INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: October 19, 2007

RE: Grain Processing Corporation / 027-14200-00046

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 03/23/06

Mitchell E. Daniels, Jr.
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PREVENTION OF SIGNIFICANT DETERIORATION (PSD) AND PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Grain Processing Corporation
1443 South 300 West
Washington, Indiana 47501

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

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

Operation Permit No.: T027-14200-00046	
Issued by: *Original signed by* Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: October 19, 2007 Expiration Date: October 19, 2012

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary corn wet milling plant.

Source Address:	1443 South 300 West, Washington, IN 47501
Mailing Address:	1443 South 300 West, Washington, IN 47501
General Source Phone Number:	(812) 257-2749
SIC Code:	2046, 2048, 2085, 2099
County Location:	Daviess
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act 1 of 28 PSD Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

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

(a) One (1) corn processing operation, consisting of:

(1) One (1) truck and railcar corn unloading process, installed in March 2000, consisting of:

(A) One (1) truck/railcar unloading pit and one (1) truck unloading pit, each equipped with one (1) totally enclosed drag pit conveyor system, unloading yellow dent corn at a combined nominal design rate of 855,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as CPC01, with all emissions exhausted through Stack CP01.

(B) One (1) totally enclosed discharge conveyor system, conveying corn received from the truck/railcar and/or truck unloading drag pit conveyor systems to the corn storage silo process at a nominal design rate of 855,000 pounds per hour.

(2) One (1) corn storage process, consisting of five (5) storage silos constructed in 2000, designated as Silos A, B, C, D, and E and one (1) storage silo constructed in 2006 designated as Silo F with a combined maximum design capacity of 53,200,000 pounds, storing corn received from the truck and railcar corn unloading process discharge conveyor system, with particulate emissions controlled by one (1) baghouse, identified as FPC05, with all emissions exhausted through Stack FP05.

(3) One (1) corn cleaning process, installed in March 2000, consisting of:

(A) One (1) totally enclosed receiving conveyor system, conveying corn received from the corn storage silo system to the corn cleaning system at a nominal design rate of 428,000 pounds per hour;

(B) One (1) corn cleaning system, cleaning corn received from the corn storage process discharge conveyor system at a nominal design rate of 428,000 pounds per hour; with particulate emissions controlled by one (1) baghouse, identified as FPC05, with all emissions exhausted through Stack FP05.

(C) One (1) totally enclosed discharge conveyor system, conveying corn received from the corn cleaning system to the corn steeping tank system at a nominal design rate of 428,000 pounds per hour.

(4) One (1) corn steeping process, installed in March 2000, consisting of:

(A) One (1) corn steeping tank system, softening corn received from the corn cleaning process discharge conveyor system at a nominal design rate of 428,000 pounds per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC06, with all emissions exhausted through Stack FP06.

(B) One (1) totally enclosed discharge conveyor system, conveying steeped corn received from the corn steeping tank system to the steeped corn dewatering system at a nominal design rate of 318,000 pounds per hour;

(C) One (1) steeped corn dewatering system, consisting of two (2) dewatering screens, separating water from the softened corn received from the corn steeping tank system discharge conveyor system at a nominal design rate of 318,000 pounds per hour, yielding a maximum of 168,000 pounds of steeped corn per hour and 150,000 pounds of steep water per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC06, with all emissions exhausted through Stack FP06;

(D) One (1) totally enclosed steeped corn discharge conveyor system, conveying steeped corn received from the steeped corn dewatering system to the corn germ, fiber, gluten, and starch separation process primary mill at a nominal design rate of 168,000 pounds per hour; and

(E) One (1) totally enclosed steep water discharge conveyor system, conveying steep water received from the steeped corn dewatering system to the alcohol production process starch precook tank at a nominal design rate of 100,000 pounds per hour and/or corn steep and alcohol stillage evaporation system at a nominal design rate of 50,000 pounds per hour.

(5) One (1) corn germ, fiber, gluten, and starch separation process, installed in March 2000, milling corn received from the steeped corn discharge conveyor system, consisting of:

(A) One (1) primary milling system, consisting of:

(i) One (1) primary mill area, grinding softened corn and supplemental water received from the steeped corn discharge conveyor system at a nominal design rate of 368,000 pounds per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC07, with all emissions exhausted through Stack FP07.

(ii) One (1) totally enclosed discharge conveyor system, conveying milled corn received from the primary mill area to the germ separator at a nominal design rate of 368,000 pounds per hour;

(B) One (1) germ separation system, consisting of:

(i) One (1) germ separation area, separating germ from the corn received from the primary milling system discharge conveyor system at nominal design rate of 368,000 pounds per hour, yielding a maximum of 82,300 pounds of germ per hour and 285,700 pounds of remnant corn, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC07, with all emissions exhausted through Stack FP07,

(ii) One (1) totally enclosed germ discharge conveyor system, conveying germ received from the germ separation area to the germ dryer at a nominal design rate of 23,800 pounds per hour, and

(iii) One totally enclosed remnant corn discharge conveyor system, conveying remnant corn received from the germ separation area to the secondary milling system at a nominal design rate of 285,700 pounds per hour;

(C) One (1) secondary milling system, consisting of:

(i) One (1) secondary milling area, grinding softened corn remnants received from the germ separation system remnant corn discharge conveyor system at a nominal design rate of 285,700 pounds per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC07, with all emissions exhausted through Stack FP07, and

(ii) One (1) totally enclosed discharge conveyor system, conveying milled corn remnants received from the secondary milling area to the fiber separation area at a nominal design rate of 285,700 pounds per hour;

(D) One (1) fiber separation system, consisting of:

(i) One (1) fiber separation area, separating fiber received from the secondary milling system discharge conveyor system at a nominal design rate of 285,700 pounds per hour, with a design maximum of 202,500 pounds of supplemental water added per hour, yielding a maximum of 154,900 pounds of fiber per hour and 333,300 pounds of remnant corn per hour, with SO2 emissions from the separation process controlled by one (1) wet scrubber, identified as FPC27, with all emissions exhausted through Stack FP27.

(ii) One (1) totally enclosed fiber discharge conveyor system, conveying fiber received from the fiber separation area to the corn gluten feed dryer at a nominal design rate of 80,000 pounds per hour, and

(iii) One (1) totally enclosed remnant corn discharge conveyor system, conveying remnant corn received from the fiber separation area to the starch and gluten separation area at a nominal design rate of 333,300 pounds per hour.

(E) One (1) starch and gluten separation system, consisting of:

(i) One (1) starch and gluten separation area, separating starch and gluten from the softened corn remnants received from the fiber separation system remnant corn discharge conveyor system at a nominal design rate of 333,300 pounds per hour, yielding a maximum of 260,000 pounds of starch per hour and 73,300 pounds of gluten per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC27, with all emissions exhausted through Stack FP27,

(ii) One (1) totally enclosed starch discharge conveyor system, conveying starch and supplemental water received from the starch and gluten separation area to the alcohol production process starch precook tank at a nominal design rate of 260,000 pounds per hour, starch production process starch reactors at a nominal design rate of 60,000 pounds per hour, and/or maltodextrin production process at a nominal design rate of 55,000 pounds per hour, and

(iii) One (1) totally enclosed gluten discharge conveyor system, consisting of two (2) totally enclosed conveyors, conveying gluten received from the starch and gluten separation area to the gluten dryer at a nominal design rate of 73,300 pounds per hour.

(6) One (1) germ production process, installed in March 2000, consisting of:

(A) One (1) germ drying system, consisting of:

(i) One (1) 24 MMBtu/hr natural gas and/or biogas fired germ dryer, drying germ received from the germ separation system germ discharge conveyor system at a nominal design rate of 23,800 pounds per hour, yielding a maximum of 11,000 pounds of germ per hour.

Currently, the process PM and SO2 emissions are controlled by wet scrubber FPC12, combustion NOx emissions are controlled by a water quench system, and all emissions exhausted through Stack FP12.

No later than August 10, 2007, process PM and SO2 emissions will be controlled by wet scrubber FPC12, combustion NOx emissions will be controlled by a water quench system, and process VOC emissions will be controlled by thermal oxidizers FPC34a and FPC34b (in parallel). All emissions will be exhausted through Stack FP34.

(ii) One (1) totally enclosed discharge conveyor system, conveying germ received from the germ dryer to the rotary germ cooler at a nominal design rate of 11,000 pounds per hour;

(B) One (1) rotary germ cooling system, consisting of:

(i) One (1) rotary germ cooler, cooling germ received from the germ drying system discharge conveyor system at a nominal design rate of 11,000 pounds per hour, with all emissions routed through one (1) cyclone, identified as FPC09, with PM and SO2 emissions controlled by one (1) wet scrubber, identified as FPC12, with all emissions exhausted through Stack FP12.

No later than August 10, 2007, emissions from FPC12 will be exhausted through oxidizers FPC34a and FPC34b to Stack 34; and

(ii) One (1) totally enclosed discharge conveyor system, conveying material received from the rotary germ cooler to the germ transport system at a nominal design rate of 11,000 pounds per hour;

(C) One (1) totally enclosed germ transport system, conveying germ received from the germ cooling system discharge conveyor system to the germ storage bin at a nominal design rate of 11,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC10, with all emissions exhausted through Stack FP10.

(D) One (1) germ storage bin, with a nominal design storage capacity of 160 tons, storing germ received from the germ transport system, with particulate emissions controlled by one (1) bin vent collector, identified as FPC11, with all emissions exhausted through Stack FP11.

(7) One (1) corn gluten feed production process, installed in March 2000, consisting of:

(A) One (1) corn steep and alcohol stillage evaporation system, consisting of:

(i) One (1) evaporation system, evaporating off excess water from the steep system and alcohol distillation still bottom (a.k.a. stillage), yielding a maximum of 5,000 pounds of supplemental gluten feed (a.k.a. syrup) per hour, with VOC emissions controlled by one (1) condenser/scrubber, identified as APC40, with all emissions exhausted through Stack AP40.

(ii) One (1) totally enclosed discharge conveyor system, conveying supplemental gluten feed syrup received from the supplemental gluten feed evaporator system to the corn gluten feed dryer at a nominal design rate of 5,000 pounds per hour;

(B) One (1) corn storage process supplemental gluten feed system, consisting of one (1) totally enclosed corn storage process supplemental corn gluten feed conveyor system, conveying supplemental corn gluten feed collected by the corn storage silo system baghouse, identified as FPC05, and the corn unloading baghouse, identified as CPC01, to the corn gluten feed dryer at a nominal design rate of 550 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC20, with all emissions exhausted through stack FP20.

(C) One (1) 30 MMBtu/hr natural gas fired corn gluten feed (CGF) dryer, drying wet corn gluten feed received from the fiber separation system fiber discharge conveyor system, supplemental gluten feed evaporator system discharge conveyor system, and corn storage process supplemental gluten feed system at a combined nominal design rate of 85,560 pounds per hour, yielding a maximum of 39,450 pounds of dried corn gluten feed per hour.

Currently, all emissions are exhausted through condenser FPC17, thermal oxidizer FPC23, the gluten dryer, wet scrubber FPC13, and exhaust to Stack FP13.

No later than August 10, 2007, combustion NOx emissions will be controlled by a flue gas recirculation system; PM and SO2 emissions will be controlled by condenser FPC17; and VOC emissions will be controlled by thermal oxidizers (in parallel) FPC34a and FPC34b. All emissions will be exhausted through Stack FP34.

(D) One (1) totally enclosed corn gluten feed transport system, conveying corn gluten feed received from the corn gluten feed dryer to the corn gluten feed storage bin at a nominal design rate of 39,450 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC18, with all emissions exhausted through Stack FP18.

(E) One (1) corn gluten feed storage system, consisting of:

(i) One (1) corn gluten feed storage bin, with a nominal design capacity of 110 tons, storing corn gluten feed received from the corn gluten feed transport system, with particulate emissions controlled by one (1) bin vent collector, identified as FPC22, with all emissions exhausted through Stack FP22.

