10	10	10	10	10	25

Alternate Operating Scenario - DDGS Coolers exhausting to baghouses and stacks S-7A and S-7B

P-4	(2)	RTO C-6A	S-6	Milled Grain Cooking (RTO C-6A)	--	--	--	--	--	--	1,402	--	35.04	24.09	6.57	--	--	4.38	--	70.08
P-6	(2)			Distillation & Dehydration (RTO C-6A)	--	--	--	--	--	--		--				--	--		--	
P-7	EP-22			DDGS Dryer (process emissions)	31.10	40.87	49.06	49.06	49.06	19.26		--				--	--		--	
				DDGS Dryer (NG combustion)								61,009				0.83	1.8E-04		--	
	RTO #1			Thermal Oxidizer C-6A (NG combustion)															--	
P-4	(2)	RTO C-6B		Milled Grain Cooking (RTO C-6B)	--	--	--	--	--	--	1,402	--	39.42	26.28	6.57	--	--	4.38	--	76.65
P-6	(2)			Distillation & Dehydration (RTO C-6B)	--	--	--	--	--	--		--				--	--		--	
P-7	EP-23			DDGS Dryer (process emissions)	31.10	40.87	49.06	49.06	49.06	19.26		--				--	--		--	
				DDGS Dryer (NG combustion)								61,009				0.83	1.8E-04		--	
	RTO #2			Thermal Oxidizer C-6B (NG combustion)															--	
P-7	EP-20	BH C-7A	S-7A	DDGS Cooler	--	--	203.04	203.04	203.04	--	7.47	--	0.29	0.10	0.05	--	--	0.05	--	0.48
	EP-21	BH C-7B	S-7B	DDGS Cooler	--	--	177.85	177.85	177.85	--	7.47	--	0.58	0.10	0.05	--	--	0.05	--	0.77
				Subtotal for AOS	***62.20***	***81.74***	***479.01***	***479.01***	***479.01***	***38.53***	***2,819***	***122,019***	***75.33***	***50.56***	***13.24***	***1.67***	***3.5E-04***	***8.86***	***0***	***147.98***

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
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Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Summary of Estimated Potential PM and $PM_{10}/PM_{2.5}$ Emission Rates - Grain Receiving, Handling, Milling, and Storage Operations

			PM Emissions						$PM_{10}/PM_{2.5}$ Emissions						
			AP-42 Emission Factor (lb/ton)[3]	Uncaptured Emissions		Capture Efficiency[5]	Fugitive Emissions		Emission Factor (lb/ton)[3]	Uncaptured Emissions		Capture Efficiency[5]	Fugitive Emissions		
Emission Unit ID	Emission Source	Throughput (tons/hr)		lb/hr	tpy		lb/hr	tpy		lb/hr	tpy		lb/hr		tpy
Fugitive Type Releases															
FS002	Grain Receiving - Fugitive[1]	350	0.035	12.25	53.66	95%	0.613	2.68	0.0078	2.73	11.96	95%	0.137		0.60
FS003	DDGS Storage Building - Fugitive[2]	45	0.0033	0.15	0.65	95%	0.0074	0.032	0.00080	0.036	0.16	95%	0.0018		0.0078
FS004	DDGS Loadout - Fugitives[5]	50	0.0099	0.50	2.17	95%	0.025	0.108	0.0024	0.12	0.53	95%	0.0060		0.026
	Subtotal							**2.82**							**0.63**

Process Data							
Grain Required for 116.325 MMgal ethanol:	44.7	MM bushels/yr	44,740,385	bushels/yr	DDGS Solids Rate (solids only - no moisture included)	89,481	lbs/hr
Ethanol Grain Density	56	lb/bushel			DDGS Handling (solids only)	44.7	tons/hr
Total Grain Receiving Throughput	1,252,731	ton/yr	143.01	tons/hr			

Calculation Method:

350 tons thruput per year * 0.035 lbs PM/ton / 2000 lbs per ton * 8760 hr/yr operation = 53.66 tpy uncontrolled
53.66 tpy uncontrolled * (1 - 0.95 control efficiency) = 2.68 tpy controlled

			$PM/PM_{10}/PM_{2.5}$ Emissions					Control Efficiency	Safety Factor	Controlled Emissions + Safety Factor	
			Emission Factor (gr/dscf)[4]	Operation Time (hr/yr)	Controlled Emissions		Uncontrolled Emissions				
Emission Unit ID	Emission Source	Flow (dscfm)[8]			lb/hr	tpy	tpy	(%)	(%)	lb/hr	tpy
EP-01	Grain Receiving Baghouse, C-1A for 1 truck /	26,193	0.00187	8760	0.42	1.84	183.89	99%	10%	0.46	2.02
EP-03a	Grain Scalper Baghouse, C-1B	14,406	0.00327	8760	0.40	1.77	176.86	99%	10%	0.44	1.95
EP-05	Hammermill Baghouse #1, C-2A	10,306	0.00306	8760	0.27	1.18	118.40	99%	10%	0.30	1.30
EP-06	Hammermill Baghouse #2, C-2B	10,306	0.00306	8760	0.27	1.18	118.40	99%	10%	0.30	1.30
EP-07	Hammermill Baghouse #3, C-2C	10,306	0.00306	8760	0.27	1.18	118.40	99%	10%	0.30	1.30
EP-08	Hammermill Baghouse #4, C-2D	9,820	0.00303	8760	0.26	1.12	111.71	99%	10%	0.28	1.23
	Total PTE From Grain Receiving, Handling and Milling				**1.89**	**8.28**	**827.64**	--		**2.08**	**9.10**
EP-09	DDGS Conveyor Baghouse, C-8	2,510	0.00341	8760	0.07	0.32	32.13	99%	10%	0.08	0.35
	Total PTE From DDGS Handling				**0.07**	**0.32**	**32.13**	--		**0.08**	**0.35**
	DDGS Dryer #1 Cooler Baghouse, C-7A	15,192	0.00356	8760	0.46	2.03	203.04	99%	20%	0.56	2.44
	DDGS Dryer #2 Cooler Baghouse, C-7B	15,331	0.00309	8760	0.41	1.78	177.85	99%	20%	0.49	2.13
	Total PTE From DDGS Cooling				**0.87**	**3.81**	**380.90**	--		**1.04**	**4.57**
				Subtotal		**12.41**	**1,240.67**				**14.03**

Calculation Method:

26193 dscfm flow * 0.00187 gr/dscf * 60 min/hr * 1 lb/ 7000 gr = 0.42 lb/hr
0.42 lb/hr * 8760 hr/yr operation time / 2000 lb/ton = 1.84 ton/yr

Uncontrolled Total PTE	**1297.14**	**PM**
	1253.31	**$PM_{10}/PM_{2.5}$**
Controlled Total PTE	**15.23**	**PM**
	13.04	**$PM_{10}/PM_{2.5}$**

Notes:

(1) Grain receiving operation - Majority of potential $PM/PM_{10}/PM_{2.5}$ emissions will be captured by a dry filtration device. Uncaptured emissions have been identified as a fugitive source.

(2) Grain handling and storage operation will be a closed system. Potential PM/PM_{10} emissions will be captured and controlled by a baghouse. Uncontrolled emissions are defined as a fugitive source. Since the DDGS Storage building does not meet the definition of total enclosure, leaks are conservatively estimated at 5%.

(3) Emission factors for fugitive $PM/PM_{10}/PM_{2.5}$ are from AP-42. DDGS loadout is weighted since there are 3 loadout operations.

(4) Emission factors for baghouse based on manufacturer's specifications. Testing is required to demonstrate that these factors are achievable.

(5) The DDGS Loadout operation uses shoot extension with a funnel device such that the loadout system operates similar to a choked flow system; therefore, 95% capture is assumed.

(6) "As-Built" configuration is being addressed under this significant source modification and will also be addressed as an addendum to the Part 70 renewal application dated December 16, 2011.

(7) Change from initial permitting design due to equipment and/or stack testing with no safety factor on tested results.

(8) Conservatively using acfm to represent dscfm.

