



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: June 24, 2013

RE: Ingredion Incorporated Indianapolis Plant / 097 - 33118 - 00042

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

Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires 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 from 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-AM.dot 6/13/2013



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

Melissa Putman
Ingredion Incorporated Indianapolis Plant
1515 S Drover Street
Indianapolis, IN, 46221

June 24, 2013

Re: 097-33118-00042
Administrative Amendment to
Part 70 Operating Permit Renewal
T097-26765-00042

Dear Melissa Putman:

Ingredion Incorporated Indianapolis Plant was issued a Part 70 Operating Permit Renewal No. T097-26765-00042 on April 16, 2010 for a stationary wet corn milling plant which produces feed, gluten meal, germ meal, and heavy steepwater, located at 1515 S Drover Street, Indianapolis, IN, 46221. On April 24, 2013, the Office of Air Quality (OAQ) received an application from the source requesting to incorporate three (3) diesel fire pump engines (FP1, FP2 and FP3) at the Indianapolis Plant in the air permit application.

1. Pursuant to 326 IAC 2-7-11(a)(8)(B), this change to the permit is considered an administrative amendment because the permit is amended to incorporate an insignificant activity as defined in 326 IAC 2-7-1(21) that does not otherwise constitute a modification for purposes of 326 IAC 2-7-10.5 (Source Modifications) or 326 IAC 2-7-12 (Permit Modifications).

The following are the insignificant activities:

(a) Stationary fire pump engines, including:

- (1) One (1) 210-horsepower diesel-fired emergency fire pump engine, identified as FP1, constructed in 2003;

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.

- (2) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP2, constructed in 2003; and

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.

- (3) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP3, constructed in 2006.

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.

Under 40 CFR 60, Subpart IIII, this is an affected facility.

The PTE of the insignificant activity/activities is as follows:

| Process/ Emission Unit | PTE of Proposed Modification (tons/year) | | | | | | | | | |
|---|--|--------------|--------------|-----------------|-----------------|--------------|--------------|-----------------------------|-----------------|----------------------------------|
| | PM | PM10 | PM2.5 | SO ₂ | NO _x | VOC | CO | GHGs as CO _{2e} | Total HAPs | Worst Single HAP |
| FP1, FP2, FP3 | 0.446 | 0.446 | 0.446 | 0.415 | 6.28 | 0.509 | 1.353 | 232 | 5.49E-03 | 1.67E-03 Formaldehyde |
| Total PTE of Proposed Modification | 0.446 | 0.446 | 0.446 | 0.415 | 6.28 | 0.509 | 1.353 | 232 | 5.49E-03 | 1.67E-03 Formaldehyde |

See Appendix A for the potential to emit of the exempted emissions unit(s).

- (a) The addition of the insignificant activities does not change the PSD minor status of the source.
- (b) This source is now subject to the requirements of the following new NSPS and NESHAP:

FP3 is subject to the New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII, because it is a compression ignition (CI) internal combustion engine (ICE) that commenced construction after July 11, 2005, where the CI ICE is manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

Applicable portions of the NSPS are the following:

- (1) 40 CFR 60.4200 (a)(2)(ii)
- (2) 40 CFR 60.4205 (c)
- (3) 40 CFR 60.4206
- (4) 40 CFR 60.4207 (b)
- (5) 40 CFR 60.4208
- (6) 40 CFR 60.4209 (a)
- (7) 40 CFR 60.4211 (a),(b),(f),(g)(2)
- (8) 40 CFR 60.4214 (b)
- (9) 40 CFR 60.4218
- (10) 40 CFR 60.4219
- (11) Table 8

FP1 and FP2 are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ, because they are considered existing (construction commenced prior to June 12, 2006) stationary RICE at an area source of HAP emissions.

Applicable portions of the NESHAP are the following:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590 (a)(1)(iii) and (iv)
- (4) 40 CFR 63.6595 (a)(1), (b), and (c)
- (5) 40 CFR 63.6603 (a)
- (6) 40 CFR 63.6605
- (7) 40 CFR 63.6625 (e)(3),(f),(h),(i)
- (8) 40 CFR 63.6635
- (9) 40 CFR 63.6640 (a),(b),(e), and (f)
- (10) 40 CFR 63.6645 (a)(5)
- (11) 40 CFR 63.6650 (d), (f)

- (12) 40 CFR 63.6655 (a), (d), (e)(3), (f)(2)
- (13) 40 CFR 63.6660
- (14) 40 CFR 63.6665
- (15) 40 CFR 63.6670
- (16) 40 CFR 63.6675
- (17) Table 2d (item 4)
- (18) Table 6 (item 9)
- (19) Table 8

FP3 is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ, because it is considered a new stationary RICE at an area source of HAP emissions.

Applicable portions of the NESHAP are the following:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)
- (4) 40 CFR 63.6595(a)(6)
- (5) 40 CFR 63.6665
- (6) 40 CFR 63.6670
- (7) 40 CFR 63.6675

Proposed Changes:

Pursuant to 326 IAC 2-7-11(a), the permit is hereby administratively amended as follows with the deleted language as ~~strikeouts~~ and new language **bolded**:

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) Stationary fire pump engines, including:

- (1) One (1) 210-horsepower diesel-fired emergency fire pump engine, identified as FP1, constructed in 2003;**

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.

- (2) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP2, constructed in 2003; and**

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.

- (3) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP3, constructed in 2006.**

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.

Under 40 CFR 60, Subpart IIII, this is an affected facility.

- ~~(a)~~**(b) Combustion related activities including spaces heaters, process heaters, or boilers using natural gas-fired with heat input equal to or less than ten million (10,000,000) British thermal units per hour;**

- (1) One (1) process heater, Bld 630, natural gas fired, with maximum heat input capacity of 5.1 MMBtu/hr, identified as emission unit YX31914A, constructed in 2004 and venting out stack 158-6. [326 IAC 6-2-4]
- ~~(b)~~(c) Cleaners and solvents, from operations M1 through M4 and RSP shop, characterized as:
 - (1) having a vapor pressure equal to or less than two (2.0) kilo Pascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch) measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or
 - (2) having a vapor pressure equal to or less than seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit);the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months. [326 IAC 8-3-2] [326 IAC 8-3-85]
- ~~(e)~~(d) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

SECTION E.1 FACILITY OPERATION CONDITIONS

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

- (a) **Stationary fire pump engines, including:**
 - (1) **One (1) 210-horsepower diesel-fired emergency fire pump engine, identified as FP1, constructed in 2003;**
Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.
 - (2) **One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP2, constructed in 2003; and**
Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.
 - (3) **One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP3, constructed in 2006.**
Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.
Under 40 CFR 60, Subpart IIII, this is an affected facility.

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

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

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

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the one (1) diesel-fired emergency fire pump engine, identified as FP3, except when otherwise specified in 40 CFR Part 60, Subpart IIII.

E.1.2 Stationary Compression Ignition Internal Combustion Engines NSPS Requirements [40 CFR Part 60, Subpart IIII]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart IIII (included as Attachment A), except as otherwise specified in 40 CFR Part 60, Subpart IIII:

- (1) 40 CFR 60.4200 (a)(2)(ii)
- (2) 40 CFR 60.4205 (c)
- (3) 40 CFR 60.4206
- (4) 40 CFR 60.4207 (b)
- (5) 40 CFR 60.4208
- (6) 40 CFR 60.4209 (a)
- (7) 40 CFR 60.4211 (a),(b),(f),(g)(2)
- (8) 40 CFR 60.4214 (b)
- (9) 40 CFR 60.4218
- (10) 40 CFR 60.4219
- (11) Table 8

SECTION E.2 FACILITY OPERATION CONDITIONS

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

(a) Stationary fire pump engines, including:

- (1) One (1) 210-horsepower diesel-fired emergency fire pump engine, identified as FP1, constructed in 2003;

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.
- (2) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP2, constructed in 2003; and

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.
- (3) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP3, constructed in 2006.

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.
Under 40 CFR 60, Subpart IIII, this is an affected facility.

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

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

E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [326 IAC 20-82] [40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1-1, apply to the three (3) diesel-fired emergency fire pump engines, identified as FP1, FP2, and FP3, except when otherwise specified in 40 CFR 63, Subpart ZZZZ.

E.2.2 Stationary Reciprocating Internal Combustion Engines NESHAPS Requirements [40 CFR 60, Subpart ZZZZ]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment B of this permit), except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ

For FP-1 and FP-2:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590 (a)(1)(iii) and (iv)
- (4) 40 CFR 63.6595 (a)(1), (b), and (c)
- (5) 40 CFR 63.6603 (a)
- (6) 40 CFR 63.6605
- (7) 40 CFR 63.6625 (e)(3),(f),(h),(i)
- (8) 40 CFR 63.6635
- (9) 40 CFR 63.6640 (a),(b),(e), and (f)
- (10) 40 CFR 63.6645 (a)(5)
- (11) 40 CFR 63.6650 (d), (f)
- (12) 40 CFR 63.6655 (a), (d), (e)(3), (f)(2)
- (13) 40 CFR 63.6660
- (14) 40 CFR 63.6665
- (15) 40 CFR 63.6670
- (16) 40 CFR 63.6675
- (17) Table 2d (item 4)
- (18) Table 6 (item 9)
- (19) Table 8

For FP3:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)
- (4) 40 CFR 63.6595(a)(6)
- (5) 40 CFR 63.6665
- (6) 40 CFR 63.6670
- (7) 40 CFR 63.6675

....

Additional Changes:

Upon further review, IDEM, OAQ has decided to make the following changes to the permit. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

- (a) On January 30, 2013, amendments to 326 IAC 8-3 (Organic Solvent Degreasing Operations) were published, effective March 1, 2013. 326 IAC 8-3-2 was revised and 326 IAC 8-3-5 was repealed. The Permittee is now subject to 326 IAC 8-3-8 on and after January 1, 2015.

D.3.6 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning degreasing operations constructed after January 1, 1980, the owner or operator shall:

- ~~_____ (a) Equip the cleaner with a cover;~~
- ~~_____ (b) Equip the cleaner with a facility for draining cleaned parts;~~
- ~~_____ (c) Close the degreaser cover whenever parts are not being handled in the cleaner;~~
- ~~_____ (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;~~
- ~~_____ (e) Provide a permanent, conspicuous label summarizing the operation requirements; and~~
- ~~_____ (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.~~

~~D.3.7 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]~~

- ~~_____ (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility, construction of which commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:~~
 - ~~_____ (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - ~~_____ (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));~~
 - ~~_____ (B) The solvent is agitated; or~~
 - ~~_____ (C) The solvent is heated.~~~~
 - ~~_____ (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three tenths (4.3) kiloPascals (thirty two (32) millimeters of mercury or six tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.~~
 - ~~_____ (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).~~
 - ~~_____ (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.~~
 - ~~_____ (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three tenths (4.3) kiloPascals (thirty two (32) millimeters of mercury or six tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - ~~_____ (A) A freeboard that attains a freeboard ratio of seventy five hundredths (0.75) or greater.~~~~

- ~~_____ (B) A water cover when solvent is used is insoluble in, and heavier than, water.~~
- ~~_____ (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.~~
- ~~_____ (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
 - ~~_____ (1) Close the cover whenever articles are not being handled in the degreaser.~~
 - ~~_____ (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.~~
 - ~~_____ (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.~~~~

D.3.6 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]
Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control and Equipment Operating Requirements), the Permittee shall:

- (a) Ensure the following control equipment and operating requirements are met:
 - (1) Equip the degreaser with a cover.**
 - (2) Equip the degreaser with a device for draining cleaned parts.**
 - (3) Close the degreaser cover whenever parts are not being handled in the degreaser.**
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;**
 - (5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).**
 - (6) Store waste solvent only in closed containers.**
 - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.****
- (b) Ensure the following additional control equipment and operating requirements are met:
 - (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.**
 - (B) A water cover when solvent used is insoluble in, and heavier than,******

- water.
 - (C) A refrigerated chiller.
 - (D) Carbon adsorption.
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
- (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
- (3) If used, solvent spray:
- (A) must be a solid, fluid stream; and
 - (B) shall be applied at a pressure that does not cause excessive splashing.

D.3.7 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), on and after January 1, 2015, the Permittee shall not operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

D.3.12 Record Keeping Requirements

- (a) To document the compliance status with Condition D.3.9, the Permittee shall maintain a weekly record of visible emission notations of the exhaust from stacks 40-1A, 40-1B, 152-7, 157-8, 152-9, 152-10, 152-11, FA-60582, 157-12, and 106. 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.3.10, the Permittee shall maintain a weekly record of the pressure drop across the baghouses used in conjunction with units TF41818, TF41819, and TF41820. 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) To document the compliance status with Condition D.3.7, on and after January 1, 2015, the Permittee shall maintain the following records for each purchase of solvent used in the cold cleaner degreasing operations. These records shall be retained on-site or accessible electronically for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.
- (1) The name and address of the solvent supplier.
 - (2) The date of purchase.
 - (3) The type of solvent purchased.
 - (4) The total volume of the solvent purchased.
 - (5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

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

(b) On November 3, 2011, the Indiana Air Pollution Control Board issued a revision to 326 IAC 2. The revision resulted in a change to the rule site of the "responsible official" definition.

The rule site for the responsible official has been revised from 326 IAC 2-7-1(34) to 326 IAC 2-7-1(35) throughout the permit.

All other conditions of the permit shall remain unchanged and in effect. Please find attached the entire Part 70 Operating Permit (SPM) as modified.

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

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 Nida Habeeb of my staff, at 317-234-8531 or 1-800-451-6027, and ask for extension 4-8531.

Sincerely,



Jason R. Krawczyk, Section Chief
Permits Branch
Office of Air Quality

Attachment(s): Updated Permit and Appendix A

JK/NH

cc: File - Marion County
Marion County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
Billing, Licensing and Training Section



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

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Ingredion Incorporated Indianapolis Plant
1515 South Drover Street
Indianapolis, Indiana 46221

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

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

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

| | |
|--|--|
| Operating Permit No.: T097-26765-00042 | |
| Issued By: / Original Signed By: Alfred C. Dumauval, Ph. D., Section Chief Permits Branch Office of Air Quality | Issuance Date: April 16, 2010 Expiration Date: April 16, 2015 |

- First Administrative Amendment No. 097-29351-00042, issued July 19, 2010
- Second Administrative Amendment No. 097-29768-00042, issued October 18, 2010
- First Significant Permit Modification No.: 097-29534-00042, issued November 22, 2010
- Second Significant Permit Modification No.: 097-29836-00042, issued April 4, 2011
- Third Administrative Amendment No.: 097-30416-00042, issued April 11, 2011
- Third Significant Permit Modification No.: 097-30227-00042, issued October 12, 2011
- Fourth Administrative Amendment No.: 097-32047-00042, issued June 29, 2012

| | |
|--|--|
| Fifth Administrative Amendment No.: 097-33118-00042 | |
| Issued by:  Jason R. Krawczyk, Section Chief Permits Branch Office of Air Quality | Issuance Date: June 24, 2013 Expiration Date: April 16, 2015 |

TABLE OF CONTENTS

| | |
|--|-----------|
| A. SOURCE SUMMARY | 6 |
| A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)] | |
| A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)] | |
| A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] | |
| A.4 Part 70 Permit Applicability [326 IAC 2-7-2] | |
| B. GENERAL CONDITIONS | 20 |
| B.1 Definitions [326 IAC 2-7-1] | |
| 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)] | |
| B.3 Term of Conditions [326 IAC 2-1.1-9.5] | |
| B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12] | |
| B.5 Severability [326 IAC 2-7-5(5)] | |
| B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)] | |
| B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)] | |
| B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)] | |
| B.9 Annual Compliance Certification [326 IAC 2-7-6(5)] | |
| B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3] | |
| B.11 Emergency Provisions [326 IAC 2-7-16] | |
| B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12] | |
| B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5] | |
| B.14 Termination of Right to Operate [326 IAC 2-7-10][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] | |
| B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)] | |
| B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] | |
| B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)] | |
| B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5] | |
| B.20 Source Modification Requirement [326 IAC 2-7-10.5] | |
| 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] | |
| B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11] | |
| B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7] | |
| B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6] | |
| C. SOURCE OPERATION CONDITIONS | 31 |
| Emission Limitations and Standards [326 IAC 2-7-5(1)] | |
| C.1 Opacity [326 IAC 5-1] | |
| C.2 Open Burning [326 IAC 4-1] [IC 13-17-9] | |
| C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2] | |
| C.4 Fugitive Dust Emissions [326 IAC 6-4] | |
| C.5 Stack Height [326 IAC 1-7] | |
| C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M] | |
| Testing Requirements [326 IAC 2-7-6(1)] | |
| C.7 Performance Testing [326 IAC 3-6] | |

Compliance Requirements [326 IAC 2-1.1-11]

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

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

- C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]
- C.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)]
[326 IAC 2-7-6(1)]

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

- C.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.12 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
- C.13 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

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

- C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)]
[326 IAC 2-6]
- C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]
[326 IAC 2-3]
- C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]
[326 IAC 2-3]

Stratospheric Ozone Protection

- C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1. EMISSIONS UNIT OPERATION CONDITIONS..... 39

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

- D.1.1 Prevention of Significant Deterioration [326 IAC 2-2]
- D.1.2 Particulate Matter [326 IAC 6.5-1-2]
- D.1.3 Particulate Matter [326 IAC 6.5-6-25]
- D.1.4 Volatile Organic Compounds [326 IAC 8-1-6]
- D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.6 Particulate and Sulfur Dioxide and VOC Control
- D.1.7 Testing Requirements [326 IAC 2-1.1-11]

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

- D.1.8 Visible Emissions Notations
- D.1.9 Parametric Monitoring for Scrubbers, RTO and First (1st) Effect Wash Water System

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

- D.1.10 Record Keeping Requirements
- D.1.11 Reporting Requirements

D.2. EMISSIONS UNIT OPERATION CONDITIONS..... 47

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

- D.2.1 Prevention of Significant Deterioration [326 IAC 2-2]
- D.2.2 Particulate Matter [326 IAC 6.5-1-2]
- D.2.3 Particulate Matter [326 IAC 6.5-6-25]
- D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.2.5 Particulate Control

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

- D.2.6 Visible Emissions Notations
- D.2.7 Parametric Monitoring for Baghouses
- D.2.8 Broken or Failed Bag Detection
- D.2.9 Cyclone Failure Detection

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

- D.2.10 Record Keeping Requirements
- D.2.11 Reporting Requirements

D.3. EMISSIONS UNIT OPERATION CONDITIONS..... 55

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

- D.3.1 PSD and Nonattainment NSR Minor Limits [326 IAC 2-2] [326 IAC 2-1.1-5]
- D.3.2 Particulate Matter [326 IAC 6.5-1-2]
- D.3.3 Particulate Matter [326 IAC 6.5-6-25]
- D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]
- D.3.5 Particulate Emissions [326 IAC 6-2-4]
- D.3.6 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]
- D.3.7 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Compliance Determination Requirements

D.3.8 Particulate Control

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

- D.3.9 Visible Emissions Notations
- D.3.10 Parametric Monitoring for Baghouses
- D.3.11 Broken or Failed Bag Detection

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

- D.3.12 Record Keeping Requirements

E.1. FACILITY OPERATION CONDITIONS 70

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

- E.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]
- E.1.2 Stationary Compression Ignition Internal Combustion Engines NSPS Requirements [40 CFR Part 60, Subpart IIII]

E.2. FACILITY OPERATION CONDITIONS 71

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

- E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [326 IAC 20-82] [40 CFR 63, Subpart A]
- E.2.2 Stationary Reciprocating Internal Combustion Engines NESHAPS Requirements [40 CFR 60, Subpart ZZZZ]