(ii) One (1) totally enclosed discharge conveyor system, conveying corn gluten feed received from the corn gluten feed storage bin to the corn gluten feed final mill at a nominal design rate of 39,450 pounds per hour.

(F) One (1) corn gluten feed final mill system, consisting of:

(i) One (1) final milling area, milling corn gluten feed received from the corn gluten feed storage system discharge conveyor system at a nominal design rate of 39,450 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC19, with all emissions exhausted through Stack FP19.

(ii) One (1) totally enclosed discharge conveyor system, conveying corn gluten feed received from the final milling area to the corn gluten feed loadout system at a nominal design rate of 39,450 pounds per hour, and/or the pellet mill at a nominal design rate of 39,450 pounds per hour.

(8) One (1) gluten production process, installed in March 2000, consisting of:

(A) One (1) 30 MMBtu/hr natural gas and/or biogas fired gluten dryer, drying gluten received from the gluten discharge conveyor system at a maximum rate of 18,750 pounds per hour, yielding a maximum of 8,333 pounds of dried gluten per hour.

Currently, the combustion NOx emissions are controlled by a water quench system, the combustion and process PM and SO2 emissions controlled by wet scrubber FPC13, and all emissions are exhausted through Stack FP13.

No later than August 10, 2007, combustion NOx emissions will be controlled by a water quench system, the combustion and process PM and SO2 emissions will be controlled by wet scrubber FPC13, and process VOC emissions will be controlled by thermal oxidizers (in parallel) FPC34a and FPC34b. All emissions will be exhausted through Stack FP34.

(B) One (1) totally enclosed gluten transport system, conveying gluten received from the gluten dryer to the gluten storage bin at a nominal design rate of 8,333 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC14, with all emissions exhausted through Stack FP14.

(C) One (1) gluten storage system, consisting of:

(i) One (1) gluten storage bin, with a nominal design capacity of 200 tons, storing dried gluten received from the gluten transport system, with particulate emissions controlled by one (1) bin vent collector, identified as FPC15, with all emissions exhausted through Stack FP15.

(ii) One (1) totally enclosed gluten storage system discharge conveyor system, conveying gluten received from the gluten storage bin to the transfer conveyor system at a nominal design rate of 180,000 pounds per hour.

(9) One (1) corn gluten feed pellet production process, installed in March 2000, consisting of:

(A) One (1) pellet milling system, consisting of:

(i) One (1) pellet mill, producing corn gluten feed pellets from corn gluten feed received from the corn gluten feed final mill system discharge conveyor system at a nominal design rate of 39,450 pounds per hour, and

(ii) One (1) totally enclosed discharge conveyor system, conveying corn gluten feed pellets received from the pellet mill to the pellet cooler at a nominal design rate of 39,450 pounds per hour;

(B) One (1) pellet cooling system, consisting of:

(i) One (1) pellet cooler, cooling corn gluten pellets received from the pellet milling system discharge conveyor system at a nominal design rate of 39,450 pounds per hour, discharging to cyclone FPC24, with all emissions exhausted through Stack FP18.

(ii) One (1) totally enclosed discharge conveyor system, conveying pellets received from the pellet cooler to the pellet storage bin at a nominal design rate of 39,450 pounds per hour.

(C) One (1) pellet storage bin with a nominal design storage capacity of 240 tons, storing pellets received from the pellet cooling system discharge conveyor system, with particulate emissions controlled by one (1) bin vent collector, identified as FPC25, with all emissions exhausted through Stack FP25.

(10) One (1) germ, gluten feed, gluten feed pellet, and gluten loadout process, installed in March 2000, consisting of:

(A) One (1) totally enclosed loadout transfer conveyor system, conveying product received from the storage bins to the loadout system at a nominal design rate of 180,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC28, with all emissions exhausted through Stack FP28.

(B) One (1) totally enclosed germ, gluten, gluten feed and gluten feed pellet loadout system, loading germ, gluten, gluten feed and gluten feed pellet received from the loadout transfer conveyor system into trucks and/or railcars at a nominal design rate of 180,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC26, with all emissions exhausted through Stack FP26.

(11) One (1) alcohol production process, installed in March 2000, consisting of:

(A) One (1) totally enclosed starch cooker and precooker tank, the cooker heats liquified starch received from the precooker tank at a nominal design rate of 260,000 pounds per hour, and converting the starch to fermentable sugars at a nominal design rate of 260,000 pounds per hour.

(B) One (1) flash cooler vent condenser system, identified as APC31, cooling fermentable sugars received from the starch cooker, steep water from the steep system, and stillage from the distillation still bases at a combined nominal design rate of 373,000 pounds per hour, yielding a maximum of 373,000 pounds of fermentable sugars per hour, with the fermentable sugars discharged to one (1) secondary liquefaction tank, with all emissions exhausted through Stack AP31.

(C) One (1) alcohol fermentation system, consisting of:

(i) Two (2) pre-fermenters, fermenting sugars received from the flash cooling chamber at a nominal design rate of 210,000 pounds per hour, yielding a maximum of 210,000 pounds of fermenter feed per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC28, with all emissions exhausted through Stack AP28.

(ii) One (1) fermentation system, fermenting sugars received from the flash cooling chamber at a nominal design rate of 163,000 pounds per hour, yielding a maximum of 123,000 pounds of distillation feed per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC29, with all emissions exhausted through Stack AP29.

(D) One (1) alcohol distillation system, consisting of:

(i) One (1) distillation system, processing distillation feed received from the alcohol fermentation system at a nominal design rate of 50,608 gallons per hour, yielding a maximum of 7,082 gallons of crude alcohol per hour, 30 pounds of distillation heads per hour, and 286,400 pounds of excess corn gluten feed (stillage) per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC32, with all emissions exhausted through Stack AP32.

(ii) One (1) totally enclosed supplemental gluten feed (stillage) discharge conveyor system, conveying supplemental gluten feed received from the alcohol distillation system to the alcohol production process supplemental gluten feed system evaporator at a nominal design rate of 286,400 pounds per hour;

(E) One (1) alcohol storage system, identified as AP95 and AP96, consisting of eighteen (18) alcohol storage tanks, with a maximum combined design capacity of 3,000,000 gallons of finished alcohol product, storing beverage/industrial and anhydrous grade alcohol received from the

alcohol distillation system, with VOC emissions controlled by two (2) wet scrubbers, identified as APC95 and APC96, with all emissions exhausted through Stacks AP95 and AP96. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(F) One (1) 51,700 gallon above ground vertical distillation heads storage tank, identified as Tank AP84, storing distillation heads received from the alcohol distillation system, with VOC emissions controlled by an internal floating roof, with all emissions exhausted through Stack AP84;

(G) One (1) 41,800 gallon above ground vertical burn tank, identified as Tank AP94, storing miscellaneous non-beverage grade alcohol received from the alcohol distillation system, with VOC emissions controlled by an internal floating roof, with all emissions exhausted through Stack AP94. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(H) One (1) denaturant storage tank system, consisting of:

(i) One (1) 41,800 gallon above ground vertical storage tank, identified as Tank AP85, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP85. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(ii) One (1) 41,800 gallon above ground vertical storage tank, identified as Tank AP86, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP86. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(iii) One (1) 21,200 gallon above ground vertical storage tank, identified as Tank AP87, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP87. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(iv) One (1) 2,100 gallon above ground vertical storage tank, identified as Tank AP88, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP88,

(v) One (1) 5,300 gallon above ground vertical storage tank, identified as Tank AP89, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP89,

(vi) One (1) 5,300 gallon above ground vertical storage tank, identified as Tank AP90, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP90, and

(vii) One (1) 1,100 gallon above ground vertical storage tank, identified as Tank AP91, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP91; and

(I) One (1) alcohol and distillation heads loadout area, consisting of:

(i) One (1) alcohol loadout system, loading beverage/industrial or anhydrous alcohol received from the alcohol storage system into trucks and/or railcars at a nominal design rate of 7,082 gallons per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC35;

(ii) One (1) distillation heads loadout system, loading distillation heads received from Tanks AP84 and AP94 into trucks and/or railcars at a combined nominal design rate of 7,082 gallons per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC35; and

(iii) One (1) denaturant delivery system, delivering denaturant received from the denaturant storage tank system to the alcohol loadout system when industrial grade alcohol is being produced, with all non-fugitive VOC emissions controlled by one (1) wet scrubber, identified as APC35, with all non-fugitive emissions exhausted through Stack AP35.

(12) One (1) starch production process, installed in March 2000, consisting of:

(A) One (1) starch reactor system, consisting of:

(i) Eight (8) starch reactors, processing starch received from the starch and gluten separation system starch discharge conveyor system at a nominal design rate of 60,000 pounds per hour, yielding a maximum of 60,000 pounds of processed starch per hour, with all emissions exhausted through Stack SP46,

(ii) One (1) starch reactor liquid brine feed system, consisting of one (1) 50 ton storage tank, storing brine that is converted from dry feed to liquid and fed to the starch reactors, with the dry brine feed particulate emissions controlled by one (1) bin vent collector, identified as SPC65, with all emissions exhausted through Stack SP65.

(iii) One (1) starch reactor liquid ethylene oxide feed system, consisting of one (1) 40,000 gallon storage tank, storing liquid ethylene oxide that is fed to the starch reactors, and

(iv) One (1) starch reactor dry soda ash feed system, consisting of:

(a) One (1) soda ash storage bin with a nominal design capacity of 75 tons, storing soda ash that is fed to the starch reactors, with the dry soda ash feed particulate emissions controlled by one (1) bin vent collector, identified as SPC64, with all emissions exhausted through Stack SP64.

(b) One (1) totally enclosed soda ash discharge conveyor system, delivering soda ash received from the soda ash storage bin to the starch reactors, and

(c) One (1) totally enclosed starch discharge conveyor system, conveying processed starch received from the starch reactors to the starch filtration system at a nominal design rate of 60,000 pounds per hour;

(B) One (1) starch filtration system, consisting of:

(i) Two (2) starch filters, refining processed starch received from the starch reactor system starch discharge conveyor system at a nominal design rate of 60,000 pounds per hour, and

(ii) One (1) totally enclosed discharge conveyor system, conveying refined starch received from the starch filter to the starch dryer at a nominal design rate of 56,000 pounds per hour;

(C) One (1) starch drying system consisting of:

(i) One (1) 30 MMBtu/hr natural gas fired starch dryer, drying refined starch received from the starch filtration system discharge conveyor system at a nominal design rate of 56,000 pounds per hour, with the process and combustion PM emissions controlled by one (1) wet scrubber, identified as SPC49, with all emissions exhausted through Stack SP49.

(ii) One (1) totally enclosed discharge conveyor system, conveying dried starch received from the starch dryer to the starch storage bin at a nominal design rate of 30,000 pounds per hour;

(D) One (1) starch storage system, consisting of four (4) starch storage bins, with a nominal design capacity of 1,000,000 pounds, storing dried starch received from the starch drying system discharge conveyor system, with particulate emissions controlled by four (4) identical bin vent collectors, identified as SPC50, with all emissions exhausted through four stacks collectively identified as SP50;

(E) One (1) totally enclosed starch loadout system, conveying starch received from the starch storage bin into trucks and/or railcars at a nominal design rate of 80,000 pounds per hour, with non-fugitive particulate emissions controlled by one (1) baghouse, identified as SPC44a, and fugitive particulate emissions controlled by one (1) dust collector identified as SPC44b, with all non-fugitive emissions exhausted through Stack SP44a, and all collected fugitive particulate emissions exhausted through Stack SP44b.