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Date: April 1, 2013

326 IAC 6-3-2 Particulate Emission Rate Limitations

				Process Weight, P		P<=60,000 lb/hr	P>60,000 lb/hr
				each unit	each unit	$E = 4.10 P^{0.67}$	$E = 55 P^{0.11} - 40$
PM Control Device	**Stack/ Vent**	**Unit ID**	**Process**	P (lb/hr)	P (ton/hr)	E (lb/hr)	E (lb/hr)
Baghouse C-1A	S-1A	EP-01a	Grain Receiving truck dump pit (conveyors & elevators)	700,000	350.0	-	64.76
		EP-01b	Grain Receiving rail dump pit (conveyor & elevator)				
n/a	S-1C	EP-02a	Corn Storage Silo	700,000	350.0	-	64.76
n/a	S-1D	EP-02b	Corn Storage Silo	700,000	350.0	-	64.76
Baghouse C-1B	S-1B	EP-03a	Grain Scalper	392,000	196.0	-	58.29
Baghouse C-1B	S-1B	EP-03b	Surge Bin	700,000	350.0	-	64.76
Baghouse C-2A	S-2A	EP-05	Hammermill	84,000	47.6	-	44.12
Baghouse C-2B	S-2B	EP-06	Hammermill	84,000	47.6	-	44.12
Baghouse C-2C	S-2C	EP-07	Hammermill	84,000	47.6	-	44.12
Baghouse C-2D	S-2D	EP-08	Hammermill	84,000	47.6	-	44.12
Baghouse C-8	S-8	EP-09	Enclosed DDGS Conveyor (DDGS Storage BLDG)	89,481	44.7	-	43.55
		EP-10	DDGS Truck Loadout	100,000	50.0	-	44.58
		EP-11	DDGS Rail Loadout	160,000	80.0	-	49.06
Baghouse C-7A	S-7A	Cooler #1	Cooler #1	44,652	22.3	32.85	-
Baghouse C-7A	S-7B	Cooler #2	Cooler #2	44,652	22.3	32.85	-
n/a	S-6A	Dryer #1	Dryer #1	44,652	22.3	32.85	-
n/a	S-6B	Dryer #2	Dryer #2	44,652	22.3	32.85	-

For P <= 60,000 lb/hr $E = 4.10 P^{0.67}$ where: E = Rate of emission in pounds per hour.
P = Process weight rate in tons per hour.

For P > 60,000 lb/hr $E = 55 P^{0.11} - 40$ where: E = Rate of emission in pounds per hour.
P = Process weight rate in tons per hour.

Notes:
(c) This rule shall not apply if a particulate matter limitation established in:
(1) 326 IAC 2-2-3, concerning prevention of significant deterioration (PSD) best available control technology (BACT) determinations contained in a permit;
(2) 326 IAC 2-3-3, concerning lowest achievable emission rate (LAER) determinations contained in a permit;
(3) 326 IAC 6.5 and 326 IAC 6.8, concerning particulate matter emissions;
(4) 326 IAC 11, concerning existing emission limitations for specific operations;
(5) 326 IAC 12, concerning new source performance standards; or
(6) 326 IAC 20, concerning national emission standards for hazardous air pollutants;

Grain Storage and DDGS Loadout Conveyors

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Significant Source Modification No.: 129-31693-00051
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Permit Reviewer: Joshua Levering
Date: April 1, 2013

1. Unrestricted PTE (based on 350 tph maximum capacity)

Emission Unit ID	Emission Source	Throughput	Emission Factors			Uncontrolled Emissions					
			PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
		ton/hr	*lb/ton*	*lb/ton*	*lb/ton*	*lb/hr*	*lb/hr*	*lb/hr*	*tpy*	*tpy*	*tpy*
EP-02a	Corn Storage Silo	350.0	0.025	0.0063	0.0011	8.75	2.21	0.385	38.33	9.66	1.69
EP-02b	Corn Storage Silo										
na	Storage Silo Conveyor	350	0.061	0.034	0.0058	21.35	11.90	2.030	93.51	52.12	8.89
TOTAL PTE FROM GRAIN STORAGE & HANDLING						**8.75**	**2.21**	**0.39**	**38.33**	**9.66**	**1.69**
EP-09a	DDGS Reclaim Conveyor #1	44.65	0.061	0.034	0.0058	2.72	2.1E-03	2.0E-04	11.93	9.1E-03	8.6E-04
EP-09b	DDGS Reclaim Conveyor #2										
TOTAL PTE FROM DDGS HANDLING						**2.72**	**2.1E-03**	**2.0E-04**	**11.93**	**9.1E-03**	**8.6E-04**

Methodology:
Uncontrolled Emissions (tpy) = Emission Factor (lb/ton) x Throughput (ton/hr) x 8760 hrs/yr x 1 ton/2000 lb
Uncontrolled Emissions (filter systems) = Emission Factor (lb/ton) x Throughput (ton/hr) x Capture Efficiency (%) x 8760 hrs/yr x 1 ton/2000 lb

Notes:
Uncontrolled Emission Factors are from AP-42, Chapter 9.9.1, Table 9.9.1-1. DDGS uses Feed Shipping, SCC 3-02-008-03.

2. Restricted PTE (based on 143 annual average ton per hour)

Emission Unit ID	Emission Source	Throughput	Emission Factors			Uncontrolled Emissions		
			PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
		ton/hr	*lb/ton*	*lb/ton*	*lb/ton*	*tpy*	*tpy*	*tpy*
EP-02a	Corn Storage Silo	143.0	0.025	0.0063	0.0011	15.66	3.95	0.69
EP-02b	Corn Storage Silo							
na	Storage Silo Conveyors	143	0.061	0.034	0.0058	38.21	21.30	3.63
TOTAL PTE FROM GRAIN STORAGE & HANDLING						**53.87**	**25.24**	**4.32**
EP-09a	DDGS Reclaim Conveyor #1	44.65	0.061	0.034	0.0058	11.93	6.65	1.13
EP-09b	DDGS Reclaim Conveyor #2							

Estimated Potential Emissions from DDGS Drying, Distillation and Evaporation - Routed to Regenerative Thermal Oxidizer (RTO)

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Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
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Permit Reviewer: Joshua Levering
Date: April 1, 2013

DDGS Drying Rate (Total):	391,148 tons/year
DDGS Drying Rate (1 Dryer):	195,574 tons/year

$PM/PM_{10}/PM_{2.5}$ Emissions**			
Limited PTE from 1 RTO Stack (lb/hr)*	TotaLimited PTE from 1 RTO Stack (tons/yr)	Limited PTE from 2 RTO Stacks (lbs/hr)	Limited PTE from 2 RTO Stacks (tons/yr)
11.2	49.06	22.4	98.11

VOC Emissions						
Emission Factor (lb/ton)	Uncontrolled Emissions from 1 RTO Stack (tons/yr)	Total Uncontrolled Emissions from 2 RTO Stacks (tons/yr)	RTO Control Efficiency	Limited PTE from 1 RTO Stack (lbs/hr)	Limited PTE from 1 RTO Stack (tons/yr)	Total Limited PTE from 2 RTO Stacks (tons/yr)
14.34	1402.3	2804.5	98.0%	6.4	28.0	56.1

CO Emissions**			
Controlled Emissions from 1 RTO Stack (lbs/hr)	Controlled Emissions from 1 RTO Stack (tons/yr)	Controlled Emissions from 2 RTO Stacks (lbs/hr)	Total Controlled Emissions from 2 RTO Stacks (tons/yr)
7.10	31.10	14.20	62.20

SO_2 Emissions				
Emission Factor (lb/ton)	Limited PTE from 1 Stack (tons/yr)	Limited PTE from 2 Stacks (tons/yr)	Limited Emissions from 1 Stack (tons/yr)	Total Limited Emissions from 2 Stacks (tons/yr)
0.197	19.26	38.53	19.26	38.53

NO_x Emissions - Natural Gas Combustion & Thermal NOX						
Firing Rate (90 MMBtu/hr each Dryer + 18 MMBtu/hr each RTO)	**Emission Factor*** (lbs/MMBtu)**	**Limited PTE from 1 Stack (tons/yr)**	**Limited PTE from 2 Stacks (tons/yr)**	**Limited Emissions from 1 Stack (tons/yr)**	**Limited Emissions from 1 Stack (lb/hr)**	**Limited Emissions from 2 Stacks (tons/yr)**
108	0.0864	40.87	81.7	40.87	9.33	81.7
Dryers Natural Gas Usage Limit (MMCF/Year)			1577			
RTOs Natural gas Usage Limit (MMCF/Year)			315			
			1892			

Notes:

Limited emission rates are based on test data plus a safety factor.

Ethanol distillation and evaporation emissions sources are ducted to regenerative thermal oxidizer (RTO) #1 or #2. RTO #1 is connected to exhaust gas stream from DDGS #1, and RTO #2 is connected to exhaust gas stream from DDGS #2.

The NOx emissions are generated primarily by the natural gas combustion from the dryers and oxidizers.

There are 2 stacks, which represent 2 RTOs (C-6A and C-6B). Each RTO is controlling 1 DDGS dryer, distillation and evaporation processes.