Certification..... 73
Emergency Occurrence Report 74
Quarterly Report..... 76
Quarterly Deviation and Compliance Monitoring Report..... 82

Attachment A: New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII

Attachment B: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary wet corn milling plant which produces feed, gluten meal, germ meal, and heavy steepwater.

| | |
|------------------------------|--|
| Source Address: | 1515 South Drover Street, Indianapolis, Indiana 46221 |
| General Source Phone Number: | (317) 635-4455 |
| SIC Code: | 2046 |
| County Location: | Marion |
| Source Location Status: | Nonattainment for PM2.5 standard Attainment for all other criteria pollutants |
| Source Status: | Part 70 Operating Permit Program Major Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act 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) One (1) natural gas-fired #1 Starch Flash Dryer, identified as unit 40-4, with a maximum heat input capacity of 30 MMBtu/hr and with a maximum air throughput of 42,200 dscfm, using a wet scrubber for particulate control, constructed in 1965 and modified in 1994, and exhausting to stack 40-4; [326 IAC 6.5-6-25]
- (b) One (1) natural gas-fired #2 Starch Flash Dryer, identified as unit 40-3, with a maximum heat input capacity of 36 MMBtu/hr and with a maximum air throughput of 73,000 dscfm, using a wet scrubber for particulate control, constructed in 1967 and modified in 1994 and 1999, and exhausting to stack 40-3; [326 IAC 6.5-6-25]
- (c) One (1) natural gas-fired #3 Starch Flash Dryer, identified as unit 40-2, with a maximum heat input capacity of 36 MMBtu/hr and with a maximum air throughput of 60,000 dscfm, using a wet scrubber for particulate control, constructed in 1971, and exhausting to stack 40-2; [326 IAC 6.5-6-25]
- (d) One (1) natural gas-fired #4 Starch Flash Dryer, identified as unit 575-1, with a maximum heat input capacity of 43 MMBtu/hr and with a maximum air throughput of 84,100 dscfm, using a wet scrubber for particulate control, constructed in 1977, and exhausting to stack 575-1; [326 IAC 6.5-6-25]
- (e) One (1) natural gas-fired #6 Starch Flash Dryer, identified as unit 575-3, with a maximum heat input capacity of 40 MMBtu/hr and with a maximum throughput of 84,100 dscfm, using a wet scrubber for particulate control, constructed in 1993, and exhausting to stack 575-3; [326 IAC 6.5-1-2]

- (f) One (1) natural gas-fired #1 Spray Dryer, identified as unit 5549-1, with a maximum heat input capacity of 25 MMBtu/hr and with a maximum air throughput of 26,000 dscfm, using a wet scrubber for particulate control, constructed in 1993 and modified in 1998, and exhausting to stack 5549-1; [326 IAC 6.5-1-2]
- (g) One (1) natural gas-fired #2 Spray Dryer, identified as unit 5549-2, with a maximum heat input capacity of 25 MMBtu/hr and with a maximum air throughput of 26,000 dscfm, using a wet scrubber for particulate control, constructed in 1993 and modified in 1998, and exhausting to stack 5549-2; [326 IAC 6.5-1-2]
- (h) One (1) natural gas-fired #5 Starch Flash Dryer, identified as unit 575-2, with a maximum heat input capacity of 38 MMBtu/hr and with a maximum air throughput of 84,200 dscfm, using a wet scrubber for particulate control, constructed in 1979 and replaced in 1995, and exhausting to stack 575-2; [326 IAC 6.5-6-25]
- (i) One (1) natural gas-fired Feed Dryer, identified as unit 5502-1A, with a maximum heat input capacity of 77 MMBtu/hr and with a maximum throughput of 20 tons/hr, using a first effect wash water system for SO₂ control, and the RTO, unit 5502-1D for VOC and particulate control, constructed in 1997, and exhausting to the inlet of unit 5502-1D; [326 IAC 6.5-1-2]
- (j) One (1) natural gas-fired Germ Dryer, identified as unit 5502-1B, with a maximum heat input capacity of 20 MMBtu/hr and with a maximum throughput of 11 tons/hr, using the RTO, unit 5502-1D, for VOC and particulate control, constructed in 1997, and exhausting to the inlet of unit 5502-1D; [326 IAC 6.5-1-2]
- (k) One (1) natural gas-fired Gluten Dryer, identified as unit 5502-1C, with a maximum heat input capacity of 32 MMBtu/hr and with a maximum throughput of 4.21 tons/hr, using the RTO, unit 5502-1D, for VOC and particulate control, constructed in 1997, and exhausting to the inlet of unit 5502-1D; [326 IAC 6.5-1-2]
- (l) One (1) natural gas-fired Regenerative Thermal Oxidizer, identified as unit 5502-1D, with a maximum heat input capacity of 18 MMBtu/hr and, used as a control for particulate and VOC, constructed in 1997, and exhausting to stack 5502-7; [326 IAC 6.5-1-2]
- (m) Spray Agglomerator #3, identified as unit 5549-28, part of the spray agglomeration process, with a maximum heat input capacity of 25.0 MMBtu/hr and with a maximum air throughput of 32,300 dscfm, using a wet scrubber for particulate control, constructed in 2001, and exhausting to stack 5549-28; [326 IAC 6.5-1-2]
- (n) One (1) DSW Bulk Bag Filler, identified as unit 71-9, with a maximum capacity of 11 tons/hr, using a baghouse* for particulate control, constructed in 1995, and exhausting to stack 71-9; [326 IAC 6.5-1-2]
- (o) One (1) Feed Storage Hopper, identified as unit 5552-1, with a maximum air throughput of 2,450 dscfm, using a baghouse* for particulate control, constructed in 1995, and exhausting to stack 5552-1; [326 IAC 6.5-1-2]
- (p) One (1) Product Transfer Hopper, identified as unit 5552-2, with a maximum air throughput of 350 dscfm, using a baghouse* for control, constructed in 1995, and exhausting to stack 5552-2; [326 IAC 6.5-1-2]
- (q) One (1) Truck Loadout, identified as unit 5503-6, with a maximum throughput of 25 tons/hr, using a baghouse for particulate control, constructed in 1999, and exhausting to stack 5502-3; [326 IAC 6.5-1-2]

- (r) One (1) Germ Bin, one (1) Pellet Bin #1, and one (1) Pellet Bin #2, identified as units 5503-2, 5503-3, and 5503-4 respectively, and with a combined maximum throughput of 120 tons/hr, using a Loadout Dust Collection System for particulate control, identified as 5503-5, each constructed in 1997, and exhausting to stack 5503-2; [326 IAC 6.5-1-2]
- (s) One (1) DSW Packing Fugitive Dust Collector, identified as unit 71-7, with a maximum throughput of 0.1 tons/hr, using a baghouse for particulate control, constructed in 1977, and exhausting to stack 71-7; [326 IAC 6.5-1-2]
- (t) One (1) RSP North Packing Line, identified as unit 577-2, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1979 and modified in 2000, and exhausting to stack 577-2; [326 IAC 6.5-1-2]
- (u) One (1) Gluten Receiver, identified as unit 5503-1, with a maximum throughput of 4.21 tons/hr, using a baghouse* for particulate control, constructed in 1997, and exhausting to stack 5503-1; [326 IAC 6.5-1-2]
- (v) One (1) Pellet Cooler and one (1) Germ Cooler, identified as units 5502-5 and 5502-6, with a maximum throughput of 19.36 tons/hr and 4.21 tons/hr respectively, each using a high efficiency cyclone for particulate control, each constructed in 1997, and exhausting to stacks 5502-5 and 5502-6; [326 IAC 6.5-1-2]
- (w) Two (2) Loose Feed Bins, collectively identified as unit 5502-4, each with a maximum throughput of 19.36 tons/hr, using a baghouse for particulate control, constructed in 1997, and exhausting to stack 5502-3; [326 IAC 6.5-1-2]
- (x) One (1) Hammer Mill, identified as unit 5502-3, with a maximum throughput of 19.36 tons/hr, using a baghouse for particulate control, constructed in 1997, and exhausting to stack 5502-3; [326 IAC 6.5-1-2]
- (y) One (1) DSE Bag Slitter, identified as unit 42-10, with a maximum throughput of 10 tons/hr, using a baghouse for particulate control, constructed in 1987, and exhausting to stack 42-10; [326 IAC 6.5-6-25]
- (z) One (1) P-6 Rework Station, identified as unit 54-1, with a maximum throughput of 7.5 tons/hr, using a baghouse for particulate control, constructed in 1987, and exhausting to stack 54-1; [326 IAC 6.5-1-2]
- (aa) One (1) RSP Hopper #4, identified as unit 577-5, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-5; [326 IAC 6.5-1-2]
- (bb) One (1) RSP Hopper #6, identified as unit 577-6, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-6; [326 IAC 6.5-1-2]
- (cc) One (1) RSP Hopper #5, identified as unit 577-7, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-7; [326 IAC 6.5-1-2]
- (dd) One (1) RSP Hopper #1, identified as unit 577-8, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-8; [326 IAC 6.5-1-2]

- (ee) One (1) RSP Hopper #2, identified as unit 577-9, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-9; [326 IAC 6.5-1-2]
- (ff) One (1) RSP Hopper #3, identified as unit 577-10, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-10; [326 IAC 6.5-1-2]
- (gg) One (1) Industrial Packer, identified as unit 71-1, with a maximum air throughput of 5,300 dscfm, using a baghouse for particulate control, constructed in 1994, and exhausting to stack 71-1; [326 IAC 6.5-6-25]
- (hh) Two (2) Spray Dryer Product Receivers, identified as units 5549-3 and 5549-4, each with a maximum air throughput of 1,700 dscfm, each using a baghouse* for particulate control, each constructed in 1993, and exhausting to stacks 5549-3 and 5549-4; [326 IAC 6.5-1-2]
- (ii) One (1) #1 Spray Dryer Storage Hopper #1, identified as unit 5549-7, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-7; [326 IAC 6.5-1-2]
- (jj) One (1) #1 Spray Dryer Storage Hopper #2, identified as unit 5549-8, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-8; [326 IAC 6.5-1-2]
- (kk) One (1) #2 Spray Dryer Storage Hopper #3, identified as unit 5549-9, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-9; [326 IAC 6.5-1-2]
- (ll) One (1) #2 Spray Dryer Storage Hopper #4, identified as unit 5549-10, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-10; [326 IAC 6.5-1-2]
- (mm) One (1) Agglomerator Feed Storage Bin, identified as unit 5549-12, with a maximum air throughput of 1530 dscfm, using a baghouse* for particulate control, constructed in 1995, and exhausting to stack 5549-12; [326 IAC 6.5-1-2]
- (nn) One (1) Agglomerator, identified as unit 5549-13, with a maximum air throughput of 12,500 dscfm, using a baghouse for particulate control, constructed in 1995, and exhausting to stack 5549-13; [326 IAC 6.5-1-2]
- (oo) One (1) Agglomerator Equipment Aspiration, identified as unit 5549-14, with a maximum air throughput of 2,840 dscfm, using a baghouse** for particulate control, constructed in 1995, and exhausting to stack 5549-14; [326 IAC 6.5-1-2]
- (pp) One (1) spray agglomeration process, constructed in 2000, consisting of the following units:
 - (1) Bulk Bag Packer Filter Receiver, identified as unit 5549-17, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-17; [326 IAC 6.5-1-2]
 - (2) Line 1 Middle Packer, identified as unit 5549-18, with a maximum air throughput of 4,600 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-18; [326 IAC 6.5-1-2]

- (3) Line 1 North Packer, identified as unit 5549-19, with a maximum air throughput of 5,400 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-19; [326 IAC 6.5-1-2]
 - (4) #2 Fugitive Dust Collector, identified as emission unit 5549-20, with a maximum throughput of 14,000 dscfm, using a baghouse for particulate control, and exhausting to stack 5549-20; [326 IAC 6.5-1-2]
 - (5) Line 1 Packing ambient D/C, identified as unit 5549-21, with a maximum air throughput of 14,000 dscfm, using a baghouse for particulate control, and exhausting to stack 5549-21; [326 IAC 6.5-1-2]
 - (6) Line 2 Packer, identified as unit 5549-26, with a maximum air throughput of 5,400 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-26; [326 IAC 6.5-1-2]
- (qq) One (1) West Corn Truck Dump, identified as unit 56-1, with a maximum throughput of 448 tons/hr, using a baghouse for particulate control, constructed prior to 1968, and modified in 1996, and exhausting to stack 56-1; [326 IAC 6.5-6-25]
- (rr) Grinding and machining operations controlled with fabric filters with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations: [326 IAC 2-7-1(21)(G)(xxiii)]
- (1) One (1) DSE Hopper #9, identified as unit 42-3A, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 6; [326 IAC 6.5-6-25]
 - (2) One (1) DSE Hopper #10, identified as unit 42-3B, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 7; [326 IAC 6.5-6-25]
 - (3) One (1) DSE Hopper #11, identified as unit 42-3C, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 43-3C; [326 IAC 6.5-6-25]
 - (4) One (1) DSE Hopper #12, identified as unit 42-3D, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 9; [326 IAC 6.5-6-25]
 - (5) One (1) DSE Hopper #13, identified as unit 42-3E, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 10; [326 IAC 6.5-6-25]
 - (6) One (1) DSE Hopper #14, identified as unit 42-3F, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 11; [326 IAC 6.5-6-25]
 - (7) One (1) DSE Hopper #2, identified as unit 42-7A, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 14; [326 IAC 6.5-6-25]
 - (8) One (1) DSE Hopper #4, identified as unit 42-7B, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 14; [326 IAC 6.5-6-25]

- (9) One (1) DSE Hopper #6, identified as unit 42-7C, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 16; [326 IAC 6.5-6-25]
- (10) One (1) DSE Hopper #1, identified as unit 42-8A, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17A; [326 IAC 6.5-6-25]
- (11) One (1) DSE Hopper #3, identified as unit 42-8B, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17B; [326 IAC 6.5-6-25]
- (12) One (1) DSE Hopper #5, identified as unit 42-8C, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17C; [326 IAC 6.5-6-25]
- (13) One (1) DSE Hopper #7, identified as unit 42-8D, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17D; [326 IAC 6.5-6-25]
- (14) One (1) CWS #8; identified as unit 63-1A, with a maximum throughput of 1 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and modified in 1976, and exhausting to stack 46A; [326 IAC 6.5-1-2]
- (15) One (1) CWS South East, identified as unit 63-1B, with maximum throughput of 1 ton/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 46B; [326 IAC 6.5-1-2]
- (16) One (1) CWS South Mill; identified as unit 63-17, constructed in 1977, with a maximum throughput of 0.8 tons/hr, using a baghouse** (replaced baghouse in 2008) for particulate control, and exhausting to stack 53; [326 IAC 6.5-1-2]
- (ss) One (1) Grain Elevator, identified as unit 56-2, with a maximum throughput of 80 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 24; [326 IAC 6.5-6-25]
- (tt) Starch operations, starch drying, starch handling and starch packaging consisting of the following units:
 - (1) One (1) Filter Receiver, identified as 152-1, with a maximum air throughput of 500 dscfm, using a baghouse* for particulate control, constructed in 2002, and exhausting to stack 152-1; [326 IAC 6.5-1-2]
 - (2) One (1) Mixer baghouse, identified as 152-2, with a maximum air throughput of 1,000 dscfm, using a baghouse* for particulate control, constructed in 2002 and approved in 2011 for modification, and exhausting to stack 152-2; [326 IAC 6.5-1-2]
 - (3) One (1) Starch Cooler Filter Receiver, identified as 152-3 (Bld 852), with a maximum air throughput of 589 dscfm, using a baghouse* for particulate control, constructed in 2002, and exhausting to stack 152-3; [326 IAC 6.5-1-2]
 - (4) One (1) Starch Mixer 2 Filter/Receiver, identified as 152-4 (Bld 852A), with a maximum air throughput of 600 dscfm, using a baghouse* for particulate control, constructed on in 2002, and exhausting to stack 152-4; [326 IAC 6.5-1-2]

- (5) One (1) Starch Mixer 2, identified as 152-5 (Bld 852A), with a maximum air throughput of 1,000 dscfm, using a baghouse* for particulate control, constructed in 2002, and exhausting to stack 152-5; [326 IAC 6.5-1-2]
- (6) One (1) Starch Storage Hopper, identified as 152-6, with a maximum throughput of 15 tons/hr, using a baghouse** for particulate control, constructed in 2003, and exhausting to stack 152-6; [326 IAC 6.5-1-2]
- (7) One (1) Starch Filter/Receiver 2 Bld 852, identified as unit 152-7, with a maximum air throughput of 500 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-7; [326 IAC 6.5-1-2]
- (8) One (1) Starch Mixer 4 Bld 852A Filter Receiver, identified as unit 152-8, with a maximum air throughput of 600 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 157-8; [326 IAC 6.5-1-2]
- (9) One (1) Starch Mixer 4 Bld 852A, identified as unit 152-9, with a maximum air throughput of 20 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-9; [326 IAC 6.5-1-2]
- (10) One (1) Starch Mixer 3 Bld 852A Filter Receiver, identified as unit 152-10, with a maximum air 600 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-10; [326 IAC 6.5-1-2]
- (11) One (1) Starch Mixer 3 Bld 852A, identified as unit 152-11, with a maximum air throughput of 1,000 dscfm, using a baghouse* for particulate control, constructed in 2004 and approved in 2011 for modification, and exhausting to stack 152-11; [326 IAC 6.5-1-2]
- (12) One (1) Bulk Bag Receiver, identified as 152-12, with a maximum air throughput of 800 dscfm, using a baghouse* for particulate control, constructed in 2004, and exhausting to stack 157-12; [326 IAC 6.5-1-2]
- (13) One (1) Starch Storage Silo #2 Receiver; identified as Bin TF41820 (formerly unit 61-21), with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed in 1976, modified in 1981, approved in 2010 for additional modification, and exhausting to stack TF41820; [326 IAC 6.5-1-2]
- (14) One (1) Starch Cooling and Conveying System, identified as TF41818 (formerly unit 581-2), with a maximum air throughput of 14,000 dscfm, using a baghouse* for particulate control, constructed in 1983, approved in 2010 for modification, and exhausting to stack TF41818; [326 IAC 6.5-1-2]
- (15) One (1) Blending Bin, identified as 152-15 (formerly unit TF41819), with a maximum air throughput of 4,000 dscfm, using a baghouse* for particulate control, approved in 2010 for construction, and exhausting to stack DC41819 [326 IAC 6.5-1-2]
- (16) One (1) Starch Hopper D/C, identified as 128-3, with a maximum throughput of 12.5 tons/hr, using a baghouse* for particulate control, constructed in 1983 and modified in 2000, and exhausting to stack 128-3; [326 IAC 6.5-1-2]
- (17) One (1) DSW Chemical Blender Bag Slitter, identified as unit 61-15, with a maximum throughput of 7.5 tons/hr, using a baghouse** for particulate control, constructed prior to 1974, and exhausting to stack 35; [326 IAC 6.5-1-2]