(13) One (1) maltodextrin production process, installed in March 2000, consisting of:

(A) One (1) maltodextrin cooking system, consisting of:

(i) One (1) maltodextrin cooker, processing starch received from the starch and gluten separation system starch discharge conveyor system at a nominal design rate of 55,000 pounds per hour, yielding 55,000 pounds of crude maltodextrin per hour, and

(ii) One totally enclosed discharge conveyor system, conveying crude maltodextrin received from the maltodextrin cooker to the maltodextrin filtration system at a nominal design rate of 55,000 pounds per hour;

(B) One (1) maltodextrin filtration system, consisting of:

(i) One (1) maltodextrin filter, refining crude maltodextrin received from the maltodextrin cooking system discharge conveyor system at a nominal design rate of 42,900 pounds per hour,

(ii) One (1) filtration system dry carbon feed system, consisting of:

(a) One (1) dry carbon storage bin with a nominal design capacity of 100,000 pounds, storing carbon that is fed to the maltodextrin filtration system at a nominal design rate of 50,000 pounds per hour, with the dry carbon feed particulate emissions controlled by one (1) bin vent collector, identified as MPC61, with all emissions exhausted through Stack MP61.

(b) One (1) totally enclosed carbon discharge conveyor system, delivering carbon received from the carbon storage bin to the filtration system,

(iii) One (1) totally enclosed discharge conveyor system, conveying refined maltodextrin from the maltodextrin filter to the maltodextrin dryer at a nominal design rate of 42,900 pounds per hour;

(C) One (1) maltodextrin drying system, consisting of one (1) 72 MMBtu/hr natural gas fired maltodextrin dryer, drying maltodextrin received from the maltodextrin filtration system discharge conveyor system a nominal design rate of 42,900 pounds per hour, with the process and combustion PM emissions controlled by one (1) wet scrubber, identified as MPC39, with all emissions exhausted through Stack MP39.

(D) One (1) totally enclosed maltodextrin transfer conveyor system, conveying dried maltodextrin received from the maltodextrin dryer to the maltodextrin storage system at a nominal design rate of 24,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as MPC42, with all emissions exhausted through Stack MP42.

(E) One (1) maltodextrin storage system, consisting of four (4) maltodextrin storage bins with a combined nominal design capacity of 1,000,000 pounds, storing maltodextrin received from the maltodextrin transfer conveyor system, with particulate emissions controlled by four (4) identical bin vent collectors, identified as MPC44, with all emissions exhausted through four stacks collectively identified as MP44.

(F) One (1) totally enclosed maltodextrin loadout system, including one (1) maltodextrin screening process and one (1) loadout process, conveying maltodextrin received from the maltodextrin storage bins to the maltodextrin packaging system at a nominal design rate of 90,000 pounds per hour, with particulate emissions controlled by one (1) dust collector, identified as MPC41, with all emissions exhausted through Stack MP41.

(G) One (1) maltodextrin central vacuum system, identified as MPC43, controlling fugitive particulate emissions generated by the maltodextrin production process, with all emissions exhausted through Stack MP43.

(b) One (1) anaerobic wastewater treatment process, installed in March 2000. Biogas generated by the treatment process can be:

(1) Combusted in one (1) 18 MMBtu/hr flare, identified as UPC54, with all emissions exhausted through Stack UP54;

(2) Used as fuel in the germ dryer. Currently, process PM and SO2 emissions from the germ dryer are controlled by scrubber FPC12 and combustion NOx emissions are controlled by a water quench system. All emissions are exhausted

to Stack FP13. No later than August 10, 2007, process PM and SO2 emissions will be controlled by wet scrubber FPC12, NOx emissions will be controlled by a water quench system, and process VOC emissions will be controlled by thermal oxidizers FPC34a and FPC34b (in parallel). All emissions will be exhausted through Stack FP34.

(3) Used as fuel in the gluten dryer. Currently, process PM and SO2 emissions from the germ dryer are controlled by scrubber FPC12 and combustion NOx emissions are controlled by a water quench system. All emissions are exhausted to Stack FP13. No later than August 10, 2007, process PM and SO2 emissions will be controlled by wet scrubber FPC12, NOx emissions will be controlled by a water quench system, and process VOC emissions will be controlled by thermal oxidizers FPC34a and FPC34b (in parallel). All emissions will be exhausted through Stack FP34.

(4) Combusted in thermal oxidizer FPC23 until oxidizers FPC34a and FPC34b are in operation. Emissions from FPC23 are exhausted through Stack FP13.

(5) Combusted in thermal oxidizers FPC34a and FPC34b. Emissions will be exhausted through Stack FP34.

Supporting the wastewater treatment process is a wastewater treatment lime feed system, consisting of:

(1) One (1) lime storage bin with a nominal design capacity of 100,000 pounds, storing lime that is fed to the wastewater treatment system, with the lime feed particulate emissions controlled by one (1) bin vent collector, identified as MPC60, with all emissions exhausted through Stack MP60; and

(2) One (1) totally enclosed lime discharge conveyor system, delivering lime received from the lime storage bin to the maltodextrin filtration system.

(c) Two (2) natural gas or alcohol fired boilers, identified as Boiler 1 and 2, each with a heat input capacity of 244 MMBtu/hr, installed in March 2000, each equipped with one (1) low NOx burner and a flue gas recirculation system to control combustion NOx emissions, with all emissions exhausted through Stack UP51.

(d) One (1) process water cooling tower, installed in March 2000, cooling hot process water received from the source processes at a nominal design rate of 18,000,000 pounds per hour, with particulate mist controlled by one (1) mist elimination system, identified as APC38.

A.3 Specifically Regulated Insignificant Activities
[326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

(a) Paved and unpaved roads and parking lots with public access [326 IAC 6-4] [326 IAC 6-5].

(b) Stationary fire pumps: One (1) 425 horsepower, No. 2 distillate oil-fired emergency fire water pump engine, installed in March 2000, with all emissions exhausted through Stack UP57 [326 IAC 2-2].

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, T027-14200-00046, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

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

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

B.4 Enforceability [326 IAC 2-7-7]

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

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

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This

certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) The "responsible official" is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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 Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the

emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) All terms and conditions of permits established prior to T027-14200-00046 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 combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12][40 CFR 72]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue

MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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

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

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

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to

326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

(a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2and 326 IAC 2-7-10.5.

(b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2 (for sources located in NA areas).

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

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

C.2 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

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

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on December 17, 2003. The plan is included as Attachment A.

C.7 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.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

C.9 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

Compliance Requirements [326 IAC 2-1.1-11]

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

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.

(b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(c) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 12 and 40 CFR Part 60, Subpart Db.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.14 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.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

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

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

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

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.17 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

(a) Pursuant to 326 IAC 2-6-3(b)(3), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

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

The statement must be submitted to:

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

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

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

Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

(c) If there is a "project" (as defined in 326 IAC 2-2-1(qq)) at an existing emissions unit (or at a source with Plant-wide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr) and/or IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:
- (A) A description of the project.
- (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
- (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
  - (i) Baseline actual emissions;
  - (ii) Projected actual emissions;
  - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and
  - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(2) 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

(3) 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.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or

before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

(f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ :

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).

(g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

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

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

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a)(1) One (1) truck and railcar corn unloading process, installed in March 2000, consisting of:

(A) One (1) truck/railcar unloading pit and one (1) truck unloading pit, each equipped with one (1) totally enclosed drag pit conveyor system, unloading yellow dent corn at a combined nominal design rate of 855,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as CPC01, with all emissions exhausted through Stack CP01.

(B) One (1) totally enclosed discharge conveyor system, conveying corn received from the truck/railcar and/or truck unloading drag pit conveyor systems to the corn storage silo process at a nominal design rate of 855,000 pounds per hour.

(a)(2) One (1) corn storage system, consisting of five (5) storage silos constructed in 2000, designated as Silos A, B, C, D, and E and one (1) storage silo constructed in 2006 designated as Silo F with a combined maximum design capacity of 53,200,000 pounds, storing corn received from the truck and railcar corn unloading process discharge conveyor system, with particulate emissions controlled by one (1) baghouse, identified as FPC05, with all emissions exhausted through Stack FP05.

(a)(3) One (1) corn cleaning process, installed in March 2000, consisting of:

(A) One (1) totally enclosed receiving conveyor system, conveying corn received from the corn storage silo system to the corn cleaning system at a nominal design rate of 428,000 pounds per hour;

(B) One (1) corn cleaning system, cleaning corn received from the corn storage process discharge conveyor system at a nominal design rate of 428,000 pounds per hour; with particulate emissions controlled by one (1) baghouse, identified as FPC05, with all emissions exhausted through Stack FP05.

(C) One (1) totally enclosed discharge conveyor system, conveying corn received from the corn cleaning system to the corn steeping tank system at a nominal design rate of 428,000 pounds per hour.

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

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

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

(a) Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the PM/PM10 emissions (including filterable and condensible PM10) shall be limited as follows:

Process (Control)	Stack	PM/PM10 Limit (gr/dscf)	PM/PM10 Limit (lb/hr)
Truck and Railcar Corn Unloading Process (CPC01)	CP01	0.005	2.57

(b) Pursuant to SSM 037-22018-000046, issued May 17, 2006:

(1) Pursuant to 326 IAC 2-2-3, and in order to render the requirements of 326 IAC 2-2 not applicable to Silo F, emissions from Stack FP05 shall not exceed the limits

listed in the following table:

Process (Control)	Stack	PM/PM10 Limit (gr/dscf)	PM10 Limit (lb/hr)	PM Limit (lb/hr)
Corn Cleaning Process and Corn Storage System (FPC05)	FP05	0.005	0.17	5.7

(2) Throughput of the existing drag pit conveyor (unloading bins to storage silos) and receiving conveyor system (storage silos to corn cleaning process) shall not exceed 15,000 bushels/hour and 7,500 bushels/hour, respectively.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.1.3 Particulate Control

(a) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with Condition D.1.1, baghouse CPC01, used to control particulate emissions, shall be in operation at all times the truck and rail car corn unloading process is in operation.

(b) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with Condition D.1.1, baghouse FPC05, used to control particulate emissions, shall be in operation at all times the corn cleaning process or corn storage system is in operation.

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

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) During the period within 60 days of achieving the maximum production rate but no later than 180 days after start-up of Silo F, in order to demonstrate compliance with Condition D.1.1(b)(1), the Permittee shall perform PM and PM10 testing on the stack exhaust from baghouse FPC05 when Silo F is in operation. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test. PM10 includes filterable and condensable PM10. Testing shall be conducted utilizing methods approved by the Commissioner and in accordance with Section C - Performance Testing.

(b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.1.1(a), the Permittee shall perform PM and PM10 testing on the stack exhaust from baghouse CPC01 when the unloading and storage process is in operation. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test. PM10 includes filterable and condensable PM10. Testing shall be conducted utilizing methods approved by the Commissioner and in accordance with Section C - Performance Testing.

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

D.1.5 Visible Emissions Notations

(a) Visible emission notations of the stack exhaust from the truck and railcar corn unloading process (stack CP01) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of the stack exhaust from the corn cleaning process and corn storage system (stack FP05) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(c) 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.

(d) 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.

(e) 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.

(f) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

D.1.6 Parametric Monitoring

(a) The Permittee shall record the pressure drop across baghouse CPC01, used in conjunction with the truck and railcar corn unloading process, at least once per day when the respective process is in operation.

(b) The Permittee shall record the pressure drop across baghouse FPC05, used in conjunction with the corn cleaning process and corn storage system, at least once per day when either respective process/system is in operation.

(c) When for any one reading, the pressure drop is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.7 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 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).

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

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

D.1.8 Record Keeping Requirements

(a) To document compliance with Condition D.1.1(b)(2), the Permittee shall maintain records of the hourly throughput of the drag pit conveyor and the receiving conveyor system.

(b) To document compliance with Condition D.1.5, the Permittee shall maintain records of the visible emission notations required by that condition. 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 compliance with Condition D.1.6, the Permittee shall maintain records of the pressure drop readings required by that condition. 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) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(a)(4) One (1) corn steeping process, installed in March 2000, consisting of:

(A) One (1) corn steeping tank system, softening corn received from the corn cleaning process discharge conveyor system at a nominal design rate of 428,000 pounds per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC06, with all emissions exhausted through Stack FP06.