There are 2 DDGS dryers.

* The emission factor for $PM_{2.5}$ is assumed to be the same as PM and PM_{10}.

** Emission factors for CO, SO_2, NO_X, PM, PM_{10} and VOC were based on stack test data from Aventine on August 2011 plus a 10% Safety Factor.

The PM, NO_x and SO_2 are not controlled by the RTOs.

***Engineering estimate - accounts for any thermal NOx that could be present from ammonia compounds in the wet DGS.

Methodology:

EF = 0.0864 lb/MMBtu * 1000 MMBtu/MMCF = 86.4 lb/MMCF

Dryers natural gas throughput limit = 90 MMBtu/hr * 2 dryers * 8760 hrs/yr * 1 MMCF/1000 MMBtu = 1,577 MMCF/yr

RTOs natural gas throughput limit = 18 MMBtu/hr * 2 RTOs * 8760 hrs/yr * 1 MMCF/1000 MMBtu = 315 MMCF/yr

Uncontrolled Emissions (ton/yr) = EF (lb/ton) * DDGS dried (tons/yr) * ton/2000 lb

NOx Emissions (tons/yr) = Firing Rate (MMBtu/hr) * EF (lbs/MMBtu) * 8760 hrs/yr * ton/2000 lbs

Controlled Emissions (tons/yr) = Uncontrolled Emissions (tons/yr) * (1-Control Efficiency)

DDGS Drying is controlled by the two (2) RTOs.

Estimated Potential Emissions from DDGS Cooling

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Emission Unit	VOC Emissions (Two DDGS Coolers Routed to Individual Emission Rate		Safety Factor	Emission Limit	PTE
	(lb/hr)	*(tons/yr)*	*(%)*	*(lb/hr)*	*(tons/yr)*
Cooler 1	1.55	6.79	10%	1.71	7.47
Cooler 2	1.55	6.79	10%	1.71	7.47

Notes:
The DDGS Cooling Emission rate is based on stack testing performed at the Mount Vernon plant in 2011.
The emission rate is based on the highest tested emission rate for both coolers

Fermentation

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Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Maximum Throughput: 116.5 MMgal/year
13,302 gal/hour
Control Equipment: 1 Scrubber (C-5A) with 98% efficiency

Pollutant	Emission Factor* (lb/MMgal)	PTE After Control 1 Scrubber (tons/year)	PTE After Control 1 Scrubber (lbs/hr)	Control Efficiency*** (%)	PTE Before Controls 1 Scrubber (tons/year)	Safety Factor (%)	Limited Emission Rate lb/hr	Limited Emission Rate tpy
VOC**	618.7	36.05	8.23	98.0%	1802.37	0%	8.23	36.05
PM	15.0	0.88	0.20	95.0%	17.52	20%	0.24	1.05
$PM_{10}/PM_{2.5}$	15.0	0.88	0.20	95.0%	17.52	20%	0.24	1.05

Notes:

*Stack Testing was performed at the Mount Vernon, Indiana plant in 2011. This stack testing was used to confirm the VOC emission factor and to revise the $PM/PM_{10}/PM_{2.5}$ emission factors used in the calculations. These emission factors were previously based on previous stack testing of a similar souce.

**VOC lb/hr number is reflective of the VOC lb/hr limit found in Part 70 permit Condition D.3.1. The emission factor for VOC (lb/MMgal) has been adjusted accordingly and confirmed based on the stack testing performed at the Mount Vernon plant in 2011.

***Control efficiency of 98% for emissions of VOC from the Scrubber required based on 326 IAC Article 8, Rule 5. Assumed control efficiency of 95% for emissions of $PM/PM_{10}/PM_{2.5}$ from the Scrubber.

Methodology:

PTE After Control (tons/yr) = Throughput rate (MMgal/yr) * EF (lb/Mmgal) * 1 ton/2000 lbs

PTE Before Control (tons/yr) = PTE After Control (tons/yr) / (1-Control Efficiency)

Process HAPs from Fermentation, DDGS Dryers and DDGS Coolers

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Hazardous Air Pollutant (HAP)	Tested Emission Rates (lb/hr)* - 2011 Compliance Emission Testing										
	CO_2 Scrubber (lb/hr)	RTO #1 (lb/hr)	RTO #2 (lb/hr)	DDGS Cooler #1 (lb/hr)	DDGS Cooler #2 (lb/hr)	Revised CO_2 Scrubber Emission Rates (lb/hr)**	TOTAL (lbs/hr)	10% Adjustment Factor	REVISED TOTAL (lbs/hr)	Maximum Total Emissions (tons/yr)	Total Emissions - Without Adjustment Factor (tons/yr)
Acetaldehyde	2.07	0.16	0.18	0.06	0.12	1.52	2.04	0.10	2.24	9.83	8.94
Acrolein	0.04	0.11	0.12	0.02	0.02	0.03	0.30	0.10	0.33	1.45	1.31
Formaldehyde	0.01	0.03	0.03	0.01	0.01	0.01	0.09	0.10	0.10	0.43	0.39
Methanol	0.03	0.02	0.02	0.01	0.01	0.03	0.09	0.10	0.10	0.43	0.39
TOTAL	**2.15**	**0.32**	**0.35**	**0.10**	**0.16**	**1.59**	**2.52**	**--**	**2.77**	**12.14**	**11.04**

		Controlled Emissions (98%)					
HAP	Adjustment Factor	RTO #1 (ton/yr)	RTO #2 (ton/yr)	DDGS Cooler #1 (ton/yr)	DDGS Cooler #2 (ton/yr)	Revised CO_2 Scrubber Emission Rates (ton/yr)**	TOTAL (ton/yr)
Acetaldehyde	10%	0.77	0.87	0.29	0.58	7.32	9.83
Acrolein	10%	0.53	0.58	0.10	0.10	0.14	1.45
Formaldehyde	10%	0.14	0.14	0.05	0.05	0.05	0.43
Methanol	10%	0.10	0.10	0.05	0.05	0.14	0.43
TOTAL	**--**	**1.54**	**1.69**	**0.48**	**0.77**	**7.66**	**12.14**

	Uncontrolled Emissions					
HAP	RTO #1 (ton/yr)	RTO #2 (ton/yr)	DDGS Cooler #1 (ton/yr)	DDGS Cooler #2 (ton/yr)	Revised CO_2 Scrubber Emission Rates (ton/yr)**	TOTAL (ton/yr)
Acetaldehyde	35.04	39.42	0.29	0.58	332.88	446.76
Acrolein	24.09	26.28	0.10	0.10	6.57	65.70
Formaldehyde	6.57	6.57	0.05	0.05	2.19	19.71
Methanol	4.38	4.38	0.05	0.05	6.57	19.71
TOTAL	**70.08**	**76.65**	**0.48**	**0.77**	**348.21**	**551.88**

Note:

*Emission rates based on compliance emission testing performed at the Aventine Mount Vernon plant in 2011. The emission rate is based on the highest tested emission rate for both coolers.
**Aventine will be pumping sodium bisulfite into the CO_2 scrubber in order to reduce potential HAP emissions, primarily acetaldehyde.

Methodology:
Acetaldehyde: TOTAL (lbs/hr) + (TOTAL (lbs/hr) * 10%) = REVISED TOTAL (lbs/hr)
REVISED TOTAL (lbs/hr) * 8,760 hrs/yr / 2000 lbs/ton = Maximum Total Emissions (tons/yr)

Revised emission estimates show that emissions of Acetaldehyde will be < 10 tons/year, thus the plant will be minor stationary source of HAPs. This is based on the CO_2 Scrubber exhaust being vented directly to the atmosphere and the use of sodium bisulfite to reduce potential HAP emissions.