- (18) One (1) sodium sulfate conveying system, including a receiver and silo, identified as unit 40-1A and 40-1B, with a maximum throughput of 15 tons/hr, using two baghouses* for particulate control, constructed prior to 1968, modified in 1998, and exhausting to stacks 1A and 1B; [326 IAC 6.5-1-2]
- (19) One (1) DSE North Packer, identified as unit 42-1, with a maximum throughput of 30 tons/hr, using a baghouse* for particulate control, constructed prior to 1968 and modified in 1996, and exhausting to stack 5; [326 IAC 6.5-6-25]
- (20) One (1) DSE Hopper #8, identified as unit 42-4, with a maximum throughput of 13.95 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 17E; [326 IAC 6.5-6-25]
- (21) One (1) DSE Negative Receiver, identified as unit 42-6, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 13; [326 IAC 6.5-6-25]
- (22) One (1) DSE South Packer, identified as unit 42-9, with a maximum throughput of 30 tons/hr, using a baghouse* for particulate control, constructed prior to 1968 and modified in 1996, and exhausting to stack 18; [326 IAC 6.5-1-2]
- (23) One (1) DSE Railcar Loading - East Track, identified as unit 42-11, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 20; [326 IAC 6.5-1-2]
- (24) One (1) DSE Railcar Loading - West Track, identified as unit 42-12, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 21; [326 IAC 6.5-1-2]
- (25) One (1) DSE Bulk Bag System, identified as unit 42-13, with a maximum throughput of 30 tons/hr, using a receiver/baghouse* for particulate control, constructed in 1997, and exhausting to stack 106; [326 IAC 6.5-1-2]
- (26) One (1) Dextrin #1 System Pneumatic, identified as unit 61-3, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed in 1973, and exhausting to stack 27; [326 IAC 6.5-1-2]
- (27) One (1) Dextrin Flash Dryer, identified as unit 61-9, with a maximum throughput of 5 tons/hr, using a cyclone and a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 30; [326 IAC 6.5-6-25]
- (28) One (1) Dextrin #3 System Pneumatic, identified as unit 61-22, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed in 1976, and exhausting to stack 41; [326 IAC 6.5-1-2]
- (29) One (1) Dextrin #2 System Pneumatic, identified as unit 61-23, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed in 1976, and exhausting to stack 42; [326 IAC 6.5-1-2]
- (30) One (1) Dextrin #1 System Mixer, identified as unit 61-1, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed in 1973, and exhausting to stack 25; [326 IAC 6.5-1-2]
- (31) One (1) Dextrin #1 System Cookers, identified as unit 61-2, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed in 1973, and exhausting to stack 26; [326 IAC 6.5-1-2]

- (32) One (1) Dextrin #2 System Mixer, identified as unit 61-6, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed in 1974, and exhausting to stack 28; [326 IAC 6.5-6-25]
- (33) Two (2) Dextrin #2 System East and West Batch Bins, identified as units 61-7E and 61-7W, each with a maximum throughput of 5 tons/hr, using two baghouses* for particulate control, constructed in 1974, and exhausting to stacks 29A and 29B; [326 IAC 6.5-1-2]
- (34) One (1) Starch Storage Silo #3 Receiver, identified as unit 61-11, with a maximum throughput of 7.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 31; [326 IAC 6.5-1-2]
- (35) One (1) Starch Storage Silo #1 Receiver, identified as unit 61-12, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 32; [326 IAC 6.5-1-2]
- (36) One (1) Starch Storage Silo #1, identified as unit 61-13, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 33; [326 IAC 6.5-1-2]
- (37) One (1) Dextrin Blend, identified as unit 61-14, with a maximum throughput of 7.5 tons/hr, using hopper/filter receiver using a baghouse** for particulate control, constructed prior to 1973, and exhausting to stack 61-14; [326 IAC 6.5-6-25]
- (38) One (1) DSW Chemical Blender Tank; identified as unit 61-14A, with a maximum throughput of 7.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 34; [326 IAC 6.5-6-25]
- (39) One (1) Dextrin System Acidifiers; identified as unit 61-16, with a maximum air throughput of 1,530 dscfm, using a baghouse* for particulate control, constructed in 1973, and exhausting to stack 36; [326 IAC 6.5-1-2]
- (40) One (1) Dextrin #2 System Cooler; identified as unit 61-18, with a maximum air throughput of 2,300 dscfm, using a baghouse* for particulate control, constructed in 1974, and exhausting to stack 37; [326 IAC 6.5-1-2]
- (41) One (1) Dextrin #3 System Cookers; identified as unit 61-19, with a maximum air throughput of 2,300 dscfm, using a baghouse* for particulate control, constructed in 1974, and exhausting to stack 38; [326 IAC 6.5-1-2]
- (42) One (1) Starch Storage Silo #2; identified as unit 61-20, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed in 1976, and exhausting to stack 39; [326 IAC 6.5-1-2]
- (43) One (1) Dextrin #3 System Mixer; identified as unit 61-24, with a maximum air throughput of 410 dscfm, using a baghouse* for particulate control, constructed in 1976, and exhausting to stack 43; [326 IAC 6.5-1-2]
- (44) One (1) Dextrin #3 System West Batch Bin; identified as unit 61-25, with a maximum air throughput of 350 dscfm, using a baghouse* for particulate control, constructed in 1976, and exhausting to stack 44; [326 IAC 6.5-1-2]
- (45) One (1) Dextrin #3 System East Batch Bin; identified as unit 61-26, with a maximum air throughput of 350 dscfm, using a baghouse** for particulate control, constructed in 1976, and exhausting to stack 45; [326 IAC 6.5-1-2]

- (46) One (1) CWS #7 Dryer Receiver; identified as unit 63-3, with a maximum air throughput of 2000 dscfm, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 47; [326 IAC 6.5-1-2]
- (47) One (1) CWS North Mill, identified as unit 63-4, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 48; [326 IAC 6.5-1-2]
- (48) One (1) CWS North Product, identified as unit 63-5, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 49; [326 IAC 6.5-1-2]
- (49) One (1) CWS Packer; identified as unit 63-9, with a maximum throughput of 20 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 50; [326 IAC 6.5-1-2]
- (50) One (1) Liquid Glue Bag Dump; identified as unit 63-12, with a maximum throughput of 8 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 51; [326 IAC 6.5-1-2]
- (51) One (1) CWS #9 and #10 Dryers Receiver; identified as unit 63-15, with a maximum air throughput of 3,600 dscfm, using a baghouse* for particulate control, constructed in 1975 and modified in 2010, and exhausting to stack 52; [326 IAC 6.5-1-2]
- (52) CWS #11, #12, and #13 Dryers; identified as unit 63-16A and 63-16B, each with a maximum air throughput of 3,300 dscfm, using two baghouses* for particulate control, constructed prior to August 7, 1977, and exhausting to stacks 54A and 54B; [326 IAC 6.5-1-2]
- (53) One (1) CWS South Raw Material Dump; identified as unit 63-18, with a maximum throughput of 3.5 tons/hr, using a baghouse** for particulate control, constructed in 1977, and exhausting to stack 55; [326 IAC 6.5-1-2]
- (54) One (1) DSW Negative Receiver; identified as unit 63-20, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 56; [326 IAC 6.5-1-2]
- (55) Two (2) DSW Hoppers #17 and #18; identified as unit 71-2A and 71-2B, each with a maximum throughput of 15 tons/hr, using two baghouses* for particulate control, constructed prior to 1968, and exhausting to stacks 58A and 58B; [326 IAC 6.5-6-25]
- (56) One (1) Negative Receiver; identified as unit 71-3, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 71-3; [326 IAC 6.5-1-2]
- (57) One (1) DSW Hopper #13, identified as unit 71-4, with a maximum throughput of 2.5 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 67; [326 IAC 6.5-6-25]
- (58) One (1) DSW Hopper #1; identified as unit 71-5A, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 59; [326 IAC 6.5-6-25]

- (59) One (1) DSW Hopper #2; identified as unit 71-5B, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 60; [326 IAC 6.5-6-25]
- (60) One (1) DSW Hopper #3; identified as unit 71-5C, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 61; [326 IAC 6.5-6-25]
- (61) One (1) DSW Hopper #4; identified as unit 71-5D, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 62; [326 IAC 6.5-6-25]
- (62) One (1) DSW Hopper #5; identified as unit 71-5E, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 63; [326 IAC 6.5-6-25]
- (63) One (1) DSW Hopper #6; identified as unit 71-5F, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 64; [326 IAC 6.5-6-25]
- (64) One (1) DSW Hopper #7; identified as unit 71-5G, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 65; [326 IAC 6.5-6-25]
- (65) One (1) DSW Hopper #8; identified as unit 71-5H, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 66; [326 IAC 6.5-6-25]
- (66) One (1) DSW Hopper #9; identified as unit 71-5I, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 71-5I; [326 IAC 6.5-6-25]
- (67) One (1) DSW Hopper #10; identified as unit 71-5J, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 8; [326 IAC 6.5-6-25]
- (68) One (1) DSW Hopper #11; identified as unit 71-5K, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 69; [326 IAC 6.5-6-25]
- (69) One (1) DSW Hopper #12; identified as unit 71-5L, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 70; [326 IAC 6.5-6-25]
- (70) One (1) DSW Bulk Car Loading; identified as unit 71-8, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed in 1971, and exhausting to stack 72; [326 IAC 6.5-1-2]
- (71) One (1) RSP South Bulk Bag Packing; identified as unit 577-1, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 77; [326 IAC 6.5-1-2]
- (72) One (1) FG Bulk Bag Bin Vent Bld 800, identified as unit FA-60582, with a maximum throughput of 18 tons/hr using a baghouse** for particulate control, constructed in 2003, and exhausting to stack FA-60582; [326 IAC 6.5-1-2]

- (73) One (1) RSP South Packing Line, identified as unit 577-3, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 79; [326 IAC 6.5-1-2]
- (74) One (1) RSP Bulk Loading System A; identified as unit 577-4, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 80; [326 IAC 6.5-1-2]
- (75) One (1) RSP Bulk Loading Fugitive Dust Collector**; identified as unit 577-4A, with a maximum throughput of 18 tons/hr and an actual throughput of 18 lbs/hr, constructed in 1986, and exhausting to stack 81; [326 IAC 6.5-1-2]
- (76) One (1) CSW conveying cyclone operation, identified as unit 578-1, with a maximum throughput of 7.5 tons/hr, using a baghouse** for particulate control, returned to service in 2008, and exhausting through stack 578-1. [326 IAC 6.5-1-2]
- (77) One (1) CWS Packing Hopper; identified as unit 578-2, with a maximum throughput of 1 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 89; [326 IAC 6.5-1-2]
- (78) One (1) CWS Milling System, identified as unit 578-3, with a maximum throughput of 1.5 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 90; [326 IAC 6.5-1-2]
- (79) One (1) Base Blending Bin 158-5, identified as unit TF31901, with a maximum air throughput of 2,000 dscfm, using product recovery DC-31901** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 1-158; [326 IAC 6.5-1-2]
- (80) One (1) Base Bin 158-1, identified as unit TF31902, with a maximum air throughput of 200 dscfm, using product recovery DC-31901** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 2-158; [326 IAC 6.5-1-2]
- (81) One (1) Product Bin 158-2, identified as unit TF31991, with a maximum air throughput of 200 dscfm, using product recovery DC-31991** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 3-158; [326 IAC 6.5-1-2]
- (82) One (1) Surge Tank Bin 158-3, identified as unit SH31913, with a maximum air throughput of 200 dscfm, using product recovery DC-31911** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 7-158; [326 IAC 6.5-1-2]
- (83) One (1) Bulk Bag Unload Bin 158-4, identified as unit DC-31900 (Bld 630) with a maximum air throughput of 600 dscfm, using a dust collector* for particulate control, constructed in 2004, and exhausting to stack 8-158; [326 IAC 6.5-1-2]
- (84) One (1) FBR exhaust, identified as unit TR31912, with a maximum air throughput of 8,800 dscfm, using product recovery metal filters** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 5-158 [326 IAC 6.5-1-2]
- (85) One (1) starch dryer, identified as unit T-1, with a maximum production rate of 300 lbs/hr, using a product collector/cyclone and dust collector* for particulate control, constructed in 2005, and exhausting to stack T-1; [326 IAC 6.5-1-2]
- (86) One (1) Line 1 South Packing Hopper, identified as unit 5549-22, with a maximum air throughput of 4,800 dscfm, using a baghouse* for particulate control, constructed in 2006, and exhausting to stack 5549-22. [326 IAC 6.5-1-2]

*The control device is considered both integral to the process and inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).

**The control device is considered inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).

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) Stationary fire pump engines, including:

- (1) One (1) 210-horsepower diesel-fired emergency fire pump engine, identified as FP1, constructed in 2003;

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.

- (2) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP2, constructed in 2003; and

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.

- (3) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP3, constructed in 2006.

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.

Under 40 CFR 60, Subpart IIII, this is an affected facility.

(b) Combustion related activities including spaces heaters, process heaters, or boilers using natural gas-fired with heat input equal to or less than ten million (10,000,000) British thermal units per hour;

- (1) One (1) process heater, Bld 630, natural gas fired, with maximum heat input capacity of 5.1 MMBtu/hr, identified as emission unit YX31914A, constructed in 2004 and venting out stack 158-6. [326 IAC 6-2-4]

(c) Cleaners and solvents, from operations M1 through M4 and RSP shop, characterized as:

- (1) having a vapor pressure equal to or less than two (2.0) kilo Pascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch) measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or
- (2) having a vapor pressure equal to or less than seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit);

the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months. [326 IAC 8-3-2] [326 IAC 8-3-8]

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

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

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

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

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, T097-26765-00042, 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:
- (i) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and
 - (ii) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(35).

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

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

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

and

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

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

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

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

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

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (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, 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

- (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 T097-26765-00042 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) or (c). 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 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 thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

The Permittee shall not operate an incinerator 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.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 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.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
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.7 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.

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

Unless otherwise specified in this permit, 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.

C.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

C.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee shall 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.12 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]

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

C.13 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system);
or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or

- (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]
Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
[326 IAC 2-2][326 IAC 2-3]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, where applicable:

- (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, where applicable

- (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) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, document and maintain the following records:

- (A) A description of the project.
- (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
- (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;

- (iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:
- (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]
[326 IAC 2-2][326 IAC 2-3]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. 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.
- (e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
 - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (ww) and/or 326 IAC 2-3-1 (pp), for that regulated NSR pollutant, and
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).
- (f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:
 - (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) natural gas-fired #1 Starch Flash Dryer, identified as unit 40-4, with a maximum heat input capacity of 30 MMBtu/hr and with a maximum air throughput of 42,200 dscfm, using a wet scrubber for particulate control, constructed in 1965 and modified in 1994, and exhausting to stack 40-4; [326 IAC 6.5-6-25]
- (b) One (1) natural gas-fired #2 Starch Flash Dryer, identified as unit 40-3, with a maximum heat input capacity of 36 MMBtu/hr and with a maximum air throughput of 73,000 dscfm, using a wet scrubber for particulate control, constructed in 1967 and modified in 1994 and 1999, and exhausting to stack 40-3; [326 IAC 6.5-6-25]
- (c) One (1) natural gas-fired #3 Starch Flash Dryer, identified as unit 40-2, with a maximum heat input capacity of 36 MMBtu/hr and with a maximum air throughput of 60,000 dscfm, using a wet scrubber for particulate control, constructed in 1971, and exhausting to stack 40-2; [326 IAC 6.5-6-25]
- (d) One (1) natural gas-fired #4 Starch Flash Dryer, identified as unit 575-1, with a maximum heat input capacity of 43 MMBtu/hr and with a maximum air throughput of 84,100 dscfm, using a wet scrubber for particulate control, constructed in 1977, and exhausting to stack 575-1; [326 IAC 6.5-6-25]
- (e) One (1) natural gas-fired #6 Starch Flash Dryer, identified as unit 575-3, with a maximum heat input capacity of 40 MMBtu/hr and with a maximum throughput of 84,100 dscfm, using a wet scrubber for particulate control, constructed in 1993, and exhausting to stack 575-3; [326 IAC 6.5-1-2]
- (f) One (1) natural gas-fired #1 Spray Dryer, identified as unit 5549-1, with a maximum heat input capacity of 25 MMBtu/hr and with a maximum air throughput of 26,000 dscfm, using a wet scrubber for particulate control, constructed in 1993 and modified in 1998, and exhausting to stack 5549-1; [326 IAC 6.5-1-2]
- (g) One (1) natural gas-fired #2 Spray Dryer, identified as unit 5549-2, with a maximum heat input capacity of 25 MMBtu/hr and with a maximum air throughput of 26,000 dscfm, using a wet scrubber for particulate control, constructed in 1993 and modified in 1998, and exhausting to stack 5549-2; [326 IAC 6.5-1-2]
- (h) One (1) natural gas-fired #5 Starch Flash Dryer, identified as unit 575-2, with a maximum heat input capacity of 38 MMBtu/hr and with a maximum air throughput of 84,200 dscfm, using a wet scrubber for particulate control, constructed in 1979 and replaced in 1995, and exhausting to stack 575-2; [326 IAC 6.5-6-25]
- (i) One (1) natural gas-fired Feed Dryer, identified as unit 5502-1A, with a maximum heat input capacity of 77 MMBtu/hr and with a maximum throughput of 20 tons/hr, using a first effect wash water system for SO₂ control, and the RTO, unit 5502-1D for VOC and particulate control, constructed in 1997, and exhausting to the inlet of unit 5502-1D; [326 IAC 6.5-1-2]
- (j) One (1) natural gas-fired Germ Dryer, identified as unit 5502-1B, with a maximum heat input capacity of 20 MMBtu/hr and with a maximum throughput of 11 tons/hr, using the RTO, unit 5502-1D, for VOC and particulate control, constructed in 1997, and exhausting to the inlet of unit 5502-1D; [326 IAC 6.5-1-2]

- (k) One (1) natural gas-fired Gluten Dryer, identified as unit 5502-1C, with a maximum heat input capacity of 32 MMBtu/hr and with a maximum throughput of 4.21 tons/hr, using the RTO ,unit 5502-1D, for VOC and particulate control, constructed in 1997, and exhausting to the inlet of unit 5502-1D; [326 IAC 6.5-1-2]
- (l) One (1) natural gas-fired Regenerative Thermal Oxidizer, identified as unit 5502-1D, with a maximum heat input capacity of 18 MMBtu/hr and, used as a control for particulate and VOC, constructed in 1997, and exhausting to stack 5502-7; [326 IAC 6.5-1-2]
- (m) Spray Agglomerator #3, identified as unit 5549-28, part of the spray agglomeration process, with a maximum heat input capacity of 25.0 MMBtu/hr and with a maximum air throughput of 32,300 dscfm, using a wet scrubber for particulate control, constructed in 2001, and exhausting to stack 5549-28; [326 IAC 6.5-1-2]

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

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

D.1.1 Prevention of Significant Deterioration [326 IAC 2-2]

- (a) Pursuant to CP 097-00042-97-01, issued March 24, 1997, A 097-00042-98-01, issued April 15, 1998, and in order to render the requirements of 326 IAC 2-2 not applicable:
 - (1) The combined input of corn grind to units 5502-1A, 5502-1B, 5502-1C, 5502-3 (Section D.2), 5502-4 (Section D.2), 5502-5 (Section D.2), 5502-6 (Section D.2), 5503-1 (Section D.2), 5503-2 (Section D.2), 5503-3 (Section D.2), 5503-4 (Section D.2), 5503-5 (Section D.2) and 5503-6 (Section D.2) shall not exceed 29,584,000 bushels per twelve consecutive month period with compliance determined at the end of each month. Compliance with this limit and the limits set in D.1.1(c) and D.2.1(a) limits PM/PM10 emissions to less than or equal to 43.862 tons per year and will render the requirements of 326 IAC 2-2 not applicable.
 - (2) The combined input of starch for units 5549-1 and 5549-2 shall not exceed 22,500 tons per twelve consecutive month period with compliance determined at the end of each month and the total emission rate shall not exceed 2.50 lb PM/PM10 per ton of starch. Compliance with this limit will limit PM/PM10 emissions to less than or equal to 28.11 tons per year and will render the requirements of 326 IAC 2-2 not applicable.
 - (3) The SO₂ emissions from units 5502-1A, 5502-1B, 5502-1C, and 5502-1D, shall not exceed a total of 8.05 pounds per hour. Compliance with this limit will limit SO₂ emissions to less than or equal to 35.26 tons per year and will render the requirements of 326 IAC 2-2 not applicable.
 - (4) The combined input of natural gas to 5502-1A, 5502-1B, 5502-1C, and 5502-1D shall not exceed 1,780 million cubic feet (MMcf) per twelve consecutive month period with compliance determined at the end of each month. Compliance with this limit will limit NO_x emissions to less than or equal to 39 tons per year and will render the requirements of 326 IAC 2-2 not applicable.
- (b) Pursuant to CP 097-00042-97-01, issued March 24, 1997, SSM 097-11362-00042, issued August 31, 1996, and in order to render the requirements of 326 IAC 2-2 not applicable, the following facilities are limited as indicated in the table below:

| Unit/ Stack ID | PM/PM10 Limit (gr/dscf) | PM/PM10 Limit (lb/hr) | PM/PM10 Limit (ton/yr) |
|----------------|-------------------------|-----------------------|------------------------|
| 575-3 | 0.012 | 5.63 | 24.65 |
| 5549-1 | 0.02 | -- | -- |
| 5549-2 | 0.02 | -- | -- |
| 5549-28 | 0.025 | 9.64 | 42.24 |

- (c) Pursuant to M 097-00042-99-01, issued February 25, 1999, the total PM/PM10 emissions from stack 5502-7 (exhausting emissions from units 5502-1A through 5502-1D) shall not exceed 0.0114 gr/dscf, 4.53 lb/hr, and 19.856 tons per year. Compliance with this limit will render the requirements of 326 IAC 2-2 not applicable.
- (d) Pursuant to CP 097-00042-99-01, issued June 11, 1999, the starch produced from unit 40-3 shall not exceed 145,610 tons per twelve consecutive month period with compliance determined at the end of each month and the emission rate shall not exceed 0.581 lb of PM/PM10 per ton of starch produced. Compliance with this limit will limit PM/PM10 emissions to less than or equal to 42.3 tons per year, will satisfy the requirements of 326 IAC 6.5-6-25, and render the requirements of 326 IAC 2-2 not applicable.
- (e) The combined VOC emissions from units 5502-1A, 5502-1B, 5502-1C, and 5502-1D shall not exceed a total of 4.89 pounds per hour. Compliance with this limit will limit VOC emissions to less than or equal to 21.4 tons of per year and will render the requirements of 326 IAC 2-2 not applicable to the Germ Dryer, Feed Dryer, and Gluten Dryer.