(B) One (1) totally enclosed discharge conveyor system, conveying steeped corn received from the corn steeping tank system to the steeped corn dewatering system at a nominal design rate of 318,000 pounds per hour;

(C) One (1) steeped corn dewatering system, consisting of two (2) dewatering screens, separating water from the softened corn received from the corn steeping tank system discharge conveyor system at a nominal design rate of 318,000 pounds per hour, yielding a maximum of 168,000 pounds of steeped corn per hour and 150,000 pounds of steep water per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC06, with all emissions exhausted through Stack FP06;

(D) One (1) totally enclosed steeped corn discharge conveyor system, conveying steeped corn received from the steeped corn dewatering system to the corn germ, fiber, gluten, and starch separation process primary mill at a nominal design rate of 168,000 pounds per hour; and

(E) One (1) totally enclosed steep water discharge conveyor system, conveying steep water received from the steeped corn dewatering system to the alcohol production process starch precook tank at a nominal design rate of 100,000 pounds per hour and/or corn steep and alcohol stillage evaporation system at a nominal design rate of 50,000 pounds per hour.

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

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

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

Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the SO2 emissions shall be limited as follows:

Facility (Control)	Stack/ Vent	SO2 Limit (lb/hr)
Steep Area (FPC06)	FP06	0.23

Compliance with this limit will render the requirements of 326 IAC 2-2 not applicable.

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.2.3 SO2 Control

Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with

Condition D.2.1, scrubber FPC06, used to control SO2 emissions, shall be in operation at all times the corn steeping process is in operation.

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

D.2.4 Scrubber Monitoring

(a) The Permittee shall monitor the pH of the scrubbing liquid, exhaust air stream pressure drop, and pump discharge pressure of scrubber FPC06 at least once per day when the scrubber is in operation.

(b) When for any one reading, the pH of the scrubbing liquid is less than 5.0, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pH reading that is less than 5.0 is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(c) When for any one reading, the exhaust air stream pressure drop is outside the normal range of 1.0 and 6.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(d) When for any one reading, the pump discharge pressure indicates that the scrubbant flow rate is less than 36 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

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

D.2.5 Record Keeping Requirements

(a) To document compliance with Condition D.2.4, the Permittee shall maintain records of the scrubber operating parameters required by that condition. The Permittee shall include in its daily record when a reading is not taken and the reason for the lack of a reading (e.g. the process did not operate that day).

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

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(a)(5) One (1) corn germ, fiber, gluten, and starch separation process, installed in March 2000, milling corn received from the steeped corn discharge conveyor system, consisting of:

(A) One (1) primary milling system, consisting of:

(i) One (1) primary mill area, grinding softened corn and supplemental water received from the steeped corn discharge conveyor system at a nominal design rate of 368,000 pounds per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC07, with all emissions exhausted through Stack FP07.

(ii) One (1) totally enclosed discharge conveyor system, conveying milled corn received from the primary mill area to the germ separator at a nominal design rate of 368,000 pounds per hour;

(B) One (1) germ separation system, consisting of:

(i) One (1) germ separation area, separating germ from the corn received from the primary milling system discharge conveyor system at nominal design rate of 368,000 pounds per hour, yielding a maximum of 82,300 pounds of germ per hour and 285,700 pounds of remnant corn, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC07, with all emissions exhausted through Stack FP07,

(ii) One (1) totally enclosed germ discharge conveyor system, conveying germ received from the germ separation area to the germ dryer at a nominal design rate of 23,800 pounds per hour, and

(iii) One totally enclosed remnant corn discharge conveyor system, conveying remnant corn received from the germ separation area to the secondary milling system at a nominal design rate of 285,700 pounds per hour;

(C) One (1) secondary milling system, consisting of:

(i) One (1) secondary milling area, grinding softened corn remnants received from the germ separation system remnant corn discharge conveyor system at a nominal design rate of 285,700 pounds per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC07, with all emissions exhausted through Stack FP07, and

(ii) One (1) totally enclosed discharge conveyor system, conveying milled corn remnants received from the secondary milling area to the fiber separation area at a nominal design rate of 285,700 pounds per hour;

(D) One (1) fiber separation system, consisting of:

(i) One (1) fiber separation area, separating fiber received from the secondary milling system discharge conveyor system at a nominal design rate of 285,700 pounds per hour, with a design maximum of 202,500 pounds of supplemental water added per hour, yielding a maximum of 154,900 pounds of fiber per hour and 333,300 pounds of remnant corn per hour, with SO2 emissions from the separation process controlled by one (1) wet scrubber, identified as FPC27, with all emissions exhausted through Stack FP27.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(ii) One (1) totally enclosed fiber discharge conveyor system, conveying fiber received from the fiber separation area to the corn gluten feed dryer at a nominal design rate of 80,000 pounds per hour, and

(iii) One (1) totally enclosed remnant corn discharge conveyor system, conveying remnant corn received from the fiber separation area to the starch and gluten separation area at a nominal design rate of 333,300 pounds per hour.

(E) One (1) starch and gluten separation system, consisting of:

(i) One (1) starch and gluten separation area, separating starch and gluten from the softened corn remnants received from the fiber separation system remnant corn discharge conveyor system at a nominal design rate of 333,300 pounds per hour, yielding a maximum of 260,000 pounds of starch per hour and 73,300 pounds of gluten per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC27, with all emissions exhausted through Stack FP27,

(ii) One (1) totally enclosed starch discharge conveyor system, conveying starch and supplemental water received from the starch and gluten separation area to the alcohol production process starch precook tank at a nominal design rate of 260,000 pounds per hour, starch production process starch reactors at a nominal design rate of 60,000 pounds per hour, and/or maltodextrin production process at a nominal design rate of 55,000 pounds per hour, and

(iii) One (1) totally enclosed gluten discharge conveyor system, consisting of two (2) totally enclosed conveyors, conveying gluten received from the starch and gluten separation area to the gluten dryer at a nominal design rate of 73,300 pounds per hour.

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

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

D.3.1 Prevention of Significant Deterioration [326 IAC 2-2]

(a) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the SO2 emissions shall be limited as follows:

Facility (Control)	Stack/ Vent	SO2 Limit (lb/hr)
Milling Area (FPC07)	FP07	0.23

Compliance with this limit will render the requirements of 326 IAC 2-2 not applicable.

(b) The IDEM, OAQ has information that indicates that the SO2 emissions from the starch and gluten separation area have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2

(PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.3.3 SO2 Control

(a) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with Condition D.3.1, scrubber FPC07, used to control SO2 emissions, shall be in operation at all times the primary milling, germ separation, and secondary milling processes are in operation.

(b) Scrubber FPC27, used to control SO2 emissions, shall be in operation at all times the fiber separation, and starch and gluten separation processes are in operation.

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 180 days after issuance of this Part 70 permit, the Permittee shall perform SO2 testing for scrubber FPC27 utilizing methods approved by the Commissioner. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.

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

D.3.5 Scrubber Monitoring

(a) The Permittee shall monitor the pH of the scrubbing liquid, exhaust air stream pressure drop and pump discharge pressure of scrubbers FPC07 and FPC27 at least once per day when the respective wet scrubber is in operation.

(b) When for any one reading, the pH of the scrubbing liquid is less than 5.0, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pH reading that is greater than 5.0 is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(c) When for any one reading, the exhaust air stream pressure drop is outside the normal range of 1.0 and 6.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(d) When for any one reading, the pump discharge pressure indicates that the scrubbant flow rate of FPC07 is less than 120 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(e) When for any one reading, the pump discharge pressure indicates that the scrubbant flow rate of FPC27 is less than 190 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

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

D.3.6 Record Keeping Requirements

(a) To document compliance with Condition D.3.5, the Permittee shall maintain records of the scrubber operating parameters required by that condition. The Permittee shall include in its daily record when a reading is not taken and the reason for the lack of a reading (e.g. the process did not operate that day).

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

SECTION D.4 FACILITY OPERATION CONDITIONS

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

(a)(6) One (1) germ production process, installed in March 2000, consisting of:

(A) One (1) germ drying system, consisting of:

(i) One (1) 24 MMBtu/hr natural gas and/or biogas fired germ dryer, drying germ received from the germ separation system germ discharge conveyor system at a nominal design rate of 23,800 pounds per hour, yielding a maximum of 11,000 pounds of germ per hour.

Currently, the process PM and SO2 emissions are controlled by wet scrubber FPC12, combustion NOx emissions are controlled by a water quench system, and all emissions exhausted through Stack FP12.

No later than August 10, 2007, process PM and SO2 emissions will be controlled by wet scrubber FPC12, combustion NOx emissions will be controlled by a water quench system, and process VOC emissions will be controlled by thermal oxidizers FPC34a and FPC34b (in parallel). All emissions will be exhausted through Stack FP34.

(ii) One (1) totally enclosed discharge conveyor system, conveying germ received from the germ dryer to the rotary germ cooler at a nominal design rate of 11,000 pounds per hour;

(B) One (1) rotary germ cooling system, consisting of:

(i) One (1) rotary germ cooler, cooling germ received from the germ drying system discharge conveyor system at a nominal design rate of 11,000 pounds per hour, with all emissions routed through one (1) cyclone, identified as FPC09, with particulate and SO2 emissions controlled by one (1) wet scrubber, identified as FPC12, with all emissions exhausted through Stack FP12.

No later than August 10, 2007, emissions from FPC12 will be exhausted through oxidizers FPC34a and FPC34b to Stack 34; and

(ii) One (1) totally enclosed discharge conveyor system, conveying material received from the rotary germ cooler to the germ transport system at a nominal design rate of 11,000 pounds per hour;

(C) One (1) totally enclosed germ transport system, conveying germ received from the germ cooling system discharge conveyor system to the germ storage bin at a nominal design rate of 11,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC10, with all emissions exhausted through Stack FP10.

(D) One (1) germ storage bin, with a nominal design storage capacity of 160 tons, storing germ received from the germ transport system, with particulate emissions controlled by one (1) bin vent collector, identified as FPC11, with all emissions exhausted through Stack FP11.

(a)(7) One (1) corn gluten feed production process, installed in March 2000, consisting of:

(A) One (1) corn steep and alcohol stillage evaporation system, consisting of:

(i) One (1) evaporation system, evaporating off excess water from the steep

SECTION D.4 FACILITY OPERATION CONDITIONS

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

system and alcohol distillation still bottom (a.k.a. stillage), yielding a maximum of 5,000 pounds of supplemental gluten feed (a.k.a. syrup) per hour, with VOC emissions controlled by one (1) condenser/scrubber, identified as APC40, with all emissions exhausted through Stack AP40.

(ii) One (1) totally enclosed discharge conveyor system, conveying supplemental gluten feed syrup received from the supplemental gluten feed evaporator system to the corn gluten feed dryer at a nominal design rate of 5,000 pounds per hour;

(B) One (1) corn storage process supplemental gluten feed system, consisting of one (1) totally enclosed corn storage process supplemental corn gluten feed conveyor system, conveying supplemental corn gluten feed collected by the corn storage silo system baghouse, identified as FPC05, and the corn unloading baghouse, identified as CPC01, to the corn gluten feed dryer at a nominal design rate of 550 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC20, with all emissions exhausted through stack FP20.

(C) One (1) 30 MMBtu/hr natural gas fired corn gluten feed (CGF) dryer, drying wet corn gluten feed received from the fiber separation system fiber discharge conveyor system, supplemental gluten feed evaporator system discharge conveyor system, and corn storage process supplemental gluten feed system at a combined nominal design rate of 85,560 pounds per hour, yielding a maximum of 39,450 pounds of dried corn gluten feed per hour.

Currently, all emissions are exhausted through condenser FPC17, thermal oxidizer FPC23, the gluten dryer, wet scrubber FPC13, and ultimately exhausted to Stack FP13.

No later than August 10, 2007, combustion NOx emissions will be controlled by a flue gas recirculation system; PM and SO2 emissions will be controlled by condenser FPC17; and VOC emissions will be controlled by thermal oxidizers (in parallel) FPC34a and FPC34b. All emissions will be exhausted through Stack FP34.