Greenhouse Gas Emissions from Fermentation

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Green House Gas from Fermentation (Biogenic)

Given:
116,525,520 gallons of undenatured (200-proof) EtOH / year
46.06844 [g/mol] mole wieght of EtOH
0.789 [g/cm^3] density of liquid EtOH
44.0095 [g/mol] mole wieght of CO2

and: $C_6H_{12}O_6$ + yeast = 2 CH_3CH_2OH + 2 CO_2
sugar + yeast = ethanol + carbon dioxide

Therefore:

$$\frac{116{,}525{,}520 \text{ gal 200-proof EtOH}}{\text{year}} \times \frac{0.789 \text{ g EtOH}}{1 \text{ cm}^3} \times \frac{3{,}785.41 \text{ cm}^3}{1 \text{ gal}}$$

$$= \frac{3.48\text{E+11 g EtOH}}{\text{year}} \times \frac{1 \text{ mol EtOH}}{46.06844 \text{ g EtOH}}$$

$$= \frac{7{,}554{,}530{,}376 \text{ mol EtOH}}{\text{year}} \times \frac{2 \text{ mol } CO_2}{2 \text{ mol EtOH}}$$

$$= \frac{7{,}554{,}530{,}376 \text{ mol } CO_2}{\text{year}} \times \frac{44.0095 \text{ g } CO_2}{1 \text{ mol } CO_2} \times \frac{1 \text{ ton}}{907{,}184.74 \text{ g}}$$

= **366,487** tons CO_2 / year

= **366,487** CO2e Total in tons/yr

Summary of Estimated Potential Air Pollutant Emission Rates - Utility Boilers (4 @ 92.4 MMBtu/hr each)

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
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		NO_x			SO_2			VOC			$PM/PM_{10}/PM_{2.5}$			CO		
Emission Source	**Max. Heat Input (MMBtu/ hr)**	**Emission Factor (lb/MMBtu)(1)**	**PTE (lb/hr)**	**PTE (tons/yr)**	**Emission Factor (lb/MMBtu)(1)**	**PTE (lb/hr)**	**PTE (tons/yr)**	**Emission Factor (lb/MMBtu)(1)**	**PTE (lb/hr)**	**PTE (tons/yr)**	**Emission Factor (lb/MMBtu)(1)**	**PTE (lb/hr)**	**PTE (tons/yr)**	**Emission Factor (lb/MMBtu)(1)**	**PTE (lb/hr)**	**PTE (tons/yr)**
Proposed Utility Boiler #1	92.4	0.03	2.77	12.14	5.88E-04	0.05	0.24	0.002	0.18	0.81	0.005	0.46	2.02	0.018	1.66	7.28
Proposed Utility Boiler #2	92.4	0.03	2.77	12.14	5.88E-04	0.05	0.24	0.002	0.18	0.81	0.005	0.46	2.02	0.018	1.66	7.28
Proposed Utility Boiler #3	92.4	0.03	2.77	12.14	5.88E-04	0.05	0.24	0.002	0.18	0.81	0.005	0.46	2.02	0.018	1.66	7.28
Proposed Utility Boiler #4	92.4	0.03	2.77	12.14	5.88E-04	0.05	0.24	0.002	0.18	0.81	0.005	0.46	2.02	0.018	1.66	7.28
Total (tons/year)				**48.57**			**0.95**			**3.24**			**8.09**			**29.14**

Calculation Method:
92.4 MMBtu/hr heat input * 0.03 lbs NOx/MMBtu = 2.772 lb/hr
2.772 lbs/hr * 8760 hours/year * 1/2000 = 12.14136 tons/yr

Notes:
(1) Emission factors updated to reflect manufacturer's guarantee. Testing of CO and NO_X is required by the draft permit to demonstrate compliance with the CO and NO_X emission limitas based on these guaranteed emission rates.

Summary of Estimated Potential VOC/HAP Emission Rates - Piping and Pumping Equipment (Potential Equipment Leaks)

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

ESTIMATED REGULATED CRITERIA AIR POLLUTANT EMISSION RATE

				VOC Emissions				
	Emission Source	# of sources	Leak Rate (kg/hr/source)	Uncontrolled VOC (lb/hr)	Uncontrolled VOC (tpy)	LDAR Control Percent (%)	Controlled VOC (lb/hr)	Controlled VOC (ton/yr)
Fermentation	Gas/Vapor Valves	0	0.00597	0	0	87%	0	0
	Light Liquid Valves	146	0.00403	1.30	5.68	84%	0.21	0.91
	Light Liquid Pumps	12	0.0199	0.53	2.31	69%	0.16	0.71
	Compressor Seals	0	0.228	0	0	75%	0	0
	Pressure Relief Valves	8	0.104	1.83	8.03	87%	0.24	1.04
	Sample Connections	0	0.015	0	0	87%	0	0
	Open-ended Lines	14	0.0017	0.05	0.23	84%	0.01	0.04
	Flanges (Connectors)	164	0.00183	0.66	2.90	84%	0.11	0.46
Distillation	Gas/Vapor Valves	206	0.00597	2.71	11.88	87%	0.35	1.54
	Light Liquid Valves	0	0.00403	0	0	84%	0	0
	Light Liquid Pumps	9	0.0199	0.39	1.73	69%	0.12	0.54
	Compressor Seals	0	0.228	0	0	75%	0	0
	Pressure Relief Valves	1	0.104	0.23	1.00	87%	0.03	0.13
	Sample Connections	0	0.015	0	0	87%	0	0
	Open-ended Lines	70	0.0017	0.26	1.15	84%	0.04	0.18
	Flanges (Connectors)	115	0.00183	0.46	2.03	84%	0.07	0.33
Tank Farm	Gas/Vapor Valves	0	0.00597	0	0	87%	0	0
	Light Liquid Valves	53	0.00403	0.47	2.06	84%	0.08	0.33
	Light Liquid Pumps	5	0.0199	0.22	0.96	69%	0.07	0.30
	Compressor Seals	0	0.228	0	0	75%	0	0
	Pressure Relief Valves	0	0.104	0	0	87%	0	0
	Sample Connections	0	0.015	0	0	87%	0	0
	Open-ended Lines	14	0.0017	0.05	0.23	84%	0.01	0.04
	Flanges (Connectors)	61	0.00183	0.25	1.08	84%	0.04	0.17
	TOTAL	**878**	**--**	**9.42**	**19.15**	**--**	**1.54**	**6.73**

Calculation Method:
Uncontrolled VOC (lb/hr) = No. of Emission Source x Leak Rate (kg/hr/source) x 2.2 lb/kg
Uncontrolled VOC (ton/yr) = Uncontrolled VOC (lb/hr) x 8760 hr/yr / 2000 lb/ton
Controlled VOC (lb/hr) = Uncontrolled VOC (lb/hr) x (1 - LDAR Control Percent (%))
Controlled VOC (ton/yr) = Controlled VOC (lb/hr) x 8760 hr/yr / 2000 lb/ton

ESTIMATED REGULATED HAP EMISSION RATES

HAPS	Mass Fraction of VOC	Controlled HAP (lb/hr)	Controlled HAP (tpy)	Uncontrolled HAP (tpy)	Uncontrolled HAP (lb/hr)
Acetaldehyde	2.00E-04	3.07E-04	1.35E-03	3.83E-03	8.74E-04
Benzene	2.50E-03	3.84E-03	1.68E-02	4.79E-02	1.09E-02
Carbon Disulfide	2.00E-05	3.07E-05	1.35E-04	3.83E-04	8.74E-05
Cumene	1.00E-03	1.54E-03	6.73E-03	1.91E-02	4.37E-03
Ethylbenzene	5.00E-05	7.68E-05	3.36E-04	9.57E-04	2.19E-04
n-Hexane	5.00E-02	7.68E-02	3.36E-01	9.57E-01	2.19E-01
Toluene	5.00E-03	7.68E-03	3.36E-02	9.57E-02	2.19E-02
Xylene	5.00E-04	7.68E-04	3.36E-03	9.57E-03	2.19E-03
Methanol	2.00E-04	3.07E-04	1.35E-03	3.83E-03	8.74E-04
HAP TOTAL		**0.09**	**0.40**	**1.14**	**0.26**

Notes:
LDAR = Leak Detection and Repair
Leak rates and VOC control from: Protocol for Leak Emission Rates EPA-453/R-95-017, November 1995.
Except for valves and pumps, non-welded components and fittings treated as flanges for LDAR.

Calculation Method:
Controlled HAP (lb/hr) = Controlled VOC (lb/hr) x Mass Fraction of Emissions
Controlled HAP (ton/yr) = Controlled HAP (lb/hr) x 8760 hr/yr / 2000 lb/ton
Uncontrolled HAP (ton/yr) = Uncontrolled VOC (ton/yr) x Mass Fraction of Emissions
Uncontrolled HAP (lb/hr) = Uncontrolled HAP (ton/yr) X 2000 lb/ton / 8760 hr/yr

Summary of Estimated Potential PM/PM_{10}/$PM_{2.5}$ Emission Rates - Vehicle Traffic on Paved Roads (In Plant Only)

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Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

Type	Load Size	Material Loaded Per Year	Units	# Trucks	Miles/Trip	VMT - Total (miles)
Grain Receiving	25	1,252,731	tons	50,109	1.06	53,116
DDGS Haul Out	25	391,148	tons	15,646	1.06	16,585
Ethanol Haul Out	8000	118,652,000	gallons	14,832	1.06	15,721
Denaturant Delivery	8000	2,950,000	gallons	369	1.06	391
					1.06	85,813

Technical Support Information
Miles per trip includes truck traveling empty inside the facility and truck traveling full inside the facility.
Vehicle Miles Traveled (VMT) equals total miles truck traveled within the facility empty and full combined.