D.1.2 Particulate Matter [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, the particulate matter emissions from units 575-3, 5502-1A, 5502-1B, 5502-1C, 5502-1D, 5549-1, 5549-2, and 5549-28 shall each not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

D.1.3 Particulate Matter [326 IAC 6.5-6-25]

- (a) Facilities 40-4, 40-3, 40-2, 575-1, and 575-2 are limited as indicated in the table below:

| Facility | PM Limit (gr/dscf) | PM Limit (ton/yr) |
|----------|--------------------|-------------------|
| 40-4 | 0.02 | 44.1 |
| 40-3 | 0.016 | 42.3 |
| 40-2 | 0.016 | 31.9 |
| 575-1 | 0.011 | 32.4 |
| 575-2 | 0.011 | 32.4 |

Compliance with these limits will satisfy the requirements of 326 IAC 6.5-6-25.

- (b) Pursuant to CP 097-00042-95-02, issued March 8, 1995, the amount of dry product processed by unit 575-2 shall not exceed 123,300 tons per twelve month consecutive period with compliance determined at the end of each month. Compliance with this limit will satisfy the requirements of 326 IAC 6.5-6-25.

D.1.4 Volatile Organic Compounds [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the Permittee shall employ Best Available Control Technology (BACT) for emission units 5502-1A, 5502-1B, 5502-1C which has been determined to be:

- (a) The VOC emissions from the Germ Dryer, Feed Dryer, and Gluten Dryer, identified as 5502-1A, 5502-1B, and 5502-1C, shall be controlled by a regenerative thermal oxidizer or an equivalent thermal oxidation unit.
- (b) The overall VOC efficiency for the regenerative thermal oxidizer, or an equivalent thermal oxidation unit, (including capture efficiency and destruction efficiency) shall be at least 95%.
- (c) The VOC emissions from the Germ Dryer, Feed Dryer, and Gluten Dryer, identified as 5502-1A, 5502-1B, and 5502-1C, combined shall not exceed 4.89 pounds per hour (lbs/hr).

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for units 40-2, 40-3, 40-4, 575-1, 575-2, 575-3, 5502-1A, 5502-1B, 5502-1C, 5549-1, 5549-2, 5549-28, and their 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.1.6 Particulate, Sulfur Dioxide and VOC Control

- (a) In order to comply with Conditions D.1.1, D.1.2 and D.1.4, the RTO, or an equivalent thermal oxidation unit, shall be in operation and control particulate and VOC emissions from units 5502-1A, 5502-1B, and 5502-1C at all times when any of those units are in operation.
- (b) In order to comply with Condition D.1.1(a)(3), the first (1st) effect wash water system shall be in operation and control SO₂ emissions from unit 5502-1A at all times the unit is in operation.
- (c) In order to comply with Conditions D.1.1, D.1.2, and D.1.3, the scrubbers shall be in operation and control particulate emissions from units 40-2, 40-3, 40-4, 575-1, 575-2, 575-3, 5549-1, 5549-2, and 5549-28 at all times those units are in operation.

D.1.7 Testing Requirements [326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Condition D.1.1 and D.1.4, the Permittee shall perform SO₂ and VOC testing on emission units 5502-1A, 5502-1B, 5502-1C and 5502-1D, utilizing methods as approved by the Commissioner 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 obligation with regard to the performance testing required by this condition.

- (b) If emission unit 5502-1D is replaced with an equivalent thermal oxidation unit, not later than 180 days after installation of an equivalent thermal oxidation unit, in order to demonstrate compliance with Condition D.1.1(e) and D.1.4(b), the Permittee shall perform VOC testing on emission units 5502-1A, 5502-1B, 5502-1C, utilizing methods approved by the Commissioner. Testing shall be repeated every five (5) years from the initial test or most recent valid compliance demonstration of an equivalent thermal oxidation unit. 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 obligation with regard to the performance testing required by this condition.

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

D.1.8 Visible Emission Notations

- (a) Visible emission notations of exhaust from stacks 40-2, 40-3, 40-4, 575-1, 575-2, 575-3, 5502-7, 5549-1, 5549-2, and 5549-28 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. A notation of abnormal visible emissions is not a deviation from this permit.
- (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 reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response shall be considered a deviation from this permit.

D.1.9 Parametric Monitoring for Scrubbers, RTO and First (1st) Effect Wash Water System

- (a) The Permittee shall monitor the pH and flow rate of the liquid through the nozzles of the first (1st) effect wash water to the GHE at least once per week of the system used to control SO₂ emissions from unit 5502-1A. When for any one reading the pH of the liquid used in the first (1st) effect wash water is less than 6.5 or the flow rate of the first (1st) effect wash water is below the minimum 400 gallons per minute or a minimum established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pH or flow rate reading that is outside the above mentioned ranges is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

- (b) The Permittee shall monitor the exhaust air stream pressure drop across each scrubber, and each scrubber make-up rate at least once per week from the scrubbers controlling emissions from units 40-3, 575-1, 575-2, and 575-3 when units 40-3, 575-1, 575-2, and 575-3 are in operation. When, for any one reading, the pressure drop across the scrubbers are outside the normal range of 6.0 to 15.0 inches of water, or the make-up rate is below the minimum 10 gallons per minute, or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure drop or make-up rate 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.
- (c) The Permittee shall monitor the exhaust air stream pressure drop across each scrubber, and each scrubber make-up rate at least once per week from the scrubbers controlling emissions from units 5549-1 and 5549-2 when units 5549-1 and 5549-2 are in operation. When, for any one reading, the pressure drop across the scrubbers are outside the normal range of 6.0 to 15.0 inches of water, or the make-up rate is below the minimum 20 gallons per minute, or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure drop or make-up rate 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.
- (d) The Permittee shall monitor the exhaust air stream pressure drop across each scrubber, and each scrubber make-up rate at least once per week from the scrubbers controlling emissions from units 40-2 and 40-4 when units 40-2 and 40-4 are in operation. When, for any one reading, the pressure drop across the scrubbers are outside the normal range of 3.0 to 8.0 inches of water, or the make-up rate is below the minimum 10 gallons per minute, or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure drop or make-up rate 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.
- (e) The Permittee shall monitor the exhaust air stream pressure drop across the scrubber, and the scrubber make-up rate at least once daily from the scrubber controlling emissions from unit 5549-28 when unit 5549-28 is in operation. When, for any one reading, the pressure drop across the scrubber is outside the normal range of 6.0 to 15.0 inches of water, or the make-up rate is below the minimum 20 gallons per minute, or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure drop or make-up rate 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.
- (f) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer, or an equivalent thermal oxidation unit, for measuring operating temperature. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until any approved stack test results are available, the Permittee shall take appropriate response steps whenever the three (3) hour average temperature of the thermal oxidizer, or an equivalent thermal oxidation unit, is below 1450°F. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this

condition. A three (3) hour average temperature that is below 1450°F is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Approved stack test results may reset the three (3) hour average temperature of the thermal oxidizer, or an equivalent thermal oxidation unit, to an alternative temperature and be incorporated via minor modification procedures.

- (g) The instruments used for determining the pH, pressure drop, flow rate and temperature shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated, maintained, and operated according to the Preventive Maintenance Plan.

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

D.1.10 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.1(a)(1), the Permittee shall maintain monthly records of the combined input of corn grind for the units identified in Condition D.1.1(a)(1).
- (b) To document the compliance status with Conditions D.1.1(a)(2), the Permittee shall maintain monthly records of the combined input of starch for units 5549-1 and 5549-2.
- (c) To document the compliance status with Condition D.1.1(a)(4), the Permittee shall maintain monthly records of the total input of natural gas consumed by 5502-1A, 5502-1B, 5502-1C, and 5502-1D.
- (d) To document the compliance status with Condition D.1.1(d), the Permittee shall maintain monthly records of the amount of starch produced by unit 40-3.
- (e) To document the compliance status with Condition D.1.3(b), the Permittee shall maintain monthly records of the amount of dry product processed by unit 575-2.
- (f) To document the compliance status with Condition D.1.8, the Permittee shall maintain a daily record of visible emission notations of the exhaust from stacks 40-2, 40-3, 40-4, 575-1, 575-2, 575-3, 5502-7, 5549-1, 5549-2, and 5549-28. 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).
- (g) To document the compliance status with Conditions D.1.1(a)(3) and D.1.9(a), the Permittee shall maintain weekly records of the pH and flow rate of the first (1st) effect wash water during normal operations.
- (h) To document the compliance status with Condition D.1.9(b), D.1.9(c), and D.1.9(d), the Permittee shall maintain weekly records of the pressure drop across the scrubbers and scrubbers make-up rates during normal operation. The Permittee shall include in its weekly 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 week).
- (i) To document the compliance status with Condition D.1.9(e), the Permittee shall maintain a daily records of the pressure drop across the scrubber and scrubber make-up rates during normal operation. 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).

- (j) To document the compliance status with Condition D.1.9(f), the Permittee shall maintain continuous records (on a 3-hour average basis) for the RTO (unit 5502-1D), or an equivalent thermal oxidation unit, combustion chamber temperature during normal operations.
- (k) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.1.11 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.1.1, and D.1.3 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee 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).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (n) One (1) DSW Bulk Bag Filler, identified as unit 71-9, with a maximum capacity of 11 tons/hr, using a baghouse* for particulate control, constructed in 1995, and exhausting to stack 71-9; [326 IAC 6.5-1-2]
- (o) One (1) Feed Storage Hopper, identified as unit 5552-1, with a maximum air throughput of 2,450 dscfm, using a baghouse* for particulate control, constructed in 1995, and exhausting to stack 5552-1; [326 IAC 6.5-1-2]
- (p) One (1) Product Transfer Hopper, identified as unit 5552-2, with a maximum air throughput of 350 dscfm, using a baghouse* for control, constructed in 1995, and exhausting to stack 5552-2; [326 IAC 6.5-1-2]
- (q) One (1) Truck Loadout, identified as unit 5503-6, with a maximum throughput of 25 tons/hr, using a baghouse for particulate control, constructed in 1999, and exhausting to stack 5502-3; [326 IAC 6.5-1-2]
- (r) One (1) Germ Bin, one (1) Pellet Bin #1, and one (1) Pellet Bin #2, identified as units 5503-2, 5503-3, and 5503-4 respectively, and with a combined maximum throughput of 120 tons/hr, using a Loadout Dust Collection System for particulate control, identified as 5503-5, each constructed in 1997, and exhausting to stack 5503-2; [326 IAC 6.5-1-2]
- (s) One (1) DSW Packing Fugitive Dust Collector, identified as unit 71-7, with a maximum throughput of 0.1 tons/hr, using a baghouse for particulate control, constructed in 1977, and exhausting to stack 71-7; [326 IAC 6.5-1-2]
- (t) One (1) RSP North Packing Line, identified as unit 577-2, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1979 and modified in 2000, and exhausting to stack 577-2; [326 IAC 6.5-1-2]
- (u) One (1) Gluten Receiver, identified as unit 5503-1, with a maximum throughput of 4.21 tons/hr, using a baghouse* for particulate control, constructed in 1997, and exhausting to stack 5503-1; [326 IAC 6.5-1-2]
- (v) One (1) Pellet Cooler and one (1) Germ Cooler, identified as units 5502-5 and 5502-6, with a maximum throughput of 19.36 tons/hr and 4.21 tons/hr respectively, each using a high efficiency cyclone for particulate control, each constructed in 1997, and exhausting to stacks 5502-5 and 5502-6; [326 IAC 6.5-1-2]
- (w) Two (2) Loose Feed Bins, collectively identified as unit 5502-4, each with a maximum throughput of 19.36 tons/hr, using a baghouse for particulate control, constructed in 1997, and exhausting to stack 5502-3; [326 IAC 6.5-1-2]
- (x) One (1) Hammer Mill, identified as unit 5502-3, with a maximum throughput of 19.36 tons/hr, using a baghouse for particulate control, constructed in 1997, and exhausting to stack 5502-3; [326 IAC 6.5-1-2]
- (y) One (1) DSE Bag Slitter, identified as unit 42-10, with a maximum throughput of 10 tons/hr, using a baghouse for particulate control, constructed in 1987, and exhausting to stack 42-10; [326 IAC 6.5-6-25]

- (z) One (1) P-6 Rework Station, identified as unit 54-1, with a maximum throughput of 7.5 tons/hr, using a baghouse for particulate control, constructed in 1987, and exhausting to stack 54-1; [326 IAC 6.5-1-2]
- (aa) One (1) RSP Hopper #4, identified as unit 577-5, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-5; [326 IAC 6.5-1-2]
- (bb) One (1) RSP Hopper #6, identified as unit 577-6, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-6; [326 IAC 6.5-1-2]
- (cc) One (1) RSP Hopper #5, identified as unit 577-7, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-7; [326 IAC 6.5-1-2]
- (dd) One (1) RSP Hopper #1, identified as unit 577-8, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-8; [326 IAC 6.5-1-2]
- (ee) One (1) RSP Hopper #2, identified as unit 577-9, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-9; [326 IAC 6.5-1-2]
- (ff) One (1) RSP Hopper #3, identified as unit 577-10, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-10; [326 IAC 6.5-1-2]
- (gg) One (1) Industrial Packer, identified as unit 71-1, with a maximum air throughput of 5,300 dscfm, using a baghouse for particulate control, constructed in 1994, and exhausting to stack 71-1; [326 IAC 6.5-6-25]
- (hh) Two (2) Spray Dryer Product Receivers, identified as units 5549-3 and 5549-4, each with a maximum air throughput of 1,700 dscfm, each using a baghouse* for particulate control, each constructed in 1993, and exhausting to stacks 5549-3 and 5549-4; [326 IAC 6.5-1-2]
- (ii) One (1) #1 Spray Dryer Storage Hopper #1, identified as unit 5549-7, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-7; [326 IAC 6.5-1-2]
- (jj) One (1) #1 Spray Dryer Storage Hopper #2, identified as unit 5549-8, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-8; [326 IAC 6.5-1-2]
- (kk) One (1) #2 Spray Dryer Storage Hopper #3, identified as unit 5549-9, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-9; [326 IAC 6.5-1-2]
- (ll) One (1) #2 Spray Dryer Storage Hopper #4, identified as unit 5549-10, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-10; [326 IAC 6.5-1-2]
- (mm) One (1) Agglomerator Feed Storage Bin, identified as unit 5549-12, with a maximum air throughput of 1530 dscfm, using a baghouse* for particulate control, constructed in 1995, and exhausting to stack 5549-12; [326 IAC 6.5-1-2]

- (nn) One (1) Agglomerator, identified as unit 5549-13, with a maximum air throughput of 12,500 dscfm, using a baghouse for particulate control, constructed in 1995, and exhausting to stack 5549-13; [326 IAC 6.5-1-2]
- (oo) One (1) Agglomerator Equipment Aspiration, identified as unit 5549-14, with a maximum air throughput of 2,840 dscfm, using a baghouse** for particulate control, constructed in 1995, and exhausting to stack 5549-14; [326 IAC 6.5-1-2]
- (pp) One (1) spray agglomeration process, constructed in 2000, consisting of the following units:
- (1) Bulk Bag Packer Filter Receiver, identified as unit 5549-17, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-17; [326 IAC 6.5-1-2]
 - (2) Line 1 Middle Packer, identified as unit 5549-18, with a maximum air throughput of 4,600 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-18; [326 IAC 6.5-1-2]
 - (3) Line 1 North Packer, identified as unit 5549-19, with a maximum air throughput of 5,400 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-19; [326 IAC 6.5-1-2]
 - (4) #2 Fugitive Dust Collector, identified as emission unit 5549-20, with a maximum throughput of 14,000 dscfm, using a baghouse for particulate control, and exhausting to stack 5549-20; [326 IAC 6.5-1-2]
 - (5) Line 1 Packing ambient D/C, identified as unit 5549-21, with a maximum air throughput of 14,000 dscfm, using a baghouse for particulate control, and exhausting to stack 5549-21; [326 IAC 6.5-1-2]
 - (6) Line 2 Packer, identified as unit 5549-26, with a maximum air throughput of 5,400 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-26; [326 IAC 6.5-1-2]
- (qq) One (1) West Corn Truck Dump, identified as unit 56-1, with a maximum throughput of 448 tons/hr, using a baghouse for particulate control, constructed prior to 1968, and modified in 1996, and exhausting to stack 56-1; [326 IAC 6.5-6-25]

*The control device is considered both integral to the process and inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).