(D) One (1) totally enclosed corn gluten feed transport system, conveying corn gluten feed received from the corn gluten feed dryer to the corn gluten feed storage bin at a nominal design rate of 39,450 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC18, with all emissions exhausted through Stack FP18.

(E) One (1) corn gluten feed storage system, consisting of:

(i) One (1) corn gluten feed storage bin, with a nominal design capacity of 110 tons, storing corn gluten feed received from the corn gluten feed transport system, with particulate emissions controlled by one (1) bin vent collector, identified as FPC22, with all emissions exhausted through Stack FP22.

(ii) One (1) totally enclosed discharge conveyor system, conveying corn gluten feed received from the corn gluten feed storage bin to the corn gluten feed final mill at a nominal design rate of 39,450 pounds per hour.

(F) One (1) corn gluten feed final mill system, consisting of:

(i) One (1) final milling area, milling corn gluten feed received from the corn gluten

SECTION D.4 FACILITY OPERATION CONDITIONS

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

feed storage system discharge conveyor system at a nominal design rate of 39,450 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC19, with all emissions exhausted through Stack FP19.

(ii) One (1) totally enclosed discharge conveyor system, conveying corn gluten feed received from the final milling area to the corn gluten feed loadout system at a nominal design rate of 39,450 pounds per hour, and/or the pellet mill at a nominal design rate of 39,450 pounds per hour.

(a)(8) One (1) gluten production process, installed in March 2000, consisting of:

(A) One (1) 30 MMBtu/hr natural gas and/or biogas fired gluten dryer, drying gluten received from the gluten discharge conveyor system at a maximum rate of 18,750 pounds per hour, yielding a maximum of 8,333 pounds of dried gluten per hour.

Currently, the combustion NOx emissions are controlled by a water quench system, the combustion and process PM and SO2 emissions controlled by wet scrubber FPC13, and all emissions are exhausted through Stack FP13.

No later than August 10, 2007, combustion NOx emissions will be controlled by a water quench system, the combustion and process PM and SO2 emissions will be controlled by wet scrubber FPC13, and process VOC emissions will be controlled by thermal oxidizers (in parallel) FPC34a and FPC34b. All emissions will be exhausted through Stack FP34.

(B) One (1) totally enclosed gluten transport system, conveying gluten received from the gluten dryer to the gluten storage bin at a nominal design rate of 8,333 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC14, with all emissions exhausted through Stack FP14.

(C) One (1) gluten storage system, consisting of:

(i) One (1) gluten storage bin, with a nominal design capacity of 200 tons, storing dried gluten received from the gluten transport system, with particulate emissions controlled by one (1) bin vent collector, identified as FPC15, with all emissions exhausted through Stack FP15.

(ii) One (1) totally enclosed gluten storage system discharge conveyor system, conveying gluten received from the gluten storage bin to the loadout transfer conveyor system at a nominal design rate of 180,000 pounds per hour.

(b) One (1) anaerobic wastewater treatment process, installed in March 2000. Biogas generated by the treatment process can be:

(1) Combusted in one (1) 18 MMBtu/hr flare, identified as UPC54, with all emissions exhausted through Stack UP54;

(2) Used as fuel in the germ dryer. Currently, process PM and SO2 emissions from the germ dryer are controlled by scrubber FPC12 and combustion NOx emissions are controlled by a water quench system. All emissions are exhausted to Stack FP13. No later than August 10, 2007, process PM and SO2 emissions will be controlled by wet scrubber FPC12, NOx emissions will be controlled by a water quench system, and process VOC emissions will be controlled by thermal oxidizers FPC34a and FPC34b

SECTION D.4 FACILITY OPERATION CONDITIONS

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

(in parallel). All emissions will be exhausted through Stack FP34.

(3) Used as fuel in the gluten dryer. Currently, process PM and SO2 emissions from the germ dryer are controlled by scrubber FPC12 and combustion NOx emissions are controlled by a water quench system. All emissions are exhausted to Stack FP13. No later than August 10, 2007, process PM and SO2 emissions will be controlled by wet scrubber FPC12, NOx emissions will be controlled by a water quench system, and process VOC emissions will be controlled by thermal oxidizers FPC34a and FPC34b (in parallel). All emissions will be exhausted through Stack FP34.

(4) Combusted in thermal oxidizer FPC23 until oxidizers FPC34a and FPC34b are in operation. Emissions from FPC23 are exhausted through Stack FP13.

(5) Combusted in thermal oxidizers FPC34a and FPC34b. Emissions will be exhausted through Stack FP34.

Supporting the wastewater treatment process is a wastewater treatment lime feed system, consisting of:

(1) One (1) lime storage bin with a nominal design capacity of 100,000 pounds, storing lime that is fed to the wastewater treatment system, with the lime feed particulate emissions controlled by one (1) bin vent collector, identified as MPC60, with all emissions exhausted through Stack MP60; and

(2) One (1) totally enclosed lime discharge conveyor system, delivering lime received from the lime storage bin to the maltodextrin filtration system.

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

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

D.4.1 PM10, SO2 and VOC Emissions [326 IAC 2-2]

(a) The IDEM, OAQ has information that indicates that the SO2 emissions from the wastewater treatment processes and germ dryer have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

(b) The IDEM, OAQ has information that indicates that the VOC emissions from the corn steep and alcohol stillage evaporation system have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to that emission unit with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

(c) The IDEM, OAQ has information that indicates that the PM/PM10 emissions from the corn storage process supplemental gluten feed system, germ dryer and discharge conveyor, gluten dryer, corn gluten feed dryer and gluten transport system have

contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

D.4.2 Prevention of Significant Deterioration [326 IAC 2-2] [326 IAC 8-1-6]

(a) Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the PM, PM10 (including filterable and condensable PM10), and NOx emissions from the units of the germ production, corn gluten feed production, gluten production, and anaerobic wastewater treatment processes shall be limited as follows:

Facility (Control)	Stack	PM Limit	PM10 Limit
germ transport system (FPC10)	FP10	0.005 gr/dscf 0.105 lb/hr	0.005 gr/dscf 0.105 lb/hr
germ storage bin (FPC11)	FP11	0.005 gr/dscf 0.005 lb/hr	0.005 gr/dscf 0.005 lb/hr
corn gluten feed transport system (FPC18)	FP18	0.005 gr/dscf 2.15 lb/hr	0.005 gr/dscf 2.15 lb/hr
corn gluten feed storage system (FPC22)	FP22	0.005 gr/dscf 0.005 lb/hr	0.005 gr/dscf 0.005 lb/hr
corn gluten feed final mill system (FPC19)	FP19	0.005 gr/dscf 0.17 lb/hr	0.005 gr/dscf 0.17 lb/hr
gluten transport system (FPC14)	FP14	0.005 gr/dscf 0.085 lb/hr	0.005 gr/dscf 0.085 lb/hr
gluten storage system (FPC15)	FP15	0.005 gr/dscf 0.005 lb/hr	0.005 gr/dscf 0.005 lb/hr
corn storage process supplemental gluten feed system (FPC20)	FP20	0.005 gr/dscf 0.045 lb/hr	0.005 gr/dscf 0.045 lb/hr
lime storage bin (MPC60)	MP60	0.005 gr/dscf 0.03 lb/hr	0.005 gr/dscf 0.03 lb/hr

(b) Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the PM, PM10 (including filterable and condensable PM10), and NOx emissions shall be limited as follows:

Facility (Control)	Stack	PM Limit	PM10 Limit	NOx limit
germ dryer and discharge conveyor (FPC12)	FP12	0.01 gr/dscf 1.37 lb/hr	-	0.06 lb/MMBtu
rotary germ cooling system (FPC09)	FP12	0.03 gr/dscf 0.77 lb/hr	0.03 gr/dscf 0.77 lb/hr	-

Facility (Control)	Stack	PM Limit	PM10 Limit	NOx limit
corn gluten feed dryer and gluten dryer (FPC17, FPC23, FPC13)	FP13	0.01 gr/dscf 3.65 lb/hr (total)	0.05 gr/dscf 1.82 lb/hr (total)	0.06 lb/MMBtu (gluten dryer) 0.047 lb/MMBtu (corn gluten feed dryer)

(c) Pursuant to 326 IAC 2-2-3 (PSD - BACT) and 326 IAC 8-1-6, no later than August 10, 2007, the Permittee shall comply with the following requirements:

(1) Regenerative thermal oxidizers, identified as FPC34a and FPC34b, shall control VOC emissions from corn gluten feed, gluten and germ dryers and achieve a minimum average overall (including capture and destruction) efficiency of ninety-eight percent (98%).

(2) The combined VOC emissions from the corn gluten feed dryer, gluten dryer and germ dryer shall not exceed 2.11 pounds per hour.

Compliance with these provisions satisfies the requirements of 326 IAC 2-2-3 and 326 IAC 8-1-6.

(d) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the SO2 emissions shall be limited as follows:

Facility (Control)	Stack	SO2 Limit (lb/hr)
Germ Dryer (FPC12)	FP12	0.28
Gluten Dryer (FPC13)	FP13	6.67
Thermal Oxidizer FPC23	FP13	2.83

Compliance with these limits will render the requirements of 326 IAC 2-2 not applicable.

(e) In order to render the requirements of 326 IAC 2-2 not applicable to FPC34a and FPC34b:

(1) The total amount of biogas combusted by FPC34a and FPC34b shall not exceed 126 million cubic feet (MMCF) per twelve (12) consecutive month period with compliance determined at the end of each month.

(2) For every one (1) MMCF of natural gas greater than 90 MMCF combusted by FPC34a and FPC34b, the respective biogas combustion limit shall be reduced by 1.81 MMCF.

(3) During biogas combustion, the SO2 emissions and NOx emissions from FPC34a and FPC34b shall not exceed 600 and 276 pounds per MMCF, respectively.

(4) During natural gas combustion, the SO2 emissions and NOx emissions from FPC34a and FPC34b shall not exceed 0.6 and 500 pounds per MMCF, respectively.

Compliance with these limits is equivalent to less than 40 tons per year of SO2 and NOx, each.

D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.4.4 PM, PM10, SO2, VOC and NOx Control

(a) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with Condition D.4.2:

(1) Cyclone FPC09 and wet scrubber FPC12, used to control PM/PM10 and SO2 emissions, shall be in operation at all times the germ drying and cooling systems are in operation.

(2) Condenser FPC17 used to control PM/PM10 emissions, shall be in operation at all times the CGF drying system is in operation.

(3) Until thermal oxidizers FPC34a and FPC34b are in operation, thermal oxidizer FPC23, used to control VOC emissions from the CGF drying system, shall be in operation at all times the CGF drying system is in operation.

(4) Wet scrubber FPC13, used to control PM and SO2 emissions, shall be in operation at all times the CGF drying system, thermal oxidizer FPC23, or gluten drying system is in operation.

(5) A water quench system, used to control NOx emissions, shall be in operation at all times the germ drying system or gluten drying system is in operation.

(6) A flue gas recirculation system, used to control NOx emissions, shall be in operation at all times the corn gluten feed drying system is in operation.

(7) The germ transport system, germ storage bin, corn storage process supplemental gluten feed system, corn gluten feed transport system, corn gluten feed storage bin, corn gluten feed final mill, gluten transport system, and gluten storage bin PM/PM10 emissions shall be controlled by baghouse FPC10, bin vent FPC11, baghouse FPC20, baghouse FPC18, bin vent FPC22, baghouse FPC19, baghouse FPC14, and bin vent FPC15 at all times the respective facilities are in operation.

(8) The Permittee shall operate the biogas flare at all times exhaust from the wastewater treatment plant is exhausted through Stack UP54. The biogas flare shall be operated as recommended by the manufacturer.

(9) The bin vent collector, used to control PM/PM10 emissions, shall be in operation at all times material is transferred to the lime storage bin.