Denaturant Throughput = 2.95 MMGal/yr
Denatured Ethanol Throughput = 118.7 MMGal/yr
Corn Throughput for Plant 44.74 MMBushels/yr
Grain Density = 56 lbs/bushel

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

Average Vehicle Weight Per Trip = 27.0 tons/trip
Average Miles Per Trip = 1.06 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	27.0	27.0	27.0	tons = average vehicle weight (provided by source)
sL =	0.8	0.8	0.8	g/m^2 = silt loading (provided by source)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]

where p = 120 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	0.259	0.052	0.0127	lb/mile
Mitigated Emission Factor, Eext =	0.238	0.048	0.012	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Grain Receiving	6.88	1.38	0.34	6.31	1.26	0.31
DDGS Haul Out	2.15	0.43	0.11	1.97	0.39	0.10
Ethanol Haul Out	2.04	0.41	0.10	1.87	0.37	0.09
Denaturant Delivery	0.05	0.0101	0.0025	0.05	0.0093	0.0023
	11.11	**2.22**	**0.55**	**10.20**	**2.04**	**0.50**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Tanks Emissions

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Permit Reviewer: Joshua Levering
Date: April 1, 2013

Source Description	Corrosion Inhibitor	Ethanol Day Tank	Ethanol Day Tank	Ethanol Day Tank	Denaturant(2)	Denatured Ethanol(3)	**Total**
Tank ID	TK007	TK001	TK002	TK003	TK004	TK005-TK006	
Material Stored	Corrosion Inhibitor	Ethanol	Ethanol	Ethanol	Denaturant	Ethanol + Denaturant	
VOC lbs/yr (1)	24.03	400.94	400.94	400.94	2741.31	1143.92	**5,112.08**
VOC tons/yr	0.01	0.20	0.20	0.20	1.37	0.57	**2.56**

Notes:
(1) VOC emissions based upon utilizing the TANKS 4.09 program.
(2) Updated Denaturant Tank (TK004) emission estimates based on denaturant throughput of 5,816,205 gallons/year.
(3) Updated Denatured Ethanol Tanks (TK005-TK006) emission estimates based on total denatured ethanol throughput of 122,141,250 gallons/year (61,070,625 gallons/year per tank).

COOLING TOWER SPECIFICATIONS

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
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Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Emission Source	Circulation Rate (gal/hour)	TDS Content (average mg/l)	Drift Loss (%)	Operating Hours (hr/yr)
Cooling Tower	2,256,000	2000	0.0005	8760

Assumptions:

1. Cooling Tower make up water contains 2000 mg/l total dissolved solids (TDS).
2. Cooling tower will operate with 1 cycle of concentration (CC) and a circulating water flowrate (CW) of 2,256,000 gal/hour
3. Cooling tower drift rate (DR) is 0.0005% of the circulating water flowrate (based on manufacturer's guarantee).
4. Cooling tower operation is continuous, 24 hours per day, 365 days per year.

CALCULATION OF POTENTIAL $PM/PM_{10}/PM_{2.5}$ EMISSIONS ASSOCIATED WITH THE PROPOSED COOLING TOWER

Circulating Water TDS = (CC) (TDS)

$$\text{Circulating Water TDS} = \frac{[(2000\ mg/l)]\ (1.0g/1000\ mg)\ (3.785\ L/gal)}{(453.6\ g/lb)}$$

Circulating Water TDS = 1.669E-02 lb/gal

Drift = (DR) (CW) = (0.0005%) (2256000 gal/hr) (8760 hr/yr)
Drift = 98,813 gal/year

Drift Particulate = (Drift) (Circulating Water TDS)
Drift Particulate = (98812.8 gal/yr) (0.017 lb/gal) = 1,649 lb/yr

Drift $PM/PM_{10}/PM_{2.5}$ Emission Rate =	**1,649 lb/year**	**=**	**0.19**	**lb/hour**	**=**	**0.82 ton/yr**

Notes:
Based on manufacturer's guarantee of 0.0005% drift loss
All PM is assumed to be $PM_{10}/PM_{2.5}$, therefore PM = $PM_{10}/PM_{2.5}$

CALCULATION OF POTENTIAL VOC EMISSIONS ASSOCIATED WITH THE PROPOSED COOLING TOWER

Emission Source	Circulation Rate (gal/hour)	VOC Emission Factor (lb/106 gal per hour)*	VOC (tpy)
Cooling Tower	2,256,000	0	0

*Cooling Tower will not use VOC/HAP-containing chemicals.

EMERGENCY FIRE PUMP

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

REGULATED AIR POLLUTANT	EMISSION FACTORS Lbs/Bhp-Hr	Total Uncontrolled/ Unlimited PTE (tpy)
SO_2	3.91E-06	4.10E-04
NO_x/NO_2	6.61E-03	0.69
PM	3.31E-04	0.035
PM_{10}	3.31E-04	0.035
$PM_{2.5}$	3.31E-04	0.035
CO	6.68E-03	0.701
VOC	2.47E-03	0.26

Heat input Capacity
Horsepower (HP)
420

Potential Throughput

BHp-hr/yr @ 500 hrs/yr
210,000

HAZARDOUS AIR POLLUTANT	Rated Capacity	EMISSION FACTOR		EMISSION RATES	EMISSIONS BASIS
		Maximum Rate		Annual Emission Rate	
	MMBtu/hr	*lbs/MMBtu*	*lb/bhp-hr*	*(tpy)*	
1,3 Butadiene	1.07	3.91E-05	3.32E-07	3.48E-05	AP-42, Table 3.3-2
Acetaldehyde	1.07	7.67E-04	6.51E-06	6.83E-04	AP-42, Table 3.3-2
Acrolein	1.07	9.25E-05	7.85E-07	8.24E-05	AP-42, Table 3.3-2
Benzene	1.07	9.33E-04	7.91E-06	8.31E-04	AP-42, Table 3.3-2
Formaldehyde	1.07	1.18E-03	1.00E-05	1.05E-03	AP-42, Table 3.3-2
Naphthalene	1.07	8.48E-05	7.19E-07	7.55E-05	AP-42, Table 3.3-2
Propylene	1.07	2.58E-03	2.19E-05	2.30E-03	AP-42, Table 3.3-2
Toluene	1.07	4.09E-04	3.47E-06	3.64E-04	AP-42, Table 3.3-2
Xylene	1.07	2.85E-04	2.42E-06	2.54E-04	AP-42, Table 3.3-2
TOTAL	--	--		**5.67E-03**	--

Notes:
1 @ 420 Hp = 1 @ 1.07 MMBtu/hr

Emission factor for SO_2 based on NSPS requirement for sulfur content from diesel fuel of 0.0015% (per 40 CFR 80.510(b)). Emission factors for NO_x/NO_2 and PM/PM_{10} based on NSPS Subpart IIII, Table 4 "Emission Standards for Stationary Fire Pump Engines". Emission factors for CO and VOC based on AP-42 Table 3.3-1.
Unlimited PTE were based on 500 hrs/yr of operation.
Emission factor for $PM_{10}/PM_{2.5}$ assumed to be all PM emissions.

Pursuant to EPA, the Guidance for emergency generators in calculating PTE based on 500 hrs/yr can also apply to emergency fire pumps.