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

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

D.2.1 Prevention of Significant Deterioration [326 IAC 2-2]

- (a) Pursuant to CP 097-0042-97-01, issued March 24, 1997, M 097-00042-99-01, issued February 25, 1999, MSM 097-11764-00042, issued March 10, 2000, SSM 097-11362-00042, issued August 31, 2000, SPM 097-24287-00042, issued on August 23, 2007, and SPM 097-23497-00042, the following facilities are limited as indicated in the table below:

| Unit/ Stack ID | PM/PM ₁₀ Limit (gr/dscf) | PM/PM ₁₀ Limit (lb/hr) | PM/PM ₁₀ Limit (ton/yr) |
|--|-------------------------------------|-----------------------------------|------------------------------------|
| 577-2 | 0.01 | 1.29 | 5.65 |
| 577-5 | 0.009 | 0.35 | 1.52 |
| 577-6 | 0.009 | 0.35 | 1.52 |
| 577-7 | 0.009 | 0.35 | 1.52 |
| 577-8 | 0.009 | 0.35 | 1.52 |
| 577-9 | 0.009 | 0.35 | 1.52 |
| 577-10 | 0.009 | 0.35 | 1.52 |
| 5549-3 | 0.01 | 0.15 | 0.64 |
| 5549-4 | 0.01 | 0.15 | 0.64 |
| 5549-7 | 0.01 | 0.039 | 0.17 |
| 5549-8 | 0.01 | 0.039 | 0.17 |
| 5549-9 | 0.01 | 0.039 | 0.17 |
| 5549-10 | 0.01 | 0.039 | 0.17 |
| 5549-12 | 0.01 | 0.13 | 0.57 |
| 5549-13 | 0.01 | 0.98 | 4.29 |
| 5549-14 | 0.01 | 0.24 | 1.07 |
| 5502-3, 5502-4 & 5503-6 (stack 5502-3) | 0.01 | 0.96 | 4.393 |
| 5502-5 | 0.01 | 1.13 | 5.177 |
| 5503-1 | 0.01 | 1.53 | 6.977 |
| 5503-2 through 5503-5 | 0.01 | 0.71 | 3.11 |
| 5502-6 | 0.01 | 0.99 | 4.349 |
| 5549-17 | 0.01 | 0.04 | 0.15 |
| 5549-18 | 0.01 | 0.28 | 1.21 |
| 5549-19 | 0.01 | 0.24 | 1.04 |
| 5549-20 | 0.01 | 0.93 | 4.05 |
| 5549-21 | 0.01 | 1.2 | 5.27 |
| 5549-26 | 0.01 | 0.26 | 1.16 |
| 71-9 | 0.01 | 0.13 | 0.57 |
| 5552-1 | 0.01 | 0.03 | 0.13 |
| 5552-2 | 0.01 | 0.21 | 0.9 |

- (b) The combined input of corn grind to units 5502-1A (Section D.1), 5502-1B (Section D.1), 5502-1C (Section D.1), 5502-3, 5502-4, 5502-5, 5502-6, 5503-1, 5503-2, 5503-3, 5503-4, 5503-5, and 5503-6 shall not exceed 29,584,000 bushels per twelve consecutive month period with compliance determined at the end of each month. Compliance with this limit and the limits set in D.1.1(a) and D.2.1(a) limits PM/PM10 emissions to less than or equal to 43.862 tons per year and will render the requirements of 326 IAC 2-2 not applicable.
- (c) The input of starch to unit 5549-13 shall not exceed 14,010 tons per twelve consecutive month period with compliance determined at the end of each month. The emission rate shall not exceed 0.61 lb PM/PM10 per ton of starch.

Compliance with these limits will render the requirements of 326 IAC 2-2 (Prevention Significant Deterioration) not applicable.

D.2.2 Particulate Matter [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, the particulate matter emissions from units 54-1, 71-7, 71-9, 577-2, 577-5 through 577-10, 5502-3, 5502-4, 5502-5, 5502-6, 5503-1, 5503-2 through 5503-5, 5503-6, 5549-3, 5549-4, 5549-7 through 5549-10, 5549-12, 5549-13, 5549-14, the spray agglomeration process (consisting of units 5549-17 through 5549-19, 5549-20, 5549-21, and 5549-26), 5552-1, and 5552-2 shall each not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

D.2.3 Particulate Matter [326 IAC 6.5-6-25]

- (a) Pursuant to 326 IAC 6.5-6-25, the particulate matter emissions from facility 42-10 shall not exceed 0.03 gr/dscf and 2.4 tons per year.
- (b) Pursuant to 326 IAC 6.5-6-25, the particulate matter emissions from facility 56-1 shall not exceed 0.02 gr/dscf and 7.02 tons per year.
- (c) Pursuant to 326 IAC 6.5-6-25, the particulate matter emissions from facility 71-1 shall not exceed 0.03 gr/dscf and 0.9 tons per year.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for facilities 42-10, 54-1, 56-1, 71-1, 71-7, 71-9, 577-2, 577-5 through 577-10, 5502-3, 5502-4, 5502-5, 5502-6, 5503-1, 5503-2 through 5503-5, 5503-6, 5549-3, 5549-4, 5549-7 through 5549-10, 5549-12, 5549-13, 5549-14, 5549-17 through 5549-19, 5549-20, 5549-21, 5549-26, 5552-1, 5552-2, and their respective 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.2.5 Particulate Control

- (a) In order to comply with Conditions D.2.1, D.2.2, and D.2.3, the respective baghouses for particulate control, including those integral to the process, shall be in operation and control particulate emissions from the respective facilities listed in this section at all times those facilities are in operation.
- (b) In order to comply with Conditions D.2.1 and D.2.2, the high efficiency cyclones for particulate control shall be in operation and control particulate emissions from facilities 5502-5 and 5502-6 at all times the respective facilities are in operation.

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

D.2.6 Visible Emissions Notations

- (a) Visible emission notations of the exhaust from stacks 42-10, 56-1, 71-7, 71-9, 577-2, 577-5 through 577-10, 5502-3, 5502-5, 5502-6, 5503-1, 5503-2, 5549-3, 5549-4, 5549-7 through 5549-10, 5549-12, 5549-13, 5549-14, 5549-17 through 5549-19, 5549-20, 5549-21, 5549-26, 5552-1, and 5552-2 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 reasonable response steps. Section C- Response to Excursions or 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.2.7 Parametric Monitoring for Baghouses

- (a) The Permittee shall record the pressure drop across the baghouses used in conjunction with units 56-1, 71-7, 577-2, 5503-6, and 5549-13 at least once per day when units 56-1, 71-7, 577-2, 5503-6, and 5549-13 are in operation. When, for any one reading, the pressure drop across the baghouses are outside the normal range of 1.0 to 8.0 inches of water or a range established during the last stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or 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.
- (b) The Permittee shall record the pressure drop across the baghouses used in conjunction with units 5503-2, 5503-3, 5503-4, 5549-20, and 5549-21 at least once per day when units 5503-2, 5503-3, 5503-4, 5549-20, and 5549-21 are in operation. When, for any one reading, the pressure drop across the baghouses are outside the normal range of 0.5 to 7.0 inches of water or a range established during the last stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or 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.
- (c) The Permittee shall record the total static pressure drop across the baghouses used in conjunction with units 5502-3, and 42-10 at least once per day when units 5502-3, and 42-10 are in operation. When, for any one reading, the pressure drop across the baghouses are outside the normal range of 1.0 to 8.0 inches of water or a range established during the last stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or 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.

- (d) The instrument 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, maintained, and operated according to the Preventive Maintenance Plan.

D.2.8 Broken or Failed Bag Detection

- (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).
- (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 pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.2.9 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. 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).

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

D.2.10 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.1(c), the Permittee shall maintain monthly records of the input of starch for unit 5549-13.
- (b) To document the compliance status with Condition D.2.6, the Permittee shall maintain a daily record of visible emission notations of the exhaust from stacks 42-10, 56-1, 71-7, 71-9, 577-2, 577-5 through 577-10, 5502-3, 5502-5, 5502-6, 5503-1, 5503-2, 5549-3, 5549-4, 5549-7 through 5549-10, 5549-12, 5549-13, 5549-14, 5549-17 through 5549-19, 5549-20, 5549-21, 5549-26, 5552-1, and 5552-2. 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).
- (c) To document the compliance status with Condition D.2.7, the Permittee shall maintain a daily record of the pressure drop across the baghouses used in conjunction with units 42-10, 56-1, 71-7, 577-2, 5502-3, 5503-2, 5503-3, 5503-4, 5503-6, 5549-13, 5549-20, and 5549-21. 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).

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

The records used to document compliance with Conditions D.1.1(a) are sufficient to document compliance with Conditions D.2.1(b).

D.2.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.2.1(b) and (c) shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee 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).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (rr) Grinding and machining operations controlled with fabric filters with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations: [326 IAC 2-7-1(21)(G)(xxiii)]
- (1) One (1) DSE Hopper #9, identified as unit 42-3A, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 6; [326 IAC 6.5-6-25]
 - (2) One (1) DSE Hopper #10, identified as unit 42-3B, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 7; [326 IAC 6.5-6-25]
 - (3) One (1) DSE Hopper #11, identified as unit 42-3C, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 43-3C; [326 IAC 6.5-6-25]
 - (4) One (1) DSE Hopper #12, identified as unit 42-3D, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 9; [326 IAC 6.5-6-25]
 - (5) One (1) DSE Hopper #13, identified as unit 42-3E, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 10; [326 IAC 6.5-6-25]
 - (6) One (1) DSE Hopper #14, identified as unit 42-3F, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 11; [326 IAC 6.5-6-25]
 - (7) One (1) DSE Hopper #2, identified as unit 42-7A, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 14; [326 IAC 6.5-6-25]
 - (8) One (1) DSE Hopper #4, identified as unit 42-7B, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 14; [326 IAC 6.5-6-25]
 - (9) One (1) DSE Hopper #6, identified as unit 42-7C, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 16; [326 IAC 6.5-6-25]
 - (10) One (1) DSE Hopper #1, identified as unit 42-8A, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17A; [326 IAC 6.5-6-25]
 - (11) One (1) DSE Hopper #3, identified as unit 42-8B, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17B; [326 IAC 6.5-6-25]

- (12) One (1) DSE Hopper #5, identified as unit 42-8C, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17C; [326 IAC 6.5-6-25]
- (13) One (1) DSE Hopper #7, identified as unit 42-8D, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17D; [326 IAC 6.5-6-25]
- (14) One (1) CWS #8; identified as unit 63-1A, with a maximum throughput of 1 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and modified in 1976, and exhausting to stack 46A; [326 IAC 6.5-1-2]
- (15) One (1) CWS South East, identified as unit 63-1B, with maximum throughput of 1 ton/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 46B; [326 IAC 6.5-1-2]
- (16) One (1) CWS South Mill; identified as unit 63-17, constructed in 1977, with a maximum throughput of 0.8 tons/hr, using a baghouse** (replaced baghouse in 2008) for particulate control, and exhausting to stack 53; [326 IAC 6.5-1-2]
- (ss) One (1) Grain Elevator, identified as unit 56-2, with a maximum throughput of 80 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 24; [326 IAC 6.5-6-25]
- (tt) Starch operations, starch drying, starch handling and starch packaging consisting of the following units:
 - (1) One (1) Filter Receiver, identified as 152-1, with a maximum air throughput of 500 dscfm, using a baghouse* for particulate control, constructed in 2002, and exhausting to stack 152-1; [326 IAC 6.5-1-2]
 - (2) One (1) Mixer baghouse, identified as 152-2, with a maximum air throughput of 1,000 dscfm, using a baghouse* for particulate control, constructed in 2002 and approved in 2011 for modification, and exhausting to stack 152-2; [326 IAC 6.5-1-2]
 - (3) One (1) Starch Cooler Filter Receiver, identified as 152-3 (Bld 852), with a maximum air throughput of 589 dscfm, using a baghouse* for particulate control, constructed in 2002, and exhausting to stack 152-3; [326 IAC 6.5-1-2]
 - (4) One (1) Starch Mixer 2 Filter/Receiver, identified as 152-4 (Bld 852A), with a maximum air throughput of 600 dscfm, using a baghouse* for particulate control, constructed on in 2002, and exhausting to stack 152-4; [326 IAC 6.5-1-2]
 - (5) One (1) Starch Mixer 2, identified as 152-5 (Bld 852A), with a maximum air throughput of 1,000 dscfm, using a baghouse* for particulate control, constructed in 2002, and exhausting to stack 152-5; [326 IAC 6.5-1-2]
 - (6) One (1) Starch Storage Hopper, identified as 152-6, with a maximum throughput of 15 tons/hr, using a baghouse** for particulate control, constructed in 2003, and exhausting to stack 152-6; [326 IAC 6.5-1-2]
 - (7) One (1) Starch Filter/Receiver 2 Bld 852, identified as unit 152-7, with a maximum air throughput of 500 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-7; [326 IAC 6.5-1-2]

- (8) One (1) Starch Mixer 4 Bld 852A Filter Receiver, identified as unit 152-8, with a maximum air throughput of 600 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 157-8; [326 IAC 6.5-1-2]
- (9) One (1) Starch Mixer 4 Bld 852A, identified as unit 152-9, with a maximum air throughput of 20 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-9; [326 IAC 6.5-1-2]
- (10) One (1) Starch Mixer 3 Bld 852A Filter Receiver, identified as unit 152-10, with a maximum air 600 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-10; [326 IAC 6.5-1-2]
- (11) One (1) Starch Mixer 3 Bld 852A, identified as unit 152-11, with a maximum air throughput of 1,000 dscfm, using a baghouse* for particulate control, constructed in 2004 and approved in 2011 for modification, and exhausting to stack 152-11; [326 IAC 6.5-1-2]
- (12) One (1) Bulk Bag Receiver, identified as 152-12, with a maximum air throughput of 800 dscfm , using a baghouse * for particulate control, constructed in 2004, and exhausting to stack 157-12; [326 IAC 6.5-1-2]
- (13) One (1) Starch Storage Silo #2 Receiver; identified as Bin TF41820 (formerly unit 61-21), with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed in 1976, modified in 1981, approved in 2010 for additional modification, and exhausting to stack TF41820; [326 IAC 6.5-1-2]
- (14) One (1) Starch Cooling and Conveying System, identified as TF41818 (formerly unit 581-2), with a maximum air throughput of 14,000 dscfm, using a baghouse* for particulate control, constructed in 1983, approved in 2010 for modification, and exhausting to stack TF41818; [326 IAC 6.5-1-2]
- (15) One (1) Blending Bin, identified as 152-15 (formerly unit TF41819), with a maximum air throughput of 4,000 dscfm, using a baghouse* for particulate control, approved in 2010 for construction, and exhausting to stack DC41819 [326 IAC 6.5-1-2]
- (16) One (1) Starch Hopper D/C, identified as 128-3, with a maximum throughput of 12.5 tons/hr, using a baghouse* for particulate control, constructed in 1983 and modified in 2000, and exhausting to stack 128-3; [326 IAC 6.5-1-2]
- (17) One (1) DSW Chemical Blender Bag Slitter, identified as unit 61-15, with a maximum throughput of 7.5 tons/hr, using a baghouse** for particulate control, constructed prior to 1974, and exhausting to stack 35; [326 IAC 6.5-1-2]
- (18) One (1) sodium sulfate conveying system, including a receiver and silo, identified as unit 40-1A and 40-1B, with a maximum throughput of 15 tons/hr, using two baghouses* for particulate control, constructed prior to 1968, modified in 1998, and exhausting to stacks 1A and 1B; [326 IAC 6.5-1-2]
- (19) One (1) DSE North Packer, identified as unit 42-1, with a maximum throughput of 30 tons/hr, using a baghouse* for particulate control, constructed prior to 1968 and modified in 1996, and exhausting to stack 5; [326 IAC 6.5-6-25]

- (20) One (1) DSE Hopper #8, identified as unit 42-4, with a maximum throughput of 13.95 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 17E; [326 IAC 6.5-6-25]
- (21) One (1) DSE Negative Receiver, identified as unit 42-6, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 13; [326 IAC 6.5-6-25]
- (22) One (1) DSE South Packer, identified as unit 42-9, with a maximum throughput of 30 tons/hr, using a baghouse* for particulate control, constructed prior to 1968 and modified in 1996, and exhausting to stack 18; [326 IAC 6.5-1-2]
- (23) One (1) DSE Railcar Loading - East Track, identified as unit 42-11, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 20; [326 IAC 6.5-1-2]
- (24) One (1) DSE Railcar Loading - West Track, identified as unit 42-12, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 21; [326 IAC 6.5-1-2]
- (25) One (1) DSE Bulk Bag System, identified as unit 42-13, with a maximum throughput of 30 tons/hr, using a receiver/baghouse* for particulate control, constructed in 1997, and exhausting to stack 106; [326 IAC 6.5-1-2]
- (26) One (1) Dextrin #1 System Pneumatic, identified as unit 61-3, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed in 1973, and exhausting to stack 27; [326 IAC 6.5-1-2]
- (27) One (1) Dextrin Flash Dryer, identified as unit 61-9, with a maximum throughput of 5 tons/hr, using a cyclone and a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 30; [326 IAC 6.5-6-25]
- (28) One (1) Dextrin #3 System Pneumatic, identified as unit 61-22, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed in 1976, and exhausting to stack 41; [326 IAC 6.5-1-2]
- (29) One (1) Dextrin #2 System Pneumatic, identified as unit 61-23, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed in 1976, and exhausting to stack 42; [326 IAC 6.5-1-2]
- (30) One (1) Dextrin #1 System Mixer, identified as unit 61-1, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed in 1973, and exhausting to stack 25; [326 IAC 6.5-1-2]
- (31) One (1) Dextrin #1 System Cookers, identified as unit 61-2, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed in 1973, and exhausting to stack 26; [326 IAC 6.5-1-2]
- (32) One (1) Dextrin #2 System Mixer, identified as unit 61-6, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed in 1974, and exhausting to stack 28; [326 IAC 6.5-6-25]

- (33) Two (2) Dextrin #2 System East and West Batch Bins, identified as units 61-7E and 61-7W, each with a maximum throughput of 5 tons/hr, using two baghouses* for particulate control, constructed in 1974, and exhausting to stacks 29A and 29B; [326 IAC 6.5-1-2]
- (34) One (1) Starch Storage Silo #3 Receiver, identified as unit 61-11, with a maximum throughput of 7.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 31; [326 IAC 6.5-1-2]
- (35) One (1) Starch Storage Silo #1 Receiver, identified as unit 61-12, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 32; [326 IAC 6.5-1-2]
- (36) One (1) Starch Storage Silo #1, identified as unit 61-13, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 33; [326 IAC 6.5-1-2]
- (37) One (1) Dextrin Blend, identified as unit 61-14, with a maximum throughput of 7.5 tons/hr, using hopper/filter receiver using a baghouse** for particulate control, constructed prior to 1973, and exhausting to stack 61-14; [326 IAC 6.5-6-25]
- (38) One (1) DSW Chemical Blender Tank; identified as unit 61-14A, with a maximum throughput of 7.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 34; [326 IAC 6.5-6-25]
- (39) One (1) Dextrin System Acidifiers; identified as unit 61-16, with a maximum air throughput of 1,530 dscfm, using a baghouse* for particulate control, constructed in 1973, and exhausting to stack 36; [326 IAC 6.5-1-2]
- (40) One (1) Dextrin #2 System Cooler; identified as unit 61-18, with a maximum air throughput of 2,300 dscfm, using a baghouse* for particulate control, constructed in 1974, and exhausting to stack 37; [326 IAC 6.5-1-2]
- (41) One (1) Dextrin #3 System Cookers; identified as unit 61-19, with a maximum air throughput of 2,300 dscfm, using a baghouse* for particulate control, constructed in 1974, and exhausting to stack 38; [326 IAC 6.5-1-2]
- (42) One (1) Starch Storage Silo #2; identified as unit 61-20, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed in 1976, and exhausting to stack 39; [326 IAC 6.5-1-2]
- (43) One (1) Dextrin #3 System Mixer; identified as unit 61-24, with a maximum air throughput of 410 dscfm, using a baghouse* for particulate control, constructed in 1976, and exhausting to stack 43; [326 IAC 6.5-1-2]
- (44) One (1) Dextrin #3 System West Batch Bin; identified as unit 61-25, with a maximum air throughput of 350 dscfm, using a baghouse* for particulate control, constructed in 1976, and exhausting to stack 44; [326 IAC 6.5-1-2]
- (45) One (1) Dextrin #3 System East Batch Bin; identified as unit 61-26, with a maximum air throughput of 350 dscfm, using a baghouse** for particulate control, constructed in 1976, and exhausting to stack 45; [326 IAC 6.5-1-2]