(b) The condenser/wet scrubber APC40, used to control VOC emissions, shall be in operation at all times the corn steep and alcohol stillage evaporation system is in operation.

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

(d) No later than August 10, 2007, thermal oxidizers FPC34a and FPC34b shall be in operation and control VOC emissions from the corn gluten feed, gluten and germ dryers at all times any one or more of those dryers is in operation.

(e) A gas pressure sensing device must be installed, calibrated, maintained, and operated in conjunction with biogas flare UPC54 to ensure the continuous presence of a flame when biogas is sent to the flare.

D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) No later than 180 days after startup of the FPC34a and FPC34b, in order to demonstrate compliance with the limits of Condition D.4.2, the Permittee shall perform PM/PM10, VOC, SO2, and NOx testing for thermal oxidizers FPC34a and FPC34b utilizing methods approved by the Commissioner. Each thermal oxidizer shall be tested individually while the corn gluten feed, gluten and germ dryers are operating at maximum capacity. PM10 includes filterable and condensable PM10. These tests shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.

(b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.4.2, the Permittee shall perform VOC testing for thermal oxidizer FPC23 utilizing methods approved by the Commissioner. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test

(c) Within 180 days after issuance of this Part 70 permit, the Permittee shall perform PM/PM10 testing for baghouses FPC14 and FPC20 utilizing methods approved by the Commissioner. PM10 includes filterable and condensable PM10. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.

(d) Within 180 days after issuance of this Part 70 permit, the Permittee shall perform VOC testing for scrubber APC40 utilizing methods approved by the Commissioner. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.

Testing shall be conducted in accordance with Section C - Performance Testing.

D.4.6 Thermal Oxidizer Temperature Monitoring

(a) Until thermal oxidizers FPC34a and FPC34b are in operation and FPC23 is shut down, the Permittee shall comply with the following monitoring requirements for thermal oxidizer FPC23:

(1) A continuous monitoring system shall be calibrated, maintained, and operated on thermal oxidizer FPC23 for measuring operating temperature of the thermal oxidizer. For the purposes of this condition, continuous monitoring shall mean no less often than once per minute. The output of this system shall be recorded as a 3-hour average.

(2) From the date of issuance of this permit until the results from the approved stack tests required by Condition D.4.2 are available, the Permittee shall operate thermal oxidizer FPC23 at or above the minimum 3-hour average temperature of 1400°F.

(b) The Permittee shall comply with the following monitoring requirements for thermal oxidizers FPC34a and FPC34b:

(1) A continuous monitoring system shall be calibrated, maintained, and operated on thermal oxidizers FPC34a and FPC34b for measuring operating temperature of the thermal oxidizer. For the purposes of this condition, continuous monitoring shall mean no less often than once per minute. The output of this system shall be recorded as a 3-hour average.

(2) From the date of initial operation until the results from the approved stack tests, required by Condition D.4.2, are available, the Permittee shall operate thermal oxidizers FPC34a and FPC34b at or above the minimum 3-hour average temperature recommended by the manufacturer.

(c) The Permittee shall determine the minimum 3-hour average temperature that demonstrates compliance with the limits in Condition D.4.2, as approved by IDEM.

(d) Once the results from the approved stack tests are available, the Permittee shall operate the thermal oxidizers at or above the minimum 3-hour average temperature determined from the most recent compliant stack test following approval of that temperature.

D.4.7 Condenser/Scrubber Monitoring

The Permittee shall comply with the following monitoring requirements for condenser/scrubber APC40 and condenser FPC17:

(a) For the condenser of APC40 and condenser FPC17:

(1) A continuous monitoring system shall be calibrated, maintained, and operated on the condenser of APC40 for measuring outlet exhaust temperature. For the purposes of this condition, continuous monitoring shall mean no less often than once per minute. The output of this system shall be recorded as an 3-hour average.

(2) A continuous monitoring system shall be calibrated, maintained, and operated on condenser of FPC17 for measuring outlet exhaust temperature. For the purposes of this condition, continuous monitoring shall mean no less often than once per minute. The output of this system shall be recorded as an 3-hour average.

(3) The Permittee shall determine the maximum 3-hour average temperature that demonstrates compliance with the limits in Condition D.4.2, as approved by IDEM.

(4) Once the results from the approved stack tests are available, the Permittee shall then operate the condenser at or below the maximum 3-hour average temperature determined from the most recent compliant stack test following approval of that temperature.

(b) For the scrubber of APC40:

(1) The Permittee shall monitor the supply water pressure at least once per day when the wet scrubber is in operation.

(2) When for any one reading, the supply water pressure is outside the normal range of 15.0 to 20.0 psig, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.4.8 Duct Pressure – Fan Amperage Parametric Monitoring

The Permittee shall comply with the following monitoring requirements for thermal oxidizers FPC23 (prior to installation of FPC34a and FPC34b), FPC34a, and FPC34b:

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in Condition D.4.2, as approved by IDEM.

(b) The duct pressure or fan amperage shall be observed at least once per day when the control device is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

(c) If the duct pressure or fan pressure is outside the respective established range, the Permittee shall take response steps in accordance with Section C - Response to Excursions or Exceedances. A reading that is outside the normal range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(d) Following the operation of FPC34a and FPC34b, the monitoring requirements of this condition are not required for FPC23.

D.4.9 Scrubber Monitoring

(a) The Permittee shall monitor the pH of the scrubbing liquid, exhaust air stream pressure drop, and pump discharge pressure of scrubber FPC12 at least once per day when the wet scrubber is in operation.

(1) When for any one reading, the pH of the scrubbing liquid is less than 5.0, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pH reading that is greater than 5.0 is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(2) When for any one reading, the exhaust air stream pressure drop is outside the normal range of 4.0 and 12.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(3) When for any one reading, the pump discharge pressure indicates that the scrubbant flow rate is less than 60 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) The Permittee shall monitor the pH of the scrubbing liquid, exhaust air stream pressure drop, and pump discharge pressure of scrubber FPC13 at least once per day when the wet scrubber is in operation.

(1) When for any one reading, the pH of the scrubbing liquid is less than 5.0, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pH reading that is greater than 5.0 is not a

deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(2) When for any one reading, the exhaust air stream pressure drop is outside the normal range of 7.0 and 13.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(3) When for any one reading, the pump discharge pressure indicates that the scrubbant flow rate is less than 100 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

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

D.4.10 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the baghouses (FPC10, FPC14, FPC18 and FPC19) used in conjunction with the corn, germ, and gluten production processes at least once per day when the respective facilities are in operation.

(b) When for any one reading, the pressure drop across baghouses FPC10, FPC14, FPC18 or FPC19 is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.4.11 Visible Emissions Notations

(a) Visible emission notations of the germ transport system, gluten transport system, corn gluten feed transport system, corn gluten feed final mill system, corn storage process supplemental gluten feed system, germ storage bin, corn gluten feed storage bin, and gluten storage bin stack exhaust 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 in accordance with Section C – Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

D.4.12 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 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).

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

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

D.4.13 Record Keeping Requirements

(a) To document compliance with Condition D.4.2(e), the Permittee shall maintain records of the amount of biogas and natural gas combusted by FPC34a and FPC34b.

(b) To document compliance with Condition D.4.5, the Permittee shall maintain records of the results from testing required by that condition.

(c) To document compliance with Conditions D.4.6 through D.4.10, the Permittee shall maintain records of the operating parameters required by those conditions. The Permittee shall include in its daily record when a reading is not taken and the reason for the lack of a reading (e.g. the process did not operate that day).

(d) To document compliance with Condition D.4.11, the Permittee shall maintain records of the visible emission notations required by that condition. 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).

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

D.4.14 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.2(e) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.5 FACILITY OPERATION CONDITIONS

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

(a)(9) One (1) corn gluten feed pellet production process, installed in March 2000, consisting of:

(A) One (1) pellet milling system, consisting of:

(i) One (1) pellet mill, producing corn gluten feed pellets from corn gluten feed received from the corn gluten feed final mill system discharge conveyor system at a nominal design rate of 39,450 pounds per hour, and

(ii) One (1) totally enclosed discharge conveyor system, conveying corn gluten feed pellets received from the pellet mill to the pellet cooler at a nominal design rate of 39,450 pounds per hour;

(B) One (1) pellet cooling system, consisting of:

(i) One (1) pellet cooler, cooling corn gluten pellets received from the pellet milling system discharge conveyor system at a nominal design rate of 39,450 pounds per hour, discharging to cyclone FPC24, with all emissions exhausted through Stack FP18.

(ii) One (1) totally enclosed discharge conveyor system, conveying pellets received from the pellet cooler to the pellet storage bin at a nominal design rate of 39,450 pounds per hour.

(C) One (1) pellet storage bin with a nominal design storage capacity of 240 tons, storing pellets received from the pellet cooling system discharge conveyor system, with particulate emissions controlled by one (1) bin vent collector, identified as FPC25, with all emissions exhausted through Stack FP25.

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

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

D.5.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the PM and PM10 emissions (including filterable and condensible PM10) from the corn gluten feed pellet production process shall be limited as follows:

Facility (Control)	Stack	PM Limit	PM10 Limit
pellet cooler (FPC24)	FP18	0.06 gr/dscf 18.00 lb/hr	0.03 gr/dscf 9.00 lb/hr
pellet storage bin (FPC25)	FP25	0.005 gr/dscf 0.13 lb/hr	0.005 gr/dscf 0.13 lb/hr

Compliance with these limits satisfies the requirements of 326 IAC 2-2.

D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.5.3 Particulate Control

(a) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with Condition D.5.1, cyclone FPC24, used to control particulate emissions, shall be in operation at all times the pellet cooler is in operation.

(b) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with Condition D.5.1, bin vent collector FPC25, used to control particulate emissions, shall be in operation at all times the pellet storage bin is in operation.

D.5.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.5.1, the Permittee shall perform PM and PM10 testing on the stack exhaust from cyclone FPC24 when the pellet cooler is in operation. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test. PM10 includes filterable and condensable PM10. Testing shall be conducted utilizing methods approved by the Commissioner and in accordance with Section C - Performance Testing.

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

D.5.5 Visible Emissions Notations

(a) Visible emission notations of the stack exhaust from the pellet cooler and pellet storage bin (stacks FP18 and FP25) 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 in accordance with Section C – Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

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

D.5.6 Record Keeping Requirements

(a) To document compliance with Condition D.5.5, the Permittee shall maintain records of the visible emission notations required by that condition. 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) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.6 FACILITY OPERATION CONDITIONS

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

(a)(10) One (1) germ, gluten, gluten feed, and gluten feed pellet loadout process, consisting of:

(A) One (1) loadout transfer conveyor system, installed in 2000, conveying product received from storage bins to the loadout system at a nominal design rate of 180,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC28, with all emissions exhausted through Stack FP28.

(B) One (1) germ, gluten, gluten feed and gluten feed pellet loadout system, installed in 1997, loading germ, gluten, gluten feed and gluten feed pellet received from the transfer conveyor system into trucks and/or railcars at a nominal design rate of 180,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC26, with all emissions exhausted through Stack FP26.

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

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

D.6.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the PM and PM10 emissions (including filterable and condensible PM10) from the germ, gluten, gluten feed, and gluten feed pellet loadout system shall be limited as follows:

Facility (Control)	Stack	PM/PM10 Limit
Germ, gluten, gluten feed, and gluten feed pellet loadout system (FPC26)	FP26	0.005 gr/dscf 0.17 lb/hr

Compliance with these limits satisfies the requirements of 326 IAC 2-2.

D.6.2 PM Emissions [326 IAC 2-2]

The IDEM, OAQ has information that indicates that the PM/PM10 emissions from the loadout system (exhausting to stack FP26) has contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to that emission unit with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

D.6.3 PM Emissions [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emissions from the transfer conveyor system (exhausting to FP28) shall be limited to 50.2 lb/hr when operating at a process weight rate of up to 180,000 lb/hr.

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

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

D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.6.5 Particulate Control

(a) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with Condition D.6.1, baghouse FPC26, used to control particulate emissions, shall be in operation at all times the loadout system is in operation.