Methodology:

Heat Input Capacity (MMBtu/hr) = Rating (hp) x 2546.699 BTU/hr / (1000000 Btu/MMBtu) 1.07

Throughput Limit (gals/year) = Heat Input Capacity (MMBtu/hr) x 500 hrs/yr x 1 gal/0.14 MMBtu 3,820

Limited Emission Rate (tpy) = Bhp-hr/yr * EF (lbs/Bhp-hr) / 2000 lbs/ton

Emission Factor for SO_2: 7.65 gal/hr x 7.15 lbs/gal distillate fuel oil = 54.6975 lbs fuel/hr

EF (lbs fuel/hr) x 0.000015 (Sulfur content by weight) x 2 (S --> SO_2) = 0.0016 lbs SO_2/hr

EF (lbs SO_2/hr) / 420 HP = 3.91E-06 lbs/BHP-hr

Emission Factor for PM: 0.15 gram/HP-hr based on NSPS, Subpart IIII limit, see below equivalent in lb/Hp-hr:
0.15 gram/HP-hr x 1 lb/453.59237 g = 0.0003307 lb/HP-hr

Emission Factor for NO_x: 3.0 gram/HP-hr based on NSPS, Subpart IIII limit, see below equivalent in lb/Hp-hr:
3.0 gram/HP-hr x 1 lb/453.59237 g = 0.0066139 lb/HP-hr

HAP Emission Factor (lb/bhp-hr) = Emission Factor (lb/MMBtu) x 0.002545 (MMBtu/bhp-hr) / 0.3 (Mechanical Efficiency)

Ethanol Loadout Flare (C-9)

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Denatured Ethanol Loading Rack Emissions - Truck/Railcar Loading

Volume Denatured Ethanol Loaded (gallons) = Q= **122,141,250** gal/yr
122.1 MMgal/yr
13,943 gal/yr

From AP-42: L = 12.46 SPM / (T+460)

L = Loading loss in pound per 1000 gals. loaded

L = 7.264 Truck Loading

S = 1 `
P (psia) = 4.9619
MW = 62
T = 67.67
Eff = 98.00%

Load Out Type	Load Out (gal/yr)	Uncontrolled VOC Losses (lbs/yr)	Uncontrolled VOC Losses (tons/yr)	Control Efficiency	Controlled VOC Emission Rate (lbs/hr)	Controlled VOC Emission Rate (tons/yr)
Truck	122,141,250	887,273.9	443.64	98%	2.03	8.87

Emission calculation based upon AP-42, Section 5.2.2 - Loading Losses.
Assume all ethanol loaded into trucks that previously contained gasoline (i.e., non-dedicated trucks or rails). This is a worst case scenario.
Loading emission factor (L) for truck loading is based on the loading of gasoline. Thus, the vapor pressure used in the calculation is that of RVP 10 gasoline.
VOC Emissions were tested on August 29, 2011. ACES ID # 139467

Methodology:
Uncontrolled VOC Losses, tons/yr = Load out, gal/yr x L, lbs/1000 gal x ton/2000 lb
Controlled VOC Losses, tons/yr = Uncontrolled VOC losses, tons/yr x (1 - Eff (%))

Loadout Flare Emissions				
Pollutant	Emission Factor (lb/gal)	Gallons Denatured Ethanol Loaded (gal/yr)	Emissions (tons/year)	lb/kgal Permit Limits
NO_X	3.34E-05	122,141,250	2.04	0.033400
CO	8.35E-05		5.10	0.083500
PM	2.99E-07		0.018	0.000299

Notes:
Emission factors for NO_X and CO from manufacturer guarantee. PM emission factor similar to that of natural gas combustion.
SO_2 emission are negligible based on minimal H_2S levels.

Methodology:
Emissions, tons/yr = Denatured ethanol loaded, gal/yr x EF, lb/gal x ton/2000 lbs

HAP Emission Calculation (Truck / Railcar / Barge Load Out)			
HAP Constituent	Percentage of Product	HAP Emissions (lbs/hr)	HAP Emissions (tons/year)
Benzene	0.31%	0.006	0.03
n-Hexane	1.29%	0.026	0.11
Ethylbenzene	0.03%	0.001	0.00
Methylcyclohexane	0.21%	0.004	0.02
Xylene	0.14%	0.003	0.01
Toluene	0.11%	0.002	0.01
TOTAL		**0.04**	**0.19**

Flares Pilot Emissions (Natural Gas Combustion)			
Pollutant	Heat Input Rate each flare (MMBtu/hr)	Emission Factor (lb/MMBtu)	Emissions (tons/year)
VOC	0.092	0.0055	2.216E-03
CO		0.084	3.385E-02
NOx		0.1	4.030E-02
SO2		0.0006	2.418E-04
PM		0.0019	7.656E-04
PM10/PM2.5		0.0076	3.062E-03

Emission Factors from AP-42, Table 1.4; 1000 Btu/SCF
PM/PM10/PM2.5 is negligible based on smokeless design.
The 1 truck and 1 rail loadout are controlled by the flare.

Methodology:
Heat input, MMBtu/hr x EF, lb/MMBtu x ton/2000 lbs

Wetcake Storage

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Air Pollutant	VOC Emission Factor (lbs/ton Wetcake)*	Tons/Hour Wetcake	Emission Estimates	
			lbs/hr	tons/year
VOC	8.33E-03	129.66	1.080	4.73

HAP	Emission Factor (lbs/ton Wetcake)**	Tons/Hour Wetcake	Emission Estimates	
			lbs/hr	tons/year
Acetaldehyde	5.56E-05	129.66	0.007	0.03
Acrolein	8.33E-06		0.001	4.73E-03
Formaldehyde	3.30E-04		0.043	0.19
Methanol	6.94E-05		0.009	0.04

Notes:

* Emission factor based on testing at an existing wetcake storage building in Minnesota. Adjusted to reflect Midwest Scaling Factor.

** Emission factor based on testing at wetcake storage building at the DENCO, LLC facility in Morris, Minnesota.

The Distillers Grains and Solubles (DGS) is either being dried (DDGS) or is not (Wet Distillers Grains Solubles). The worse case between the two operations (DDGS) will be considered in the PTE calculations.

Summary of Estimated HAP Potential Emission Rates - Natural Gas Combustion
(Flare, Thermal Oxidizers and Package Boilers)

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

POLLUTANT	Emission Factor (lb/mmscf)	Uncontrolled Emissions: Flare (lbs/hr)	Flare (tons/year)	DDGS Dryers & RTOs (lbs/hr)	DDGS Dryers & RTOs (tons/year)	Boilers (lbs/hr)	Boilers (tons/year)	Total (lbs/hr)	Total (tons/year)
Formaldehyde	**7.50E-02**	**6.8E-06**	**3.0E-05**	**1.6E-02**	**7.0E-02**	**2.7E-02**	**1.2E-01**	**4.3E-02**	**1.9E-01**
2-Methylnaphthalene	2.40E-05	2.2E-09	9.5E-09	5.1E-06	2.2E-05	8.7E-06	3.8E-05	1.4E-05	6.0E-05
3-Methylchloranthrene	1.80E-06	1.6E-10	7.1E-10	3.8E-07	1.7E-06	6.5E-07	2.9E-06	1.0E-06	4.5E-06
7,12-Dimethylbenz(a)anthracene	1.60E-05	1.4E-09	6.3E-09	3.4E-06	1.5E-05	5.8E-06	2.5E-05	9.2E-06	4.0E-05
Acenaphthene	1.80E-06	1.6E-10	7.1E-10	3.8E-07	1.7E-06	6.5E-07	2.9E-06	1.0E-06	4.5E-06
Acenaphthylene	1.80E-06	1.6E-10	7.1E-10	3.8E-07	1.7E-06	6.5E-07	2.9E-06	1.0E-06	4.5E-06
Anthracene	2.40E-06	2.2E-10	9.5E-10	5.1E-07	2.2E-06	8.7E-07	3.8E-06	1.4E-06	6.0E-06
Arsenic	2.00E-04	1.8E-08	7.9E-08	4.2E-05	1.9E-04	7.2E-05	3.2E-04	1.1E-04	5.0E-04
Benz(a)anthracene	1.80E-06	1.6E-10	7.1E-10	3.8E-07	1.7E-06	6.5E-07	2.9E-06	1.0E-06	4.5E-06
Benz(a)pyrene	1.20E-06	1.1E-10	4.7E-10	2.5E-07	1.1E-06	4.3E-07	1.9E-06	6.9E-07	3.0E-06
Benzene	2.10E-03	1.9E-07	8.3E-07	4.4E-04	1.9E-03	7.6E-04	3.3E-03	1.2E-03	5.3E-03
Benzo(b)fluoranthene	1.80E-06	1.6E-10	7.1E-10	3.8E-07	1.7E-06	6.5E-07	2.9E-06	1.0E-06	4.5E-06
Benzo(g,h,i)perylene	1.20E-06	1.1E-10	4.7E-10	2.5E-07	1.1E-06	4.3E-07	1.9E-06	6.9E-07	3.0E-06
Benzo(k)fluoranthene	1.80E-06	1.6E-10	7.1E-10	3.8E-07	1.7E-06	6.5E-07	2.9E-06	1.0E-06	4.5E-06
Beryllium	1.20E-05	1.1E-09	4.7E-09	2.5E-06	1.1E-05	4.3E-06	1.9E-05	6.9E-06	3.0E-05
Cadmium	1.10E-03	9.9E-08	4.3E-07	2.3E-04	1.0E-03	4.0E-04	1.7E-03	6.3E-04	2.8E-03
Chromium	1.40E-03	1.3E-07	5.5E-07	3.0E-04	1.3E-03	5.1E-04	2.2E-03	8.0E-04	3.5E-03
Chrysene	1.80E-06	1.6E-10	7.1E-10	3.8E-07	1.7E-06	6.5E-07	2.9E-06	1.0E-06	4.5E-06
Cobalt	8.40E-05	7.6E-09	3.3E-08	1.8E-05	7.8E-05	3.0E-05	1.3E-04	4.8E-05	2.1E-04
Dibenzo(a,h)anthracene	1.20E-06	1.1E-10	4.7E-10	2.5E-07	1.1E-06	4.3E-07	1.9E-06	6.9E-07	3.0E-06
Dichlorobenzene	1.20E-03	1.1E-07	4.7E-07	2.5E-04	1.1E-03	4.3E-04	1.9E-03	6.9E-04	3.0E-03
Fluoranthene	3.00E-06	2.7E-10	1.2E-09	6.4E-07	2.8E-06	1.1E-06	4.8E-06	1.7E-06	7.5E-06
Fluorene	2.80E-06	2.5E-10	1.1E-09	5.9E-07	2.6E-06	1.0E-06	4.4E-06	1.6E-06	7.0E-06
Hexane	**1.8**	**1.6E-04**	**7.1E-04**	**0.38**	**1.67**	**0.65**	**2.86**	**1.03**	**4.53**
Indeno(1,2,3-cd)pyrene	1.80E-06	1.6E-10	7.1E-10	3.8E-07	1.7E-06	6.5E-07	2.9E-06	1.0E-06	4.5E-06
Manganese	**3.80E-04**	**3.4E-08**	**1.5E-07**	**8.0E-05**	**3.5E-04**	**1.4E-04**	**6.0E-04**	**2.2E-04**	**9.6E-04**
Mercury	2.60E-04	2.3E-08	1.0E-07	5.5E-05	2.4E-04	9.4E-05	4.1E-04	1.5E-04	6.5E-04
Naphthalene	6.10E-04	5.5E-08	2.4E-07	1.3E-04	5.7E-04	2.2E-04	9.7E-04	3.5E-04	1.5E-03
Nickel	2.10E-03	1.9E-07	8.3E-07	4.4E-04	1.9E-03	7.6E-04	3.3E-03	1.2E-03	5.3E-03
Phenanathrene	1.70E-05	1.5E-09	6.7E-09	3.6E-06	1.6E-05	6.2E-06	2.7E-05	9.8E-06	4.3E-05
Pyrene	5.00E-06	4.5E-10	2.0E-09	1.1E-06	4.6E-06	1.8E-06	7.9E-06	2.9E-06	1.3E-05
Selenium	2.40E-05	2.2E-09	9.5E-09	5.1E-06	2.2E-05	8.7E-06	3.8E-05	1.4E-05	6.0E-05
Toluene	3.40E-03	3.1E-07	1.3E-06	7.2E-04	3.2E-03	1.2E-03	5.4E-03	2.0E-03	8.6E-03
			7.46E-04		**1.75**		**3.00**		**4.75**