- (46) One (1) CWS #7 Dryer Receiver; identified as unit 63-3, with a maximum air throughput of 2000 dscfm, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 47; [326 IAC 6.5-1-2]
- (47) One (1) CWS North Mill, identified as unit 63-4, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 48; [326 IAC 6.5-1-2]
- (48) One (1) CWS North Product, identified as unit 63-5, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 49; [326 IAC 6.5-1-2]
- (49) One (1) CWS Packer; identified as unit 63-9, with a maximum throughput of 20 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 50; [326 IAC 6.5-1-2]
- (50) One (1) Liquid Glue Bag Dump; identified as unit 63-12, with a maximum throughput of 8 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 51; [326 IAC 6.5-1-2]
- (51) One (1) CWS #9 and #10 Dryers Receiver; identified as unit 63-15, with a maximum air throughput of 3,600 dscfm, using a baghouse* for particulate control, constructed in 1975 and modified in 2010, and exhausting to stack 52; [326 IAC 6.5-1-2]
- (52) CWS #11, #12, and #13 Dryers; identified as unit 63-16A and 63-16B, each with a maximum air throughput of 3,300 dscfm, using two baghouses* for particulate control, constructed prior to August 7, 1977, and exhausting to stacks 54A and 54B; [326 IAC 6.5-1-2]
- (53) One (1) CWS South Raw Material Dump; identified as unit 63-18, with a maximum throughput of 3.5 tons/hr, using a baghouse** for particulate control, constructed in 1977, and exhausting to stack 55; [326 IAC 6.5-1-2]
- (54) One (1) DSW Negative Receiver; identified as unit 63-20, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 56; [326 IAC 6.5-1-2]
- (55) Two (2) DSW Hoppers #17 and #18; identified as unit 71-2A and 71-2B, each with a maximum throughput of 15 tons/hr, using two baghouses* for particulate control, constructed prior to 1968, and exhausting to stacks 58A and 58B; [326 IAC 6.5-6-25]
- (56) One (1) Negative Receiver; identified as unit 71-3, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 71-3; [326 IAC 6.5-1-2]
- (57) One (1) DSW Hopper #13, identified as unit 71-4, with a maximum throughput of 2.5 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 67; [326 IAC 6.5-6-25]
- (58) One (1) DSW Hopper #1; identified as unit 71-5A, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 59; [326 IAC 6.5-6-25]

- (59) One (1) DSW Hopper #2; identified as unit 71-5B, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 60; [326 IAC 6.5-6-25]
- (60) One (1) DSW Hopper #3; identified as unit 71-5C, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 61; [326 IAC 6.5-6-25]
- (61) One (1) DSW Hopper #4; identified as unit 71-5D, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 62; [326 IAC 6.5-6-25]
- (62) One (1) DSW Hopper #5; identified as unit 71-5E, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 63; [326 IAC 6.5-6-25]
- (63) One (1) DSW Hopper #6; identified as unit 71-5F, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 64; [326 IAC 6.5-6-25]
- (64) One (1) DSW Hopper #7; identified as unit 71-5G, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 65; [326 IAC 6.5-6-25]
- (65) One (1) DSW Hopper #8; identified as unit 71-5H, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 66; [326 IAC 6.5-6-25]
- (66) One (1) DSW Hopper #9; identified as unit 71-5I, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 71-5I; [326 IAC 6.5-6-25]
- (67) One (1) DSW Hopper #10; identified as unit 71-5J, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 8; [326 IAC 6.5-6-25]
- (68) One (1) DSW Hopper #11; identified as unit 71-5K, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 69; [326 IAC 6.5-6-25]
- (69) One (1) DSW Hopper #12; identified as unit 71-5L, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 70; [326 IAC 6.5-6-25]
- (70) One (1) DSW Bulk Car Loading; identified as unit 71-8, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed in 1971, and exhausting to stack 72; [326 IAC 6.5-1-2]
- (71) One (1) RSP South Bulk Bag Packing; identified as unit 577-1, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 77; [326 IAC 6.5-1-2]

- (72) One (1) FG Bulk Bag Bin Vent Bld 800, identified as unit FA-60582, with a maximum throughput of 18 tons/hr using a baghouse** for particulate control, constructed in 2003, and exhausting to stack FA-60582; [326 IAC 6.5-1-2]
- (73) One (1) RSP South Packing Line, identified as unit 577-3, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 79; [326 IAC 6.5-1-2]
- (74) One (1) RSP Bulk Loading System A; identified as unit 577-4, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 80; [326 IAC 6.5-1-2]
- (75) One (1) RSP Bulk Loading Fugitive Dust Collector**; identified as unit 577-4A, with a maximum throughput of 18 tons/hr and an actual throughput of 18 lbs/hr, constructed in 1986, and exhausting to stack 81; [326 IAC 6.5-1-2]
- (76) One (1) CSW conveying cyclone operation, identified as unit 578-1, with a maximum throughput of 7.5 tons/hr, using a baghouse** for particulate control, returned to service in 2008, and exhausting through stack 578-1. [326 IAC 6.5-1-2]
- (77) One (1) CWS Packing Hopper; identified as unit 578-2, with a maximum throughput of 1 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 89; [326 IAC 6.5-1-2]
- (78) One (1) CWS Milling System, identified as unit 578-3, with a maximum throughput of 1.5 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 90; [326 IAC 6.5-1-2]
- (79) One (1) Base Blending Bin 158-5, identified as unit TF31901, with a maximum air throughput of 2,000 dscfm, using product recovery DC-31901** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 1-158; [326 IAC 6.5-1-2]
- (80) One (1) Base Bin 158-1, identified as unit TF31902, with a maximum air throughput of 200 dscfm, using product recovery DC-31901** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 2-158; [326 IAC 6.5-1-2]
- (81) One (1) Product Bin 158-2, identified as unit TF31991, with a maximum air throughput of 200 dscfm, using product recovery DC-31991** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 3-158; [326 IAC 6.5-1-2]
- (82) One (1) Surge Tank Bin 158-3, identified as unit SH31913, with a maximum air throughput of 200 dscfm, using product recovery DC-31911** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 7-158; [326 IAC 6.5-1-2]
- (83) One (1) Bulk Bag Unload Bin 158-4, identified as unit DC-31900 (Bld 630) with a maximum air throughput of 600 dscfm, using a dust collector* for particulate control, constructed in 2004, and exhausting to stack 8-158; [326 IAC 6.5-1-2]
- (84) One (1) FBR exhaust, identified as unit TR31912, with a maximum air throughput of 8,800 dscfm, using product recovery metal filters** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 5-158 [326 IAC 6.5-1-2]

- (85) One (1) starch dryer, identified as unit T-1, with a maximum production rate of 300 lbs/hr, using a product collector/cyclone and dust collector* for particulate control, constructed in 2005, and exhausting to stack T-1; [326 IAC 6.5-1-2]
- (86) One (1) Line 1 South Packing Hopper, identified as unit 5549-22, with a maximum air throughput of 4,800 dscfm, using a baghouse* for particulate control, constructed in 2006, and exhausting to stack 5549-22. [326 IAC 6.5-1-2]

*The control device is considered both integral to the process and inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).

**The control device is considered inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).

Emissions Unit Description: Specifically Regulated Insignificant Activities

- (a) Combustion related activities including spaces heaters, process heaters, or boilers using natural gas-fired with heat input equal to or less than ten million (10,000,000) British thermal units per hour;
 - (1) One (1) process heater, Bld 630, natural gas fired, with maximum heat input capacity of 5.1 MMBtu/hr, identified as unit YX31914A, constructed in 2004 and venting out stack 158-6. [326 IAC 6-2-4]
- (b) Cleaners and solvents, from operations M1 through M4 and RSP shop, characterized as:
 - (1) having a vapor pressure equal to or less than two (2.0) kilo Pascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch) measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or
 - (2) having a vapor pressure equal to or less than seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit);

the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months. [326 IAC 8-3-2] [326 IAC 8-3-8]

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

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

D.3.1 PSD and Nonattainment NSR Minor Limits [326 IAC 2-2] [326 IAC 2-1.1-5]

- (a) In order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable, the PM, PM10 and PM2.5 emissions from stacks TF41818, DC41819, and TF41820 shall be less than the emission limits listed in the table below:

| Equipment Description | Stack ID | PM Emission Limit (lb/hr) | PM10 Emission Limit (lb/hr) | PM2.5 Emission Limit (lb/hr) |
|---|---------------|---------------------------|-----------------------------|------------------------------|
| One (1) Starch Cooling and Conveying System | stack TF41818 | 3.97 | 2.38 | 1.59 |
| One (1) Blending Bin | stack DC41819 | 1.12 | 0.67 | 0.45 |
| One (1) Starch Storage Silo #2 Receiver | stack TF41820 | 0.55 | 0.33 | 0.22 |

Compliance with the above limits will ensure that the potential to emit from this modification is less than twenty-five (25) tons of PM per year, less than fifteen (15) tons of PM₁₀ per year, and less than ten (10) tons of PM_{2.5} per year; and therefore will render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable.

- (b) In order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable, the PM, PM10 and PM2.5 emissions shall be less than the emission limits listed in the table below:

| Unit Number | Stack ID | PM Emission Limit (lb/hr) | PM10 Emission Limit (lb/hr) | PM2.5 Emission Limit (lb/hr) |
|-------------|----------------|---------------------------|-----------------------------|------------------------------|
| 40-1A | stack 40-1A | 0.13 | 0.13 | 0.13 |
| 40-1B | stack 40-1B | 0.13 | 0.13 | 0.13 |
| 152-7 | stack 152-7 | 0.43 | 0.30 | 0.17 |
| 152-8 | stack 157-8 | 0.52 | 0.36 | 0.21 |
| 152-9 | stack 152-9 | 0.10 | 0.05 | 0.05 |
| 152-10 | stack 152-10 | 0.52 | 0.36 | 0.21 |
| 152-11 | stack 152-11 | 0.86 | 0.60 | 0.34 |
| FA-60582 | stack FA-60582 | 1.63 | 0.80 | 0.65 |
| 152-12 | stack 157-12 | 0.69 | 0.48 | 0.28 |
| 42-13 | stack 106 | 0.50 | 0.10 | 0.10 |

Compliance with these limits, shall limit the PM emissions to less than 25 tons per year, PM10 emissions to less than 15 tons per year and PM2.5 emissions to less than 10 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) rules and the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) do not apply to this modification.

D.3.2 Particulate Matter [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, the particulate matter emissions from units 40-1A, 40-1B, 42-6, 42-9, 42-11, 42-12, 42-13, 61-1, 61-2, 61-3, 61-7, 61-11, 61-12, 61-13, 61-15, 61-16, 61-18 through 61-20, 61-22, 61-23, 61-24 through 61-26, 63-1A, 63-4, 63-5, 63-6, 63-9, 63-12, 63-15, 63-16, 63-17, 63-18, 63-20, 71-3, 71-4A, 71-8, 128-3, 152-1 through 152-12, 577-1, 577-3, 577-4, 577-4A, 578-1, 578-2, 578-3, 5549-22, DC-31900, FA-60582, SH31913, TF31901, TF31902, TR31912, TF31991, T-1, TF41818, TF41819 and TF41820 shall each not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

D.3.3 Particulate Matter [326 IAC 6.5-6-25]

Pursuant to 326 IAC 6.5-6-25, the following insignificant activities are limited as indicated in the table below:

| Facility | PM Limit (gr/dscf) | PM Limit (ton/yr) |
|----------|--------------------|-------------------|
|----------|--------------------|-------------------|

| Facility | PM Limit (gr/dscf) | PM Limit (ton/yr) |
|----------|--------------------|-------------------|
| 56-2 | 0.01 | 11.3 |
| 71-2 | 0.03 | 2.6 |
| 61-6 | 0.03 | 0.1 |
| 61-14A | 0.029 | 0.6 |
| 61-14 | 0.028 | 1.2 |
| 42-4 | 0.029 | 2.3 |
| 61-9 | 0.016 | 4.1 |
| 42-1 | 0.03 | 0.9 |
| 42-6 | 0.03 | 2.5 |
| 42-8 | 0.03 | 4.2 |
| 42-7A | 0.032 | 1.7 |
| 42-7B | 0.032 | 1.7 |
| 42-7C | 0.032 | 1.7 |
| 42-3A | 0.032 | 1.8 |
| 42-3B | 0.032 | 1.8 |
| 42-3C | 0.032 | 1.8 |
| 42-3D | 0.032 | 1.8 |
| 42-3E | 0.032 | 1.8 |
| 42-3F | 0.032 | 1.8 |
| 71-4A | 0.026 | 0.3 |
| 71-5A | 0.026 | 0.3 |
| 71-5B | 0.026 | 0.3 |
| 71-5C | 0.026 | 0.3 |
| 71-5D | 0.026 | 0.3 |
| 71-5E | 0.026 | 0.3 |
| 71-5F | 0.026 | 0.3 |
| 71-5G | 0.026 | 0.3 |
| 71-5H | 0.026 | 0.3 |
| 71-5I | 0.026 | 0.3 |
| 71-5J | 0.026 | 0.3 |
| 71-5K | 0.026 | 0.3 |
| 71-5L | 0.026 | 0.3 |

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventative 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.

D.3.5 Particulate Emissions [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the process heater, identified as YX31914A, shall each be limited to 0.71 pound per MMBtu heat input, which was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

D.3.6 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control and Equipment Operating Requirements), the Permittee shall:

- (a) Ensure the following control equipment and operating requirements are met:
 - (1) Equip the degreaser with a cover.
 - (2) Equip the degreaser with a device for draining cleaned parts.
 - (3) Close the degreaser cover whenever parts are not being handled in the degreaser.
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).
 - (6) Store waste solvent only in closed containers.
 - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.
- (b) Ensure the following additional control equipment and operating requirements are met:
 - (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) A refrigerated chiller.
 - (D) Carbon adsorption.
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
 - (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.

- (3) If used, solvent spray:
 - (A) must be a solid, fluid stream; and
 - (B) shall be applied at a pressure that does not cause excessive splashing.

D.3.7 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), on and after January 1, 2015, the Permittee shall not operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

Compliance Determination Requirements

D.3.8 Particulate Control

In order to comply with Conditions D.3.1, D.3.2, and D.3.3, the baghouses for particulate control, including those integral to the process, shall be in operation and control particulate emissions from all facilities listed in this section at all times those respective facilities are in operation.

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

D.3.9 Visible Emissions Notations

- (a) Visible emission notations of the exhaust from stacks 40-1A, 40-1B, 152-7, 157-8, 152-9, 152-10, 152-11, FA-60582, 157-12, 53, (unit 63-17) and 106 (unit 42-13) shall be performed once per week 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 reasonable response steps. Section C- Response to Excursions or 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.3.10 Parametric Monitoring for Baghouses

- (a) The Permittee shall record the pressure drop across the baghouses used in conjunction with units TF41818, TF41819, and TF41820 at least once per week when units TF41818, TF41819, and TF41820 are in operation. When, for any one reading, the pressure drop across the baghouses are outside the normal range of 1.0 to 8.0 inches of water or a range established during the last stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or 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.

- (b) The instrument 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, maintained, and operated according to the Preventive Maintenance Plan.

D.3.11 Broken or Failed Bag Detection

- (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).
- (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 pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.3.12 Record Keeping Requirements

- (a) To document the compliance status with Condition D.3.9, the Permittee shall maintain a weekly record of visible emission notations of the exhaust from stacks 40-1A, 40-1B, 152-7, 157-8, 152-9, 152-10, 152-11, FA-60582, 157-12, and 106. 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.3.10, the Permittee shall maintain a weekly record of the pressure drop across the baghouses used in conjunction with units TF41818, TF41819, and TF41820. 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) To document the compliance status with Condition D.3.7, on and after January 1, 2015, the Permittee shall maintain the following records for each purchase of solvent used in the cold cleaner degreasing operations. These records shall be retained on-site or accessible electronically for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.
 - (1) The name and address of the solvent supplier.
 - (2) The date of purchase.
 - (3) The type of solvent purchased.
 - (4) The total volume of the solvent purchased.
 - (5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

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

SECTION E.1 FACILITY OPERATION CONDITIONS

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

- (a) Stationary fire pump engines, including:
- (1) One (1) 210-horsepower diesel-fired emergency fire pump engine, identified as FP1, constructed in 2003;

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.
 - (2) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP2, constructed in 2003; and

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.
 - (3) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP3, constructed in 2006.

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.
Under 40 CFR 60, Subpart IIII, this is an affected facility.

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

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

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

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the one (1) diesel-fired emergency fire pump engine, identified as FP3, except when otherwise specified in 40 CFR Part 60, Subpart IIII.

E.1.2 Stationary Compression Ignition Internal Combustion Engines NSPS Requirements [40 CFR Part 60, Subpart IIII]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart IIII (included as Attachment A), except as otherwise specified in 40 CFR Part 60, Subpart IIII:

- (1) 40 CFR 60.4200 (a)(2)(ii)
- (2) 40 CFR 60.4205 (c)
- (3) 40 CFR 60.4206
- (4) 40 CFR 60.4207 (b)
- (5) 40 CFR 60.4208
- (6) 40 CFR 60.4209 (a)
- (7) 40 CFR 60.4211 (a),(b),(f),(g)(2)
- (8) 40 CFR 60.4214 (b)
- (9) 40 CFR 60.4218
- (10) 40 CFR 60.4219
- (11) Table 8

SECTION E.2 FACILITY OPERATION CONDITIONS

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

- (a) Stationary fire pump engines, including:
- (1) One (1) 210-horsepower diesel-fired emergency fire pump engine, identified as FP1, constructed in 2003;

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.
 - (2) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP2, constructed in 2003; and

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.
 - (3) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP3, constructed in 2006.

Under 40 CFR 63, Subpart ZZZZ, this is an affected facility.
Under 40 CFR 60, Subpart IIII, this is an affected facility.

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

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

E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [326 IAC 20-82] [40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1-1, apply to the three (3) diesel-fired emergency fire pump engines, identified as FP1, FP2, and FP3, except when otherwise specified in 40 CFR 63, Subpart ZZZZ.