(b) In order to comply with Condition D.6.2, baghouse FPC28, used to control particulate emissions, shall be in operation at all times the loadout transfer conveyor system is in operation.

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

D.6.6 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 180 days after issuance of this Part 70 permit, the Permittee shall perform PM/PM10 testing for baghouse FPC26 utilizing methods approved by the Commissioner. PM10 includes filterable and condensable PM10. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.

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

D.6.7 Visible Emissions Notations

(a) Visible emission notations of the stack exhaust from the loadout system (stack FP26) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of the stack exhaust from the loadout transfer conveyor system (stack FP28) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(c) 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.

(d) 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.

(e) 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.

(f) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

D.6.8 Parametric Monitoring

(a) The Permittee shall record the pressure drop across baghouse FPC26, used in conjunction with the loadout system at least once per day when the respective system is in operation.

(b) The Permittee shall record the pressure drop across baghouse FPC28, used in conjunction with the loadout transfer conveyor system, at least once per day when the respective system is in operation.

(c) When for any one reading, the pressure drop across baghouse FPC26 is outside the normal range of 0.1 to 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(d) When for any one reading, the pressure drop across baghouse FPC28 is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.6.9 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 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).

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

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

D.6.10 Record Keeping Requirements

(a) To document compliance with Condition D.6.7, the Permittee shall maintain records of the visible emission notations required by that condition. 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 compliance with Condition D.6.8, the Permittee shall maintain records of the pressure drop readings required by that condition. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

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

SECTION D.7 FACILITY OPERATION CONDITIONS

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

(a)(11) One (1) alcohol production process, installed in March 2000, consisting of:

(A) One (1) totally enclosed starch cooker and precooker tank, the cooker heats liquified starch received from the precooker tank at a nominal design rate of 260,000 pounds per hour, and converting the starch to fermentable sugars at a nominal design rate of 260,000 pounds per hour.

(B) One (1) flash cooler vent condenser system, identified as APC31, cooling fermentable sugars received from the starch cooker, steep water from the steep system, and stillage from the distillation still bases at a combined nominal design rate of 373,000 pounds per hour, yielding a maximum of 373,000 pounds of fermentable sugars per hour, with the fermentable sugars discharged to one (1) secondary liquefaction tank, with all emissions exhausted through Stack AP31.

(C) One (1) alcohol fermentation system, consisting of:

(i) Two (2) pre-fermenters, fermenting sugars received from the flash cooling chamber at a nominal design rate of 210,000 pounds per hour, yielding a maximum of 210,000 pounds of fermenter feed per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC28, with all emissions exhausted through Stack AP28.

(ii) One (1) fermentation system, fermenting sugars received from the flash cooling chamber at a nominal design rate of 163,000 pounds per hour, yielding a maximum of 123,000 pounds of distillation feed per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC29, with all emissions exhausted through Stack AP29.

(D) One (1) alcohol distillation system, consisting of:

(i) One (1) distillation system, processing distillation feed received from the alcohol fermentation system at a nominal design rate of 50,608 gallons per hour, yielding a maximum of 7,082 gallons of crude alcohol per hour, 30 pounds of distillation heads per hour, and 286,400 pounds of excess corn gluten feed (stillage) per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC32, with all emissions exhausted through Stack AP32.

(ii) One (1) totally enclosed supplemental gluten feed (stillage) discharge conveyor system, conveying supplemental gluten feed received from the alcohol distillation system to the alcohol production process supplemental gluten feed system evaporator at a nominal design rate of 286,400 pounds per hour;

(E) One (1) alcohol storage system, identified as AP95/AP96, consisting of eighteen (18) alcohol storage tanks, with a nominal combined design capacity of 3,000,000 gallons of finished alcohol product, storing beverage/industrial and anhydrous grade alcohol received from the alcohol distillation system, with VOC emissions controlled by two (2) wet scrubbers, identified as APC95 and APC96, with all emissions exhausted through Stacks AP95 and AP96. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(F) One (1) 51,700 gallon above ground vertical distillation heads storage tank, identified as Tank AP84, storing distillation heads received from the alcohol distillation system,

SECTION D.7 FACILITY OPERATION CONDITIONS

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

with VOC emissions controlled by an internal floating roof, with all emissions exhausted through Stack AP84;

(G) One (1) 41,800 gallon above ground vertical burn tank, identified as Tank AP94, storing miscellaneous non-beverage grade alcohol received from the alcohol distillation system, with VOC emissions controlled by an internal floating roof, with all emissions exhausted through Stack AP94. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(H) One (1) denaturant storage tank system, consisting of:

(i) One (1) 41,800 gallon above ground vertical storage tank, identified as Tank AP85, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP85. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(ii) One (1) 41,800 gallon above ground vertical storage tank, identified as Tank AP86, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP86. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(iii) One (1) 21,200 gallon above ground vertical storage tank, identified as Tank AP87, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP87. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(iv) One (1) 2,100 gallon above ground vertical storage tank, identified as Tank AP88, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP88,

(v) One (1) 5,300 gallon above ground vertical storage tank, identified as Tank AP89, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP89,

(vi) One (1) 5,300 gallon above ground vertical storage tank, identified as Tank AP90, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP90, and

(vii) One (1) 1,100 gallon above ground vertical storage tank, identified as Tank AP91, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP91; and

(I) One (1) alcohol and distillation heads loadout area, consisting of:

(i) One (1) alcohol loadout system, loading beverage/industrial or anhydrous alcohol received from the alcohol storage system into trucks and/or railcars at a nominal design rate of 7,082 gallons per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC35;

(ii) One (1) distillation heads loadout system, loading distillation heads received from Tanks AP84 and AP94 into trucks and/or railcars at a combined nominal design rate of 7,082 gallons per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC35; and

SECTION D.7 FACILITY OPERATION CONDITIONS

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

(iii) One (1) denaturant delivery system, delivering denaturant received from the denaturant storage tank system to the alcohol loadout system when industrial grade alcohol is being produced, with all non-fugitive VOC emissions controlled by one (1) wet scrubber, identified as APC35, with all non-fugitive emissions exhausted through Stack AP35.

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

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

D.7.1 VOC Emissions [326 IAC 2-2]

The IDEM, OAQ has information that indicates that the VOC emissions from the alcohol fermentation system have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

D.7.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997:

(1) The VOC emissions from the equipment of the alcohol production process shall be limited as follows:

Facility (Control)	Stack	VOC Limit
Alcohol Distillation System (APC32)	AP32	1.14 lb/hr
Alcohol Storage System (APC95 and APC96)	AP95 and AP96	0.8 lb/hr combined total
Alcohol and Distillation Heads Loadout Area (APC35)	AP35	2.3 lb/hr
Storage Tank	AP85	0.06 lb/hr
Storage Tank	AP86	0.03 lb/hr
Storage Tank	AP87	0.02 lb/hr
Storage Tank	AP88	0.0003 lb/hr
Storage Tank	AP89	0.005 lb/hr
Storage Tank	AP90	0.005 lb/hr
Storage Tank	AP91	0.004 lb/hr
Alcohol Production Process Fugitive Emissions	None	10.40 lb/hr

(2) To ensure that the fugitive VOC emissions from the alcohol production process are minimized, the Permittee shall develop, implement, and revise as necessary, a visual inspection and maintenance program for the equipment of the alcohol production process.

(b) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the SO2 emissions shall be limited as follows:

Facility (Control)	Stack	SO2 Limit (lb/hr)
Flash Cooler Vent Condenser System	AP31	0.04

Compliance with this limit will render the requirements of 326 IAC 2-2 not applicable.

D.7.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.7.4 VOC Control

Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with Condition D.7.2, scrubbers APC28, APC29, APC32, APC95, APC96 and APC35, used to control VOC emissions, shall be in operation at all times the associated facilities of the alcohol production process are in operation.

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

(a) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.7.2(a), the Permittee shall perform VOC testing for scrubbers APC28, APC29, APC32, APC95, APC96 and APC35 utilizing methods approved by the Commissioner. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.

(b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.7.2(b), the Permittee shall perform SO2 testing for the flash cooler vent condenser system utilizing methods approved by the Commissioner. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.

D.7.6 Scrubber Monitoring

(a) The Permittee shall monitor the exhaust air stream pressure drop and scrubbant flow rate of scrubbers APC28 and APC29 at least once per day when the wet scrubber is in operation.

(1) When for any one reading the exhaust air stream pressure drop of APC28 is outside the normal range of 1.0 and 10.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(2) When for any one reading the exhaust air stream pressure drop of APC29 is outside the normal range of 5.0 and 15.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to

take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(3) When for any one reading the scrubbant flow rate of APC29 is less than 20.0 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(4) When for any one reading the scrubbant flow rate of APC28 is less than 5.0 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) The Permittee shall monitor the exhaust air stream pressure drop and scrubbant flow rate of scrubber APC32 at least once per day when the wet scrubber is in operation.

(1) When for any one reading, the exhaust air stream pressure drop is outside the normal range of 1.0 and 6.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(2) When for any one reading, the scrubbant flow rate is less than 4.0 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(c) The Permittee shall monitor the scrubbant flow rate of scrubber APC95 at least once per day when the wet scrubber is in operation. When for any one reading, the scrubbant flow rate is less than 5.0 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(d) The Permittee shall monitor the scrubbant flow rate of scrubber APC96 at least once per day when the wet scrubber is in operation. When for any one reading, the scrubbant flow rate is less than 2.0 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(e) The Permittee shall monitor the exhaust air stream pressure drop and scrubbant flow rate of scrubber APC35 at least once per day when the wet scrubber is in operation.

(1) When for any one reading, the exhaust air stream pressure drop is outside the normal range of 1.0 and 6.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(2) When for any one reading, the scrubbant flow rate is less than 2.0 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

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

D.7.7 Record Keeping Requirements

(a) To document compliance with Condition D.7.5, the Permittee shall maintain records of the results from testing required by that condition.

(b) To document compliance with Conditions D.7.6, the Permittee shall maintain records of the operating parameters required by those conditions. The Permittee shall include in its daily record when a reading is not taken and the reason for the lack of a reading (e.g. the process did not operate that day).

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

New Source Performance Standards (NSPS) Requirements – 40 CFR Part 60, Subpart Kb [326 IAC 2-7-5(1)]

D.7.8 General Provisions Relating to New Source Performance Standards under 40 CFR Part 60 [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR Part 60, Subpart Kb, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, for tanks AP85, AP86, AP87, AP94, AP95 and AP96 except as otherwise specified in 40 CFR Part 60, Subpart Kb.

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

D.7.9 New Source Performance Standards for Volatile Organic Storage Vessels: Requirements [40 CFR Part 60, Subpart Kb]

Pursuant to 40 CFR 60.110b, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart Kb for tanks AP85, AP86, AP87, AP94, AP95 and AP96 as specified as follows:

Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

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

§ 60.110b Applicability and designation of affected facility.

(a) Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m^3) that is used to store

volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

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

(c) [Reserved]

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

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

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

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

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

(5) Vessels located at bulk gasoline plants.

(6) Storage vessels located at gasoline service stations.

(7) Vessels used to store beverage alcohol.

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

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

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

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

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

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

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

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

§ 60.111b Definitions.

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

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

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

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

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

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

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

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

(2) As obtained from standard reference texts; or

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

(4) Any other method approved by the Administrator.

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

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

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

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

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

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

(2) Subsurface caverns or porous rock reservoirs; or

(3) Process tanks.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

§ 60.113b Testing and procedures.

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

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

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

(2) For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof

is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

§ 60.114b Alternative means of emission limitation.

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

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

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

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

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

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

§ 60.115b Reporting and recordkeeping requirements.

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

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

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

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

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

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

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

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

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

(i) The date of measurement.

(ii) The raw data obtained in the measurement.

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

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

(i) The date of measurement.

(ii) The raw data obtained in the measurement.

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

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

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

(1) A copy of the operating plan.