Equipment	Heat Input (MMBtu/hr)	*Stack Totals*: Heat Input (MMBtu/hr)	Fuel Throughput (MMCF/yr)
Flare	0.092	0.092	0.79
Thermal Oxidizers #1 and #2	36		
DDGS Dryers #1 and #2	180	216	1,855
Utility Boiler #1	92.4		
Utility Boiler #2	92.4		
Utility Boiler #3	92.4		
Utility Boiler #4	92.4	369.6	3,174
TOTAL	585.692	585.692	5,030

Notes:
Emission Factors are from AP-42 Nat. Gas Comb. (7/98), Table 1.4-3

Summary of Estimated Potential HAP Emission Rates Associated with the Ethanol Production Plant

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

HAZARDOUS AIR POLLUTANT	NATURAL GAS COMBUSTION* (ton/yr)	FERMENTATION, DDGS DRYING, DDGS COOLING (ton/yr)	ETHANOL LOADOUT (ton/yr)	FIRE PUMP (ton/yr)	WET CAKE STORAGE (ton/yr)	LEAKS (ton/yr)	TOTAL HAPS (ton/yr)
1,3-Butadiene				3.48E-05			3.48E-05
2-Methylnaphthalene	6.04E-05						6.04E-05
3-Methylchloranthrene	4.53E-06						4.53E-06
7,12-Dimethylbenz(a)anthracene	4.02E-05						4.02E-05
Acenaphthene	4.53E-06						4.53E-06
Acenaphthylene	4.53E-06						4.53E-06
Acetaldehyde		9.83		6.83E-04	3.16E-02	3.83E-03	**9.86**
Acrolein		1.45		8.24E-05	4.73E-03		1.45
Anthracene	6.04E-06						6.04E-06
Arsenic	5.03E-04						5.03E-04
Benz(a)anthracene	4.53E-06						4.53E-06
Benz(a)pyrene	3.02E-06						3.02E-06
Benzene	5.28E-03		2.75E-02	8.31E-04		4.79E-02	8.15E-02
Benzo(b)fluoranthene	4.53E-06						4.53E-06
Benzo(g,h,i)perylene	3.02E-06						3.02E-06
Benzo(k)fluoranthene	4.53E-06						4.53E-06
Beryllium	3.02E-05						3.02E-05
Cadmium	2.77E-03						2.77E-03
Chromium	3.52E-03						3.52E-03
Chrysene	4.53E-06						4.53E-06
Cobalt	2.11E-04						2.11E-04
Dibenzo(a,h)anthracene	3.02E-06						3.02E-06
Dichlorobenzene	3.02E-03						3.02E-03
Ethylbenzene			2.57E-03			9.57E-04	3.53E-03
Fluoranthene	7.55E-06						7.55E-06
Fluorene	7.04E-06						7.04E-06
Formaldehyde	0.19	0.43		1.05E-03	0.19		0.81
Hexane	4.53		0.11			9.57E-01	5.60
Indeno(1,2,3-cd)pyrene	4.53E-06						4.53E-06
Manganese	9.56E-04						9.56E-04
Mercury	6.54E-04						6.54E-04
Methanol		0.43			3.94E-02	3.83E-03	0.48
Naphthalene	1.53E-03			7.55E-05			1.61E-03
Nickel	5.28E-03						5.28E-03
Phenanathrene	4.28E-05						4.28E-05
Propylene				2.30E-03			2.30E-03
Pyrene	1.26E-05						1.26E-05
Selenium	6.04E-05						6.04E-05
Toluene	0.01		9.76E-03	3.64E-04		9.57E-02	1.14E-01
Xylene			1.24E-02	2.54E-04		9.57E-03	2.23E-02
	4.75	12.14	0.17	5.67E-03	0.26	1.14	

Note: **Total (TPY)= 18.44**

*Natural gas combustion HAPS includes thermal oxidizers, utility boilers and dryers.

Greenhouse Gas Emissions - Natural Gas Combustion

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Emission Factor Table

Fuel	Fuel Classification	Higher Heating Value (HHV)			CO_2 Emission Factor (EF)			CH_4 Emission Factor (EF)			N_2O Emission Factor		
		Value - HHV	Default - HHV	Units	Value - EF	Default - EF	Units	Value - EF	Default - EF	Units	Value - EF	Default - EF	Units
Natural Gas	Fossil-gaseous	0.001028	1.028E-03	MMBtu/scf	53.02	53.02	kg/MMBtu	0.001	1.0E-03	kg/MMBtu	0.0001	1.0E-04	kg/MMBtu

Annual GHG Calculation (By GHG Rule Eq. C-2a and C-2b)

			1	21	310	GWP
			CO_2	CH_4	N_2O	CO_2e
			53.02	1.0E-03	1.0E-04	53.07 Emission Factor (kg/MMBtu)
Equipment	Heat Input (MMBtu/hr)	Heat Input (MMBtu/yr)	PTE (ton/yr)	PTE (ton/yr)	PTE (ton/yr)	PTE (ton/yr)
Thermal Oxidizers #1 and #2	36	315,360	18,431	0.35	0.03	20,336
DDGS Dryers #1 and #2	180	1,576,800	92,154	1.74	0.17	101,682
Flare	0.092	806	47.10	8.9E-04	8.9E-05	51.97
Utility Boiler #1	92.4	809,424	47,306	0.89	0.09	52,197
Utility Boiler #2	92.4	809,424	47,306	0.89	0.09	52,197
Utility Boiler #3	92.4	809,424	47,306	0.89	0.09	52,197
Utility Boiler #4	92.4	809,424	47,306	0.89	0.09	52,197
TOTAL	**585.7**	**5,130,662**	**299,856**	**5.66**	**0.57**	**330,859**

Notes:

a) The default HHV value from Table C-1 of the EPA Greenhouse Gas Reporting Rule is substituted when no actual HHV data from fuel sampling is available. Use of the default HHV value constitutes the Tier 1 calculation method while use of HHV values obtained from fuel sampling constitutes Tier 2.

b) Emission factors (EF) for natural gas were obtained from Tables C-1 and C-2 of the EPA Greenhouse Gas Reporting Rule (40 CFR 98). Table C-1 - Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel. Table C-2 - Default CH_4 and N_2O Emission Factors for Various Types of Fuel.

c) Global warming potentials (GWP) were obtained from Table A-1 of the EPA Greenhouse Gas Reporting Rule (40 CFR 98).