E.2.2 Stationary Reciprocating Internal Combustion Engines NESHAPS Requirements [40 CFR 60, Subpart ZZZZ]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment B of this permit), except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ

For FP-1 and FP-2:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590 (a)(1)(iii) and (iv)
- (4) 40 CFR 63.6595 (a)(1), (b), and (c)
- (5) 40 CFR 63.6603 (a)
- (6) 40 CFR 63.6605
- (7) 40 CFR 63.6625 (e)(3),(f),(h),(i)
- (8) 40 CFR 63.6635
- (9) 40 CFR 63.6640 (a),(b),(e), and (f)
- (10) 40 CFR 63.6645 (a)(5)
- (11) 40 CFR 63.6650 (d), (f)
- (12) 40 CFR 63.6655 (a), (d), (e)(3), (f),(2)
- (13) 40 CFR 63.6660
- (14) 40 CFR 63.6665

- (15) 40 CFR 63.6670
- (16) 40 CFR 63.6675
- (17) Table 2d (item 4)
- (18) Table 6 (item 9)
- (19) Table 8

For FP3:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)
- (4) 40 CFR 63.6595(a)(6)
- (5) 40 CFR 63.6665
- (6) 40 CFR 63.6670
- (7) 40 CFR 63.6675

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Ingredion Incorporated Indianapolis Plant
Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
Part 70 Permit No.: T097-26765-00042

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: Ingredion Incorporated Indianapolis Plant
Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
Part 70 Permit No.: T097-26765-00042

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Ingredion Incorporated Indianapolis Plant
Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
Part 70 Permit No.: T097-26765-00042
Facilities: 5502-1A, 5502-1B, 5502-1D, 5502-3, 5502-4, 5502-5, 5502-6, 5502-7, 5503-1, 5503-2, 5503-3, 5503-4, 5503-5, and 5503-6
Parameter: Combined input of corn grind in bushels per twelve consecutive month period
Limit: The combined input of corn grind to units 5502-1A, 5502-1B, 5502-1C, 5502-3, 5502-4, 5502-5, 5502-6, 5502-7, 5503-1, 5503-2, 5503-3, 5503-4, 5503-5, and 5503-6 shall not exceed 29,584,000 bushels per twelve consecutive month period with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

| Month | Corn grind (bushels) | Corn grind (bushels) | Corn grind (bushels) |
|---------|----------------------|----------------------|----------------------|
| | This Month | Previous 11 Months | 12 Month Total |
| 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: _____

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

Part 70 Quarterly Report

Source Name: Ingredion Incorporated Indianapolis Plant
 Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
 Part 70 Permit No.: T097-26765-00042
 Facilities: 5549-1 and 5549-2
 Parameter: Combined input of starch in tons per twelve consecutive month period
 Limit: The combined input of starch for units 5549-1 and 5549-2 shall not exceed 22,500 tons per twelve consecutive month period with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

| Month | Starch (tons) | Starch (tons) | Starch (tons) |
|---------|---------------|--------------------|----------------|
| | This Month | Previous 11 Months | 12 Month Total |
| 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: _____

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

Part 70 Quarterly Report

Source Name: Ingredion Incorporated Indianapolis Plant
 Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
 Part 70 Permit No.: T097-26765-00042
 Facilities: 5502-1A, 5502-1B, 5502-1C, and 5502-1D
 Parameter: Total natural gas usage
 Limit: The combined input of natural gas to 5502-1A, 5502-1B, 5502-1C, and 5502-1D shall not exceed 1,780 million cubic feet (MMcf) per twelve consecutive month period with compliance determined at the end of each month. Compliance with this limit is equivalent to total NO_x emissions of less than or equal to 39 tons per twelve consecutive month period.

QUARTER: _____ YEAR: _____

| Month | Natural Gas (MMscf) | Natural Gas (MMscf) | Natural Gas (MMscf) |
|---------|---------------------|---------------------|---------------------|
| | This Month | Previous 11 Months | 12 Month Total |
| 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: _____

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

Part 70 Quarterly Report

Source Name: Ingredion Incorporated Indianapolis Plant
 Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
 Part 70 Permit No.: T097-26765-00042
 Facilities: 5549-13
 Parameter: Input of starch in tons per twelve consecutive month period
 Limit: The input of starch to unit 5549-13 shall not exceed 14,010 tons per twelve consecutive month period with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

| Month | Starch (tons) | Starch (tons) | Starch (tons) |
|---------|---------------|--------------------|----------------|
| | This Month | Previous 11 Months | 12 Month Total |
| 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: _____

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

Part 70 Quarterly Report

Source Name: Ingredion Incorporated Indianapolis Plant
 Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
 Part 70 Permit No.: T097-26765-00042
 Facility: 575-2
 Parameter: Amount of dry product processed in tons per twelve consecutive month period
 Limit: The amount of dry product processed by unit 575-2 shall not exceed 123,300 tons per twelve month consecutive period with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

| Month | Dry product (tons) | | Dry product (tons) |
|---------|--------------------|--------------------|--------------------|
| | This Month | Previous 11 Months | 12 Month Total |
| 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: _____

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

Part 70 Quarterly Report

Source Name: Ingredion Incorporated Indianapolis Plant
 Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
 Part 70 Permit No.: T097-26765-00042
 Facility: 40-3
 Parameter: Amount of starch produced tons per twelve consecutive month period
 Limit: The starch produced from unit 40-3 shall not exceed 145,610 tons per twelve consecutive month period with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

| Month | Starch produced (tons) | Starch produced (tons) | Starch produced (tons) |
|---------|------------------------|------------------------|------------------------|
| | This Month | Previous 11 Months | 12 Month Total |
| 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: _____

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: Ingredion Incorporated Indianapolis Plant
 Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
 Part 70 Permit No.: T097-26765-00042

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". | |
| <input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. | |
| <input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD | |
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**Attachment A to
Part 70 Operating Permit Renewal
No. T097-26765-00042**

Ingredion Incorporated Indianapolis Plant
1515 S Dover St
Indianapolis, IN, 46221

40 CFR 60, Subpart III

**New Source Performance Standard for Standards of Performance for Stationary
Compression Ignition Internal Combustion Engines**

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

§ 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 use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
- (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; 78 FR 6695, Jan. 30, 2013]

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) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this

section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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

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

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

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

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

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

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

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

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

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

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

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed

for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

(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; 78 FR 6695, Jan. 30, 2013]

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:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \quad (\text{Eq. 1})$$

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:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 2})$$

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.

$$C_{\text{adj}} = C_d \frac{5.9}{20.9 - \% \text{O}_2} \quad (\text{Eq. 3})$$

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.

$\% \text{O}_2$ = 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:

$$F_o = \frac{0.209 F_f}{F_c} \quad (\text{Eq. 4})$$

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 O₂ , percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm³ /J (dscf/10⁶ Btu).

F_c = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm³ /J (dscf/10⁶ Btu).

(ii) Calculate the CO₂ correction factor for correcting measurement data to 15 percent O₂ , as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 5})$$

Where:

X_{CO₂} = CO₂ correction factor, percent.

5.9 = 20.9 percent O₂ - 15 percent O₂ , the defined O₂ correction value, percent.

(iii) Calculate the NO_x and PM gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 6})$$

Where:

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O₂ .

C_d = Measured concentration of NO_x or PM, uncorrected.

%CO₂ = Measured CO₂ 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:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{KW\text{-hour}} \quad (\text{Eq. 7})$$

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:

$$ER = \frac{C_{adj} \times Q \times T}{KW\text{-hour}} \quad (\text{Eq. 8})$$

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.

(d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in § 60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

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

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in § 60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 60.4211(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purposes specified in § 60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

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

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 60.4.

[71 FR 39172, July 11, 2006, as amended at 78 FR 6696, Jan. 30, 2013]

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 reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in § 60.4211(f) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in § 60.4211(f), then it is not considered to be an emergency stationary ICE under this subpart.

(1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. 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.

(2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 60.4211(f).

(3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 60.4211(f)(2)(ii) or (iii) and § 60.4211(f)(3)(i).

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; 78 FR 6696, Jan. 30, 2013]

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

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 |

¹Manufacturers 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) |
| | 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. |
| | | 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 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 _x concentration. |
| | | 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, 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). |
| § 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 | | |

**Attachment B to
Part 70 Operating Permit Renewal
No. T097-26765-00042**

Ingredion Incorporated Indianapolis Plant
1515 S Dover St
Indianapolis, IN, 46221

40 CFR 63, Subpart ZZZZ

**National Emissions Standards for Hazardous Air Pollutants for Stationary
Reciprocating Internal Combustion Engines**

Title 40: Protection of Environment

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

§ 63.6580 What is the purpose of subpart ZZZZ?

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

[73 FR 3603, Jan. 18, 2008]

§ 63.6585 Am I subject to this subpart?

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

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

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

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

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

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

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

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

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for

the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

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

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

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

This subpart applies to each affected source.

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

(1) Existing stationary RICE.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;
- (4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
- (6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

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

 [Back to Top](#)

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

- (a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.
- (2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.
 - (3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.
 - (4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.
 - (5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

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

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

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

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

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

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

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

Emission and Operating Limitations

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

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

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

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

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill

gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

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

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

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

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

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

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

[78 FR 6701, Jan. 30, 2013]

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

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

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

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

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

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

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

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

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

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

(1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement.

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

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

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

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

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements

under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

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

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

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

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

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

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

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

[78 FR 6702, Jan. 30, 2013]

General Compliance Requirements

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

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

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

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

Testing and Initial Compliance Requirements

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

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

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

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

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

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

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

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

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

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

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

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

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

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

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

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

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

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

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

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

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

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

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

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

 [Back to Top](#)

§ 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.

 [Back to Top](#)

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

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

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

(1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

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

(3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(c) [Reserved]

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

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

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

[View or download PDF](#)

Where:

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

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

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

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

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

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

[View or download PDF](#)

Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ 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, dsm³ /J (dscf/10⁶ Btu).

F_c = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm³ /J (dscf/10⁶ Btu)

(ii) Calculate the CO₂ correction factor for correcting measurement data to 15 percent O₂, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

[View or download PDF](#)

Where:

X_{CO₂} = CO₂ correction factor, percent.

5.9 = 20.9 percent O₂ — 15 percent O₂, the defined O₂ correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{100} \quad (\text{Eq. 4})$$

[View or download PDF](#)

Where:

C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O₂.

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

X_{CO₂} = CO₂ correction factor, percent.

$\%CO_2$ = 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; 78 FR 6702, Jan. 30, 2013]

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

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O₂ or CO₂ according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

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

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

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

(4) The CEMS data must be reduced as specified in § 63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO₂ concentration.

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

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

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

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

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

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

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

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

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

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

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

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

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

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the

following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

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

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

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

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

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

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

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

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote

stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

- (1) The compliance demonstration must consist of at least three test runs.
- (2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.
- (3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.
- (4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.
- (5) You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.
- (6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.

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

Continuous Compliance Requirements

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

- (a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.
- (b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- (c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

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

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

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

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

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

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

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

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

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

(5) You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.

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

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

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following

RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

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

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

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

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

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

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

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

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are

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

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

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

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

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

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

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

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

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

Notifications, Reports, and Records

§ 63.6645 What notifications must I submit and when?

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

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

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

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

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

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

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

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

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

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

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

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

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

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

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

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

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

§ 63.6650 What reports must I submit and when?

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

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

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

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.6595.

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

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

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

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

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

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

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

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

(1) Company name and address.

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

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

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

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

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

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

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

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

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

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

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

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

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in § 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

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

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

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

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

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

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

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

§ 63.6655 What records must I keep?

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

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

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

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

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

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

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

- (1) Records described in § 63.10(b)(2)(vi) through (xi).
 - (2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in § 63.8(d)(3).
 - (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 63.8(f)(6)(i), if applicable.
- (c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.
- (d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.
- (e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;
- (1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.
 - (2) An existing stationary emergency RICE.
 - (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.
- (f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in § 63.6640(f)(2)(ii) or (iii) or § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
- (1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.
 - (2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

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

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

- (a) Your records must be in a form suitable and readily available for expeditious review according to § 63.10(b)(1).
- (b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

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

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

Other Requirements and Information

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

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

[75 FR 9678, Mar. 3, 2010]

§ 63.6670 Who implements and enforces this subpart?

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

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

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

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

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

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

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

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in § 63.6610(b).

§ 63.6675 What definitions apply to this subpart?

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

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

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

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

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

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

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

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

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

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

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

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless of whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by § 63.6(e)(1)(i).

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

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

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO₂ .

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

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in § 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in § 63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

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

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

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

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

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

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

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

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

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

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

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

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO₂.

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 CO₂, 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 C₃H₈.

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

(1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

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

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

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

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

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

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

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

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_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 P P P P P of this part, that tests stationary RICE.

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

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart Z Z Z Z.

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

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

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

Table 1 a to Subpart Z Z Z Z 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 | |

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

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

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

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

| For each . . . | You must meet the following operating limitation, except during periods of startup . . . |
|--|--|
| 1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ 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. ¹ |
| 2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or | Comply with any operating limitations approved by the Administrator. |
| existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ and not using NSCR. | |

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

[78 FR 6706, Jan. 30, 2013]

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

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

| For each . . . | You must meet the following emission limitation, except during periods of startup . . . | During periods of startup you must . . . |
|--------------------|---|--|
| 1. 2SLB stationary | a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary | Minimize the engine's time spent at idle and minimize the engine's startup time at startup |

| | | |
|-------------------------|---|--|
| RICE | 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 ₂ until June 15, 2007 | 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 CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP

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

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

| | |
|--|--|
| | equal to 1350 °F. ¹ |
| 3. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and | Comply with any operating limitations approved by the Administrator. |
| New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and | |
| existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst. | |

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

[78 FR 6707, Jan. 30, 2013]

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

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

| 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, and replace as necessary; 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 | |

| | | |
|--|--|--|
| | <p>first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.³</p> | |
| 3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP | <p>Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O₂.</p> | |
| 4. Non-Emergency, non-black start CI stationary RICE 300<HP≤500 | <p>a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O₂; or b. Reduce CO emissions by 70 percent or more.</p> | |
| 5. Non-Emergency, non-black start stationary CI RICE >500 HP | <p>a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O₂; or b. Reduce CO emissions by 70 percent or more.</p> | |
| 6. Emergency stationary SI RICE and black start stationary SI RICE. ¹ | <p>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, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.³</p> | |
| 7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE | <p>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, and replace as necessary;</p> | |
| | <p>c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.³</p> | |
| 8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP | <p>a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;² b. Inspect spark plugs every</p> | |

| | | |
|---|--|--|
| | 4,320 hours of operation or annually, whichever comes first, and replace as necessary; | |
| | c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. 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 stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis | Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O 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) or (j) 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.

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

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

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

| | | |
|----------------|--|--|
| For each . . . | You must meet the following requirement, | During periods of startup you must . . . |
|----------------|--|--|

| | except during periods of startup . . . | |
|---|--|--|
| 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 b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. | Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. |
| 2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500 | a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O 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 b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. | |
| 5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year. 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 replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and | |

| | | |
|--|---|--|
| | replace as necessary. | |
| 6. Non-emergency, non-black start 2SLB stationary RICE | a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; ¹ | |
| | b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and | |
| | c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. | |
| 7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP | a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ¹ | |
| | b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and | |
| | c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. | |
| 8. Non-emergency, non-black start 4SLB remote stationary RICE >500 HP | a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; ¹ | |
| | b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and | |
| | c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary. | |
| 9. Non-emergency, non-black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year | Install an oxidation catalyst to reduce HAP emissions from the stationary RICE. | |
| 10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP | a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ¹ | |
| | b. Inspect spark plugs | |

| | | |
|--|---|--|
| | every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and | |
| | c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. | |
| 11. Non-emergency, non-black start 4SRB remote stationary RICE >500 HP | a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; ¹ | |
| | b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and | |
| | c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary. | |
| 12. Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year | Install NSCR to reduce HAP emissions from the stationary RICE. | |
| 13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis | a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ¹ b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and | |
| | c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. | |

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

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.

[78 FR 6709, Jan. 30, 2013]

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

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.

[78 FR 6711, Jan. 30, 2013]

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

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

| 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) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (Reapproved 2005). ^{a,c} | (a) 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) ASTM D6522-00 (Reapproved 2005) ^{a,b,c} or Method 10 of 40 CFR part 60, appendix A | (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 D6522-00 (Reapproved 2005). ^a | (a) measurements to determine O ₂ concentration must be made at the same time as the measurements for formaldehyde or THC concentration. |
| | | iii. Measure moisture content at the inlet and outlet of the control device; and | (1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. ^a | (a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration. |
| | | iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formaldehyde at the inlet and the outlet of the control device | (1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, ^a 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. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device | (1) Method 25A, reported as propane, of 40 CFR part 60, appendix A | (a) THC concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |
| 3. Stationary RICE | a. limit the concentration of formaldehyde or CO in the | 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 |

| | | | | |
|--|-------------------------|--|---|--|
| | stationary RICE exhaust | | | device. |
| | | ii. Determine the O ₂ concentration of the stationary RICE exhaust at the sampling port location; and | (1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (Reapproved 2005). ^a | (a) measurements to determine O ₂ concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration. |
| | | iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and | (1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. ^a | (a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration. |
| | | iv. Measure formaldehyde at the exhaust of the stationary RICE; or | (1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, ^a 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 | (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 or longer runs. |

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

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

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

[78 FR 6711, Jan. 30, 2013]

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

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

| 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- | a. Reduce CO emissions and using oxidation catalyst, and | i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent |

| | | |
|---|---|---|
| <p>emergency 4SLB stationary RICE ≥ 250 HP located at a major source of HAP, non-emergency stationary CI RICE > 500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE > 500 HP located at an area source of HAP</p> | <p>using a CPMS</p> | <p>reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p> |
| <p>2. Non-emergency stationary CI RICE > 500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE > 500 HP located at an area source of HAP</p> | <p>a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS</p> | <p>i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and</p> |
| | | <p>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and</p> |
| | | <p>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p> |
| <p>3. New or reconstructed non-emergency 2SLB stationary RICE > 500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥ 250 HP located at a major source of HAP, non-emergency stationary CI RICE > 500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE > 500 HP located at an area source of HAP</p> | <p>a. Reduce CO emissions and not using oxidation catalyst</p> | <p>i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.</p> |
| <p>4. Non-emergency stationary CI RICE > 500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE > 500 HP located at an area source of HAP</p> | <p>a. Limit the concentration of CO, and not using oxidation catalyst</p> | <p>i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and</p> |
| | | <p>iii. You have recorded the approved operating parameters (if any) during the initial performance test.</p> |
| <p>5. New or reconstructed non-emergency 2SLB stationary RICE > 500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥ 250 HP located at a major source of HAP, non-emergency stationary CI RICE > 500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE > 500 HP located at an area source of HAP</p> | <p>a. Reduce CO emissions, and using a CEMS</p> | <p>i. You have installed a CEMS to continuously monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and</p> |
| | | <p>iii. The average reduction of CO calculated using § 63.6620 equals or exceeds the</p> |

| | | |
|--|---|---|
| | | required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period. |
| 6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP | a. Limit the concentration of CO, and using a CEMS | i. You have installed a CEMS to continuously monitor CO and either O ₂ or CO ₂ at the outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and |
| | | ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and |
| | | iii. The average concentration of CO calculated using § 63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period. |
| 7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP | a. Reduce formaldehyde emissions and using NSCR | i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and |
| | | ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and |
| | | iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test. |
| 8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP | a. Reduce formaldehyde emissions and not using NSCR | i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and |
| | | ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and |
| | | iii. You have recorded the approved operating parameters (if any) during the initial performance test. |
| 9. New or reconstructed non-emergency | a. Limit the | i. The average formaldehyde concentration, |

| | | |
|---|---|---|
| <p>stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP</p> | <p>concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR</p> | <p>corrected to 15 percent O₂, 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</p> |
| | | <p>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p> |
| <p>10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP</p> | <p>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR</p> | <p>i. The average formaldehyde concentration, corrected to 15 percent O₂, 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</p> |
| | | <p>iii. You have recorded the approved operating parameters (if any) during the initial performance test.</p> |
| <p>11. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP</p> | <p>a. Reduce CO emissions</p> | <p>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.</p> |
| <p>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</p> | <p>a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust</p> | <p>i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O₂, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.</p> |
| <p>13. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year</p> | <p>a. Install an oxidation catalyst</p> | <p>i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O₂;</p> |
| | | <p>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.</p> |
| <p>14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year</p> | <p>a. Install NSCR</p> | <p>i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O₂, or the average reduction of emissions of THC is 30 percent or more;</p> |

| | | |
|--|--|--|
| | | ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F. |
|--|--|--|

[78 FR 6712, Jan. 30, 2013]

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

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

| 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 |
| 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 | 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. |
| | | i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved ^a ; and |
| 3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, and | a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS | ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and |
| | | iii. Reducing these data to 4-hour rolling averages; and |
| | | iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test. |
| 3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, and | 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 |

| | | |
|--|--|--|
| existing non-emergency stationary CI RICE >500 HP | | the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and |
| | | iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1. |
| 4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP | a. Reduce formaldehyde emissions and using NSCR | i. Collecting the catalyst inlet temperature data according to § 63.6625(b); and |
| | | ii. Reducing these data to 4-hour rolling averages; and |
| | | iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and |
| | | iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. |
| 5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP | a. Reduce formaldehyde emissions and not using NSCR | i. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and |
| | | ii. Reducing these data to 4-hour rolling averages; and |
| | | iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test. |
| 6. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of HAP | a. Reduce formaldehyde emissions | Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent. ^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. |
| 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 stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE | 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 | a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst | i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and |
| | | ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and |
| | | iii. Reducing these data to 4-hour rolling averages; and |

| | | |
|--|---|---|
| | | iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and |
| | | v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. |
| 11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE | a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst | i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and |
| | | ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and |
| | | iii. Reducing these data to 4-hour rolling averages; and |
| | | iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test. |
| 12. Existing limited use CI stationary RICE >500 HP | a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst | i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and |
| | | ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and |
| | | iii. Reducing these data to 4-hour rolling averages; and |
| | | iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and |
| | | v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. |
| 13. Existing limited use CI stationary RICE >500 HP | a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst | i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved |

| | | |
|---|----------------------------------|---|
| | | or that your emissions remain at or below the CO or formaldehyde concentration limit; and |
| | | ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and |
| | | iii. Reducing these data to 4-hour rolling averages; and |
| | | iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test. |
| 14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year | a. Install an oxidation catalyst | <p>i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O₂; and either</p> <p>ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or</p> <p>iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.</p> |
| 15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year | a. Install NSCR | <p>i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O₂ or the average reduction of emissions of THC is 30 percent or more; and either</p> <p>ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or</p> <p>iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.</p> |

^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.