Example Calculations

Estimated GHG Emissions (metric tons) = Fuel Use (scf/year) * Emission Factor (kg/MMBtu) * High Heat Value (MMBtu/scf) * 0.001 (metric tons/kg)

Estimated GHG Emissions (metric tons CO_2e) = Estimated GHG Emissions (metric tons) * Global Warming Potential (kg CO_2e/kg)

Estimated GHG Emissions (tons CO_2e) = Estimated GHG Emissions (metric tons CO_2e) * 1.102311309

Greenhouse Gas Emissions - Diesel

Company Name: Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip: 7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.: 129-31693-00051
Part 70 Operating Permit Renewal No.: T129-31281-00051
Permit Reviewer: Joshua Levering
Date: April 1, 2013

Emission Factor Table

Fuel	Fuel Classification	Higher Heating Value (HHV)			CO_2 Emission Factor (EF)			CH_4 Emission Factor (EF)			N_2O Emission Factor		
		Value - HHV	Default - HHV	Units	Value - EF	Default - EF	Units	Value - EF	Default - EF	Units	Value - EF	Default - EF	Units
Diesel	Petroleum Products	0.138	1.380E-01	MMBtu/gal	73.96	73.96	kg/MMBtu	0.003	3.0E-03	kg/MMBtu	0.0006	6.0E-04	kg/MMBtu

Annual GHG Calculation (By GHG Rule Eq. C-2a and C-2b)

Annual Fuel Use - Emergency Fire Pump (gallons/yr) 3,820

Parameter	CO_2	CH_4	N_2O	TOTAL
EF[(b)] (kg/MMBtu)	73.96	0.003	0.0006	--
Estimated GHG Emissions (metric tons) - Emergency Fire Pump	38.99	1.6E-03	3.2E-04	--
Global Warming Potential (GWP)[(c)] (kg CO_2e/kg)	1	21	310	--
Estimated GHG Emissions (metric tons CO_2e) - Emergency Fire Pump	38.99	3.3E-02	9.8E-02	39.12
Estimated GHG Emissions (tons CO_2e) - Total	42.98	3.7E-02	1.1E-01	43.12

Notes:

(a) The default HHV value from Table C-1 of the EPA Greenhouse Gas Reporting Rule is substituted when no actual HHV data from fuel sampling is available. Use of the default HHV value constitutes the Tier 1 calculation method while use of HHV values obtained from fuel sampling constitutes Tier 2.

b) Emission factors (EF) for diesel fuel were obtained from Tables C-1 and C-2 of the EPA Greenhouse Gas Reporting Rule (40 CFR 98). Table C-1 - Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel. Table C-2 - Default CH_4 and N_2O Emission Factors for Various Types of Fuel.

c) Global warming potentials (GWP) were obtained from Table A-1 of the EPA Greenhouse Gas Reporting Rule (40 CFR 98).

Example Calculations

Estimated GHG Emissions (metric tons) = Fuel Use (MMBtu/hr) * Emission Factor (kg/MMBtu) * High Heat Value (MMBtu/gal) * 0.001 (metric tons/kg)
Estimated GHG Emissions (metric tons CO_2e) = Estimated GHG Emissions (metric tons) * Global Warming Potential (kg CO_2e/kg)
Estimated GHG Emissions (tons CO_2e) = Estimated GHG Emissions (metric tons CO_2e) * 1.1023113109

Vehicle Refueling Operations (Gasoline)

Company Name:	Aventine Renewable Energy - Mt. Vernon LLC
Address City IN Zip:	7201 Port Road, Mount Vernon, Indiana, 47620
Significant Source Modification No.:	129-31693-00051
Part 70 Operating Permit Renewal No.:	T129-31281-00051
Permit Reviewer:	Joshua Levering
Date:	April 1, 2013

Maximum Annual Throughput Capacity:	75	gal/month
	900	gal/yr

Emission Factors (AP 42 Section 5.2, "Transportation and Marketing of Petroleum Liquids", 6/08):

Displacement Losses (uncontrolled)	11.0	lb/ 1000 gal
Displacement Losses (controlled)	1.1	lb/ 1000 gal
Spillage	0.7	lb/ 1000 gal

VOC Emissions:

Displacement Losses (uncontrolled)	0.0050	ton/yr	**Total Uncontrolled VOC:**	**0.0053 ton/yr**
Spillage	0.0003	ton/yr		

Notes:

Emission Factors for VOC is also for total organic emissions because the methane and ethane content of gasoline evaporative emissions is negligible.
This gasoline tank is not equipped with vapor recovery; therefore, all emissions are uncontrolled.

Methodology:

VOC Emissions (ton/yr) = Emission Factor (lb/1000 gal) x Annual Throughput (gal/yr) / 1000 / 2000 lb/ton

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Steve Antonacci
Aventine Renewable Energy – Mt. Vernon LLC
1300 South Second Street
Pekin, IL 61544

DATE: September 5, 2013

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

SUBJECT: Final Decision
Title V – Significant Source Modification
129-31693-00051

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:
John Valenti, Plant Manager / Aventine Renewable Energy
Steven Frey / ARCADIS U.S.
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.

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Commissioner

September 5, 2013

TO: Alexandrian Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Aventine Renewable Energy
Permit Number: 129-31693-00051

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

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant

DATE: September 5, 2013

RE: Aventine Renewable Energy / 129-31693-00051

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.*

Enclosures
CD Memo.dot 6/13/2013

Mail Code 61-53

IDEM Staff	AWELLS 9/5/2013 Aventine Renewable Energy - Mt. Vernon LLC 129-31693-00051 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Type of Mail: **CERTIFICATE OF MAILING ONLY**	

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		Steve Antonacci Aventine Renewable Energy - Mt. Vernon LLC 1300 S 2nd St Pekin IL 61554 (Source CAATS) confirmed delivery									
2		John Valenti Plant Mgr Aventine Renewable Energy - Mt. Vernon LLC 7201 Port Rd Mount Vernon IN 47620 *(RO CAATS)*									
3		Posey County Commissioners County Courthouse, 126 E. 3rd Street Mount Vernon IN 47620 *(Local Official)*									
4		Posey County Health Department 126 E. 3rd St, Coliseum Bldg Mount Vernon IN 47620-1811 *(Health Department)*									
5		Mount Vernon City Council and Mayors Office 520 Main Street Mount Vernon IN 47620 *(Local Official)*									
6		Dr. Jeff Seyler Univ. of So Ind., 8600 Univ. Blvd. Evansville IN 47712 *(Affected Party)*									
7		Mr. Don Mottley Save Our Rivers 6222 Yankeetown Hwy Boonville IN 47601 *(Affected Party)*									
8		Alexandrian Public Library 115 West 5th Mt. Vernon IN 47620 *(Library)*									
9		Mr. Mark Wilson Evansville Courier & Press P.O. Box 268 Evansville IN 47702-0268 *(Affected Party)*									
10		Mrs. Connie Parkinson 510 Western Hills Dr. Mt. Vernon IN 47620 *(Affected Party)*									
11		Robert Hess c/o Mellon Corporation 830 Post Road East, Suite 105 Westport CT 06880 *(Affected Party)*									
12		Juanita Burton 7911 W. Franklin Road Evansville IN 47712 *(Affected Party)*									
13		Ms. Arlene R. Campbell 8860 Effinger Road Wadesville IN 47638 (Affected Party)									
14		Mr. Steven Frey ARCADIS U.S., Inc. 1515 East Woodfield Road Suite 360 Schaumburg IL 60173 *(Consultant)*									
15		Mr. Colin OBrien Natural Resources Defense Council 1152 15th St NW, Suite 300 Washington DC 20005 *(Affected Party)*									

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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		David Boggs 216 Western Hills Dr Mt Vernon IN 47620 (Affected Party)									
2											
3											
4											
5											
6											
7											
8											
9											
10											
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