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

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

| For each . . . | You must submit a . . . | The report must contain . . . | You must submit the report . . . |
|---|--------------------------|--|---|
| <p>1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >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; 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</p> | <p>Compliance report</p> | <p>a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or</p> | <p>i. Semiannually according to the requirements in § 63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in § 63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.</p> |
| | | <p>b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in § 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), the information in § 63.6650(e); or</p> | <p>i. Semiannually according to the requirements in § 63.6650(b).</p> |
| | | <p>c. If you had a malfunction during the reporting period, the information in § 63.6650(c)(4).</p> | <p>i. Semiannually according to the requirements in § 63.6650(b).</p> |
| <p>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</p> | <p>Report</p> | <p>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</p> | <p>i. Annually, according to the requirements in § 63.6650.</p> |
| | | <p>b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and</p> | <p>i. See item 2.a.i.</p> |
| | | <p>c. Any problems or errors suspected with the meters.</p> | <p>i. See item 2.a.i.</p> |
| <p>3. Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary</p> | <p>Compliance report</p> | <p>a. The results of the annual compliance demonstration, if conducted during the reporting period.</p> | <p>i. Semiannually according to the requirements in § 63.6650(b)(1)-(5).</p> |

| | | | |
|---|--------|---------------------------------------|---|
| RICE and that operate more than 24 hours per calendar year | | | |
| 4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in § 63.6640(f)(4)(ii) | Report | a. The information in § 63.6650(h)(1) | i. annually according to the requirements in § 63.6650(h)(2)-(3). |

[78 FR 6719, Jan. 30, 2013]

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

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

| 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. | |
| § 63.6(h) | Opacity and visible emission standards | No | Subpart ZZZZ does not contain opacity or visible emission standards. |
| § 63.6(i) | Compliance extension procedures and criteria | Yes. | |
| § 63.6(j) | Presidential compliance exemption | Yes. | |
| § 63.7(a)(1)-(2) | Performance test dates | Yes | Subpart ZZZZ contains performance test dates at §§ 63.6610, 63.6611, and 63.6612. |
| § 63.7(a)(3) | CAA section 114 authority | Yes. | |
| § 63.7(b)(1) | Notification of performance test | Yes | Except that § 63.7(b)(1) only applies as specified in § 63.6645. |
| § 63.7(b)(2) | Notification of rescheduling | Yes | Except that § 63.7(b)(2) only applies as specified in § 63.6645. |
| § 63.7(c) | Quality assurance/test plan | Yes | Except that § 63.7(c) only applies as specified in § 63.6645. |
| § 63.7(d) | Testing facilities | Yes. | |
| § 63.7(e)(1) | Conditions for conducting performance tests | No. | Subpart ZZZZ specifies conditions for conducting performance tests at § 63.6620. |
| § 63.7(e)(2) | Conduct of performance tests and reduction of data | Yes | Subpart ZZZZ specifies test methods at § 63.6620. |
| § 63.7(e)(3) | Test run duration | Yes. | |
| § 63.7(e)(4) | Administrator may require other testing under section 114 of the CAA | Yes. | |
| § 63.7(f) | Alternative test method provisions | Yes. | |
| § 63.7(g) | Performance test data analysis, recordkeeping, and reporting | Yes. | |
| § 63.7(h) | Waiver of tests | Yes. | |
| § 63.8(a)(1) | Applicability of monitoring requirements | Yes | Subpart ZZZZ contains specific requirements for monitoring at § 63.6625. |
| § 63.8(a)(2) | Performance specifications | Yes. | |
| § 63.8(a)(3) | [Reserved] | | |
| § 63.8(a)(4) | Monitoring for control devices | No. | |
| § 63.8(b)(1) | Monitoring | Yes. | |
| § 63.8(b)(2)-(3) | Multiple effluents and multiple monitoring systems | Yes. | |
| § 63.8(c)(1) | Monitoring system operation and maintenance | Yes. | |
| § 63.8(c)(1)(i) | Routine and predictable SSM | No | |
| § 63.8(c)(1)(ii) | SSM not in Startup Shutdown | Yes. | |

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

| | | | |
|--------------------------|---|---|---|
| | | Except that § 63.9(g) only applies as specified in § 63.6645. | |
| § 63.9(h)(1)-(6) | Notification of compliance status | Yes | Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. § 63.9(h)(4) is reserved. |
| | | | Except that § 63.9(h) only applies as specified in § 63.6645. |
| § 63.9(i) | Adjustment of submittal deadlines | Yes. | |
| § 63.9(j) | Change in previous information | Yes. | |
| § 63.10(a) | Administrative provisions for recordkeeping/reporting | Yes. | |
| § 63.10(b)(1) | Record retention | Yes | Except that the most recent 2 years of data do not have to be retained on site. |
| § 63.10(b)(2)(i)-(v) | Records related to SSM | No. | |
| § 63.10(b)(2)(vi)-(xi) | Records | Yes. | |
| § 63.10(b)(2)(xii) | Record when under waiver | Yes. | |
| § 63.10(b)(2)(xiii) | Records when using alternative to RATA | Yes | For CO standard if using RATA alternative. |
| § 63.10(b)(2)(xiv) | Records of supporting documentation | Yes. | |
| § 63.10(b)(3) | Records of applicability determination | Yes. | |
| § 63.10(c) | Additional records for sources using CEMS | Yes | Except that § 63.10(c)(2)-(4) and (9) are reserved. |
| § 63.10(d)(1) | General reporting requirements | Yes. | |
| § 63.10(d)(2) | Report of performance test results | Yes. | |
| § 63.10(d)(3) | Reporting opacity or VE observations | No | Subpart ZZZZ does not contain opacity or VE standards. |
| § 63.10(d)(4) | Progress reports | Yes. | |
| § 63.10(d)(5) | Startup, shutdown, and malfunction reports | No. | |
| § 63.10(e)(1) and (2)(i) | Additional CMS Reports | Yes. | |
| § 63.10(e)(2)(ii) | COMS-related report | No | Subpart ZZZZ does not require COMS. |
| § 63.10(e)(3) | Excess emission and parameter exceedances reports | Yes. | Except that § 63.10(e)(3)(i) (C) is reserved. |
| § 63.10(e)(4) | Reporting COMS data | No | Subpart ZZZZ does not require COMS. |
| § 63.10(f) | Waiver for recordkeeping/reporting | Yes. | |
| § 63.11 | Flares | No. | |

| | | | |
|---------|---------------------------------|------|--|
| § 63.12 | State authority and delegations | Yes. | |
| § 63.13 | Addresses | Yes. | |
| § 63.14 | Incorporation by reference | Yes. | |
| § 63.15 | Availability of information | Yes. | |

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

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

1.0 SCOPE AND APPLICATION. WHAT IS THIS PROTOCOL?

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O₂) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

1.1 Analytes. What does this protocol determine?

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O₂).

| Analyte | CAS No. | Sensitivity |
|--------------------------|-----------|--|
| Carbon monoxide (CO) | 630-08-0 | Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive. |
| Oxygen (O ₂) | 7782-44-7 | |

1.2 Applicability. When is this protocol acceptable?

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

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

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

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

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O₂, or no more than twice the permitted CO level.

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

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

2.0 SUMMARY OF PROTOCOL

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and O₂ gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You may use additions to, or modifications of vendor supplied measurement systems (e.g., heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

3.0 DEFINITIONS

3.1 Measurement System. The total equipment required for the measurement of CO and O₂ concentrations. The measurement system consists of the following major subsystems:

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

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

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

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

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

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

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

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

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

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

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

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

3.9 Sampling Run. A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O₂ and moisture in the electrolyte reserve and provides a mechanism to de-gas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre-sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.

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

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

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

4.0 INTERFERENCES.

When present in sufficient concentrations, NO and NO₂ are two gas species that have been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

5.0 SAFETY. [RESERVED]

6.0 EQUIPMENT AND SUPPLIES.

6.1 What equipment do I need for the measurement system?

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

6.2 Measurement System Components.

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

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

6.2.3 Calibration Assembly (optional). A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly

must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.

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

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

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

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

6.2.10 EC cell. A device containing one or more EC cells to determine the CO and O₂ concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.

6.2.11 Data Recorder. A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O₂; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.

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

7.0 REAGENTS AND STANDARDS. WHAT CALIBRATION GASES ARE NEEDED?

7.1 Calibration Gases. CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and O₂. Use CO calibration gases with labeled concentration values certified by the manufacturer to be within ± 5 percent of the label value. Dry ambient air (20.9 percent O₂) is acceptable for calibration of the O₂ cell. If needed, any lower percentage O₂ calibration gas must be a mixture of O₂ in nitrogen.

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

7.1.2 Up-Scale O₂ Calibration Gas Concentration.

Select an O₂ gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent O₂. When the average

exhaust gas O₂ readings are above 6 percent, you may use dry ambient air (20.9 percent O₂) for the up-scale O₂ calibration gas.

7.1.3 Zero Gas. Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO₂).

8.0 SAMPLE COLLECTION AND ANALYSIS

8.1 Selection of Sampling Sites.

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

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

8.2 Stack Gas Collection and Analysis. Prior to the first stack gas sampling run, conduct that the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the "sample conditioning phase" once per minute until constant readings are obtained. Then begin the "measurement data phase" and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the "refresh phase" by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the "measurement data phase" readings to calculate the average stack gas CO and O₂ concentrations.

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

9.0 QUALITY CONTROL (RESERVED)

10.0 CALIBRATION AND STANDARDIZATION

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

10.1.1 Zero Calibration. For both the O₂ and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

10.1.2 Zero Calibration Tolerance. For each zero gas introduction, the zero level output must be less than or equal to ± 3 percent of the up-scale gas value or ± 1 ppm, whichever is less restrictive, for the CO channel and less than or equal to ± 0.3 percent O₂ for the O₂ channel.

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

10.1.4 Up-Scale Calibration Error. The mean of the difference of the “measurement data phase” readings from the reported standard gas value must be less than or equal to ± 5 percent or ± 1 ppm for CO or ± 0.5 percent O₂, whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single “measurement data phase” reading must be less than or equal to ± 2 percent or ± 1 ppm for CO or ± 0.5 percent O₂, whichever is less restrictive, respectively.

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

11.0 ANALYTICAL PROCEDURE

The analytical procedure is fully discussed in Section 8.

12.0 CALCULATIONS AND DATA ANALYSIS

Determine the CO and O₂ concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the “measurement data phase”.

13.0 PROTOCOL PERFORMANCE

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

13.1 Measurement Data Phase Performance Check. Calculate the mean of the readings from the “measurement data phase”. The maximum allowable deviation from the mean for each of the individual readings is ± 2 percent, or ± 1 ppm, whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must conform to the specification in Section 8.3.

Example: A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than ± 2 percent or ± 1 ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed).

13.2 Interference Check. Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO₂ gas standards that are generally recognized as representative of diesel-fueled engine NO and NO₂ emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.

13.2.1 Interference Response. The combined NO and NO₂ interference response should be less than or equal to ± 5 percent of the up-scale CO calibration gas concentration.

13.3 Repeatability Check. Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest up-scale gas concentration.

13.3.1 Repeatability Check Procedure. Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.

13.3.2 Repeatability Check Calculations. Determine the highest and lowest average "measurement data phase" CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than ± 3 percent or ± 1 ppm of the up-scale gas value, whichever is less restrictive.

14.0 POLLUTION PREVENTION (RESERVED)

15.0 WASTE MANAGEMENT (RESERVED)

16.0 ALTERNATIVE PROCEDURES (RESERVED)

17.0 REFERENCES

- (1) "Development of an Electrochemical Cell Emission Analyzer Test Protocol", Topical Report, Phil Juneau, Emission Monitoring, Inc., July 1997.
- (2) "Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers, and Process Heaters Using Portable Analyzers", EMC Conditional Test Protocol 30 (CTM-30), Gas Research Institute Protocol GRI-96/0008, Revision 7, October 13, 1997.
- (3) "ICAC Test Protocol for Periodic Monitoring", EMC Conditional Test Protocol 34 (CTM-034), The Institute of Clean Air Companies, September 8, 1999.
- (4) "Code of Federal Regulations", Protection of Environment, 40 CFR, Part 60, Appendix A, Methods 1-4; 10.

TABLE 1: APPENDIX A—SAMPLING RUN DATA.

| Facility _____ | | Engine I.D. _____ | | | | | | Date _____ | | | |
|------------------------|------------------------|-------------------|------------------|----|----------------|----|------------------------|------------|---------------------|-----------|------------|
| Run Type: | () | | () | | | | () | | () | | |
| (X) | Pre-Sample Calibration | | Stack Gas Sample | | | | Post-Sample Cal. Check | | Repeatability Check | | |
| Run # | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | Time | Scrub. OK | Flow- Rate |
| Gas | O ₂ | CO | O ₂ | CO | O ₂ | CO | O ₂ | CO | | | |
| Sample Cond. Phase | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| Measurement Data Phase | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| Mean | | | | | | | | | | | |
| Refresh Phase | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |
| " | | | | | | | | | | | |

[78 FR 6721, Jan. 30, 2013]

**Appendix A: Emission Calculations
Reciprocating Internal Combustion Engines - Diesel Fuel**

Company Name: Ingredient Incorporated Indianapolis Plant
Address City IN Zip: 1515 S Drover Street, Indianapolis, IN, 46221
Permit No.: 097-33118-00042
Plt ID: 097-00042
Reviewer: Nida Habeeb
Date: May 28, 2013

| Output Rating Horsepower (hp) | Potential Throughput hp-hr/yr | Emission Unit ID |
|----------------------------------|----------------------------------|---------------------|
| 210 | 105,000 | FP1 |
| 300 | 150,000 | FP2 |
| 300 | 150,000 | FP3 |
| 810 | 405,000 | |

| Emission Factor in lb/hp-hr | Pollutant | | | | | | |
|-------------------------------|-----------|--------|---------------|--------|--------|--------|--------|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx | VOC | CO |
| | 0.0022 | 0.0022 | 0.0022 | 0.0021 | 0.0310 | 0.0025 | 0.0067 |
| Potential Emission in tons/yr | 0.446 | 0.446 | 0.446 | 0.415 | 6.28 | 0.509 | 1.353 |

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Hazardous Air Pollutants (HAPs)

| | Pollutant | | | | | | | Total PAH HAPs*** |
|---------------------------------|-----------|----------|----------|---------------|--------------|--------------|----------|----------------------|
| | Benzene | Toluene | Xylene | 1,3-Butadiene | Formaldehyde | Acetaldehyde | Acrolein | |
| Emission Factor in lb/hp-hr**** | 6.53E-06 | 2.86E-06 | 2.00E-06 | 2.74E-07 | 8.26E-06 | 5.37E-06 | 6.48E-07 | 1.18E-06 |
| Potential Emission in tons/yr | 1.32E-03 | 5.80E-04 | 4.04E-04 | 5.54E-05 | 1.67E-03 | 1.09E-03 | 1.31E-04 | 2.38E-04 |

***PAH = Polycyclic aromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

| | |
|---|-----------------|
| Potential Emission of Total HAPs (tons/yr) | 5.49E-03 |
|---|-----------------|

Green House Gas Emissions (GHG)

| | Pollutant | | |
|-------------------------------|-----------|----------|----------|
| | CO2 | CH4 | N2O |
| Emission Factor in lb/hp-hr | 1.14E+00 | 4.63E-05 | 9.26E-06 |
| Potential Emission in tons/yr | 2.31E+02 | 9.38E-03 | 1.88E-03 |

| | |
|--|------------|
| Summed Potential Emissions in tons/yr | 231 |
| CO2e Total in tons/yr | 232 |

Methodology:

Emission Factors are from 40 CFR 98, Subpart C (General Stationary Fuel Combustion Sources), Tables C-1 and C-2.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]

Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).



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: Melissa Putman
Ingredion Incorporated Indianapolis Plant
1515 S Drover St
Indianapolis, IN 46221

DATE: June 24, 2013

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

SUBJECT: Final Decision
Title V - Administrative Amendment
097 - 33118 - 00042

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:
Chad Davis, Plant Mgr
David Dempsey Trinity Consultants
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 6/13/2013



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: June 24, 2013

RE: Ingredion Incorporated Indianapolis Plant / 097 - 33118 - 00042

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 | LPOGOST 6/24/2013 Ingredion Incorporated Indianapolis Plant 097 - 33118 - 00042 /final) | | AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING | |
| Name and address of Sender |  | Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204 | Type of Mail: CERTIFICATE OF MAILING ONLY | |

| 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 | | Melissa Putman Ingredion Incorporated Indianapolis Plant 1515 S Drover St Indianapolis IN 46221 (Source CAATS) Via confirmed delivery | | | | | | | | | | |
| 2 | | Chad Davis Plant Mgr Ingredion Incorporated Indianapolis Plant 1515 S Drover St Indianapolis IN 46221 (RO CAATS) | | | | | | | | | | |
| 3 | | Marion County Health Department 3838 N, Rural St Indianapolis IN 46205-2930 (Health Department) | | | | | | | | | | |
| 4 | | Indianapolis City Council and Mayors Office 200 East Washington Street, Room E Indianapolis IN 46204 (Local Official) | | | | | | | | | | |
| 5 | | Marion County Commissioners 200 E. Washington St. City County Bldg., Suite 801 Indianapolis IN 46204 (Local Official) | | | | | | | | | | |
| 6 | | Mr. David Dempsey Trinity Consultants 7330 Woodland Drive, Suite 225 Indianapolis IN 46278 (Consultant) | | | | | | | | | | |
| 7 | | Matt Mosier Office of Sustainability 1200 S Madison Ave #200 Indianapolis IN 46225 (Local Official) | | | | | | | | | | |
| 8 | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | |

| | | | |
|---|--|--|--|
| Total number of pieces Listed by Sender | Total number of Pieces Received at Post Office | Postmaster, Per (Name of Receiving employee) | The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels. |
|---|--|--|--|