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

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

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

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

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

§ 60.116b Monitoring of operations.

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

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

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

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

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

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

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

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

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

(3) For other liquids, the vapor pressure:

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

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

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

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

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

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

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

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

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

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

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

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

SECTION D.8 FACILITY OPERATION CONDITIONS

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

(a)(12) One (1) starch production process, installed in March 2000, consisting of:

(A) One (1) starch reactor system, consisting of:

(i) Eight (8) starch reactors, processing starch received from the starch and gluten separation system starch discharge conveyor system at a nominal design rate of 60,000 pounds per hour, yielding a maximum of 60,000 pounds of processed starch per hour, with all emissions exhausted through Stack SP46,

(ii) One (1) starch reactor liquid brine feed system, consisting of one (1) 50 ton storage tank, storing brine that is converted from dry feed to liquid and fed to the starch reactors, with the dry brine feed particulate emissions controlled by one (1) bin vent collector, identified as SPC65, with all emissions exhausted through Stack SP65.

(iii) One (1) starch reactor liquid ethylene oxide feed system, consisting of one (1) 40,000 gallon storage tank, storing liquid ethylene oxide that is fed to the starch reactors, and

(iv) One (1) starch reactor dry soda ash feed system, consisting of:

(a) One (1) soda ash storage bin with a nominal design capacity of 75 tons, storing soda ash that is fed to the starch reactors, with the dry soda ash feed particulate emissions controlled by one (1) bin vent collector, identified as SPC64, with all emissions exhausted through Stack SP64.

(b) One (1) totally enclosed soda ash discharge conveyor system, delivering soda ash received from the soda ash storage bin to the starch reactors, and

(c) One (1) totally enclosed starch discharge conveyor system, conveying processed starch received from the starch reactors to the starch filtration system at a nominal design rate of 60,000 pounds per hour;

(B) One (1) starch filtration system, consisting of:

(i) Two (2) starch filters, refining processed starch received from the starch reactor system starch discharge conveyor system at a nominal design rate of 60,000 pounds per hour, and

(ii) One (1) totally enclosed discharge conveyor system, conveying refined starch received from the starch filter to the starch dryer at a nominal design rate of 56,000 pounds per hour;

(C) One (1) starch drying system consisting of:

(i) One (1) 30 MMBtu/hr natural gas fired starch dryer, drying refined starch received from the starch filtration system discharge conveyor system at a nominal design rate of 56,000 pounds per hour, with the process and combustion PM emissions controlled by one (1) wet scrubber, identified as SPC49, with all emissions exhausted through Stack SP49.

SECTION D.8 FACILITY OPERATION CONDITIONS

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

(ii) One (1) totally enclosed discharge conveyor system, conveying dried starch received from the starch dryer to the starch storage bin at a nominal design rate of 30,000 pounds per hour;

(D) One (1) starch storage system, consisting of four (4) starch storage bins, with a nominal design capacity of 1,000,000 pounds, storing dried starch received from the starch drying system discharge conveyor system, with particulate emissions controlled by four (4) bin vent collectors, identified as SPC50, with all emissions exhausted through four stacks collectively identified as SP50;

(E) One (1) totally enclosed starch loadout system, conveying starch received from the starch storage bin into trucks and/or railcars at a nominal design rate of 80,000 pounds per hour, with non-fugitive particulate emissions controlled by one (1) baghouse, identified as SPC44a, and fugitive particulate emissions controlled by one (1) dust collector identified as SPC44b, with all non-fugitive emissions exhausted through Stack SP44a, and all collected fugitive particulate emissions exhausted through Stack SP44b.

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

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

D.8.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997:

(1) The PM, PM10 (including filterable and condensable PM10), NOx, and VOC emissions from the units of the starch production process shall be limited as follows:

Facility (Control)	Stack	PM Limit	PM10 Limit	NOx Limit	VOC Limit
starch reactor system	SP46	-	-	-	1 lb per hour per 10 hour period
starch reactor brine feed system (SPC65)	SP65	0.02 gr/dscf 0.34 lb/hr	0.01 gr/dscf 0.17 lb/hr	-	-
soda ash storage bin (SPC64)	SP64	0.02 gr/dscf 0.34 lb/hr	0.01 gr/dscf 0.17 lb/hr	-	
starch dryer (SPC49)	SP49	0.01 gr/dscf 10.80 lb/hr	-	0.075 lb/MMBtu	-
starch storage bin (SPC50)	SP50	0.005 gr/dscf 0.09 lb/hr	0.005 gr/dscf 0.09 lb/hr	-	-
loadout system non-fugitive control (SPC44a)	SP44a	0.005 gr/dscf 0.22 lb/hr	0.005 gr/dscf 0.22 lb/hr	-	-
loadout system fugitive control (SPC44b)	SP44b	0.005 gr/dscf 0.26 lb/hr	0.005 gr/dscf 0.26 lb/hr	-	-

(2) To ensure that the fugitive VOC emissions from the starch reactor system are minimized, the Permittee shall develop, implement, and revise as necessary, a visual inspection and maintenance program.

Compliance with these requirements satisfies the requirements of 326 IAC 2-2.

(b) Pursuant to 326 IAC 2-2-3 (PSD - BACT), the VOC emissions from the starch dryer shall not exceed 1.0 pound per hour.

(c) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the SO2 emissions shall be limited as follows:

Facility (Control)	Stack	SO2 Limit (lb/hr)
Starch Dryer (SPC49)	SP49	0.02

Compliance with this limit will render the requirements of 326 IAC 2-2 not applicable.

D.8.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.8.3 Particulate Control

(a) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with Condition D.8.1, the PM/PM10 emissions from the starch reactor liquid brine feed system, soda ash storage bin, starch dryer, starch storage bin, starch loadout system nonfugitive control system, and starch loadout system fugitive control system shall be controlled by bin vent collector SPC65, bin vent collector SPC64, scrubber SPC49, bin vent collector SPC50, baghouse SPC44a, and dust collector SPC44b, at all times when the associated facilities are in operation.

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

D.8.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.8.1, the Permittee shall perform PM/PM10 and NOx testing for the starch dryer scrubber (SPC49) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.

(b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.8.1, the Permittee shall perform VOC and SO2 testing for the starch dryer scrubber (SPC49) utilizing methods approved by the Commissioner.

Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.8.5 Scrubber Monitoring

(a) The Permittee shall monitor the exhaust air stream pressure drop and scrubbant flow rate of scrubber SPC49 at least once per day when the respective scrubber is in operation.

(b) When for any one reading, the exhaust air stream pressure drop is outside the normal range of 4.0 and 12.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(c) When for any one reading, the scrubbant flow rate is less than 400 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.8.6 Baghouse/Collector Monitoring

(a) The Permittee shall record the pressure drop across the baghouses and dust collectors used in conjunction with the starch loadout system nonfugitive control system and starch loadout system fugitive control system at least once per day when the respective facilities are in operation.

(b) When for any one reading, the pressure drop is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.8.7 Visible Emissions Notations

(a) Visible emission notations of the stack exhaust from the starch production processes (stacks SP65, SP64, SP50, SP44a and SP44b) 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 in accordance with Section C – Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

D.8.8 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 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).

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

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

D.8.9 Record Keeping Requirements

(a) To document compliance with Condition D.8.2(a)(2), the Permittee shall maintain a copy of the most recent version of the visual inspection and maintenance program and any supporting documentation.

(b) To document compliance with Conditions D.8.5 and D.8.6, the Permittee shall maintain records of the readings required by those conditions. The Permittee shall include in its daily record when a reading is not taken and the reason for the lack of a reading (e.g. the process did not operate that day).

(c) To document compliance with Condition D.8.7, the Permittee shall maintain records of the visible emission notations required by that condition. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

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

SECTION D.9 FACILITY OPERATION CONDITIONS

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

(a)(13) One (1) maltodextrin production process, installed in March 2000, consisting of:

(A) One (1) maltodextrin cooking system, consisting of:

(i) One (1) maltodextrin cooker, processing starch received from the starch and gluten separation system starch discharge conveyor system at a nominal design rate of 55,000 pounds per hour, yielding 55,000 pounds of crude maltodextrin per hour, and

(ii) One totally enclosed discharge conveyor system, conveying crude maltodextrin received from the maltodextrin cooker to the maltodextrin filtration system at a nominal design rate of 55,000 pounds per hour;

(B) One (1) maltodextrin filtration system, consisting of:

(i) One (1) maltodextrin filter, refining crude maltodextrin received from the maltodextrin cooking system discharge conveyor system at a nominal design rate of 42,900 pounds per hour,

(ii) One (1) filtration system dry carbon feed system, consisting of:

(a) One (1) dry carbon storage bin with a nominal design capacity of 100,000 pounds, storing carbon that is fed to the maltodextrin filtration system at a nominal design rate of 50,000 pounds per hour, with the dry carbon feed particulate emissions controlled by one (1) bin vent collector, identified as MPC61, with all emissions exhausted through Stack MP61.

(b) One (1) totally enclosed carbon discharge conveyor system, delivering carbon received from the carbon storage bin to the filtration system,

(iii) One (1) totally enclosed discharge conveyor system, conveying refined maltodextrin from the maltodextrin filter to the maltodextrin dryer at a nominal design rate of 42,900 pounds per hour;

(C) One (1) maltodextrin drying system, consisting of one (1) 72 MMBtu/hr natural gas fired maltodextrin dryer, drying maltodextrin received from the maltodextrin filtration system discharge conveyor system a nominal design rate of 42,900 pounds per hour, with the process and combustion PM emissions controlled by one (1) wet scrubber, identified as MPC39, with all emissions exhausted through Stack MP39.

(D) One (1) totally enclosed maltodextrin transfer conveyor system, conveying dried maltodextrin received from the maltodextrin dryer to the maltodextrin storage system at a nominal design rate of 24,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as MPC42, with all emissions exhausted through Stack MP42.

(E) One (1) maltodextrin storage system, consisting of four (4) maltodextrin storage bins with a combined nominal design capacity of 1,000,000 pounds, storing maltodextrin received from the maltodextrin transfer conveyor system, with particulate emissions controlled by four (4) identical bin vent collectors, identified as MPC44, with all emissions exhausted through four stacks collectively identified as MP44.

SECTION D.9 FACILITY OPERATION CONDITIONS

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

(F) One (1) totally enclosed maltodextrin loadout system, including one (1) maltodextrin screening process and one (1) loadout process, conveying maltodextrin received from the maltodextrin storage bins to the maltodextrin packaging system at a nominal design rate of 90,000 pounds per hour, with particulate emissions controlled by one (1) dust collector, identified as MPC41, with all emissions exhausted through Stack MP41.

(G) One (1) maltodextrin central vacuum system, identified as MPC43, controlling fugitive particulate emissions generated by the maltodextrin production process, with all emissions exhausted through Stack MP43.

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

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

D.9.1 Prevention of Significant Deterioration [326 IAC 2-2]

Pursuant PSD CP 027-7239-00046, issued on June 10, 1997, the maltodextrin production process is subject to a number of 326 IAC 2-2 requirements. However, the maltodextrin production process has not been in operation since 2002. As a result, the Permittee is not allowed to operate the maltodextrin production process until this process is re-evaluated under 326 IAC 2-2 (Prevention of Significant Deterioration).

SECTION D.10 FACILITY OPERATION CONDITIONS

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

(c) Two (2) natural gas or alcohol fired boilers, identified as Boiler 1 and 2, each with a heat input capacity of 244 MMBtu/hr, installed in March 2000, each equipped with one (1) low NOx burner and a flue gas recirculation system to control combustion NOx emissions, with all emissions exhausted through Stack UP51.

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

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

D.10.1 SO_2 Emissions [326 IAC 2-2]

The IDEM, OAQ has information that indicates that the SO2 emissions from Boiler 1 and Boiler 2 have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2.

D.10.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2] [326 IAC 6-2-4]

Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the following requirements apply to Boiler 1 and Boiler 2:

(a) The PM/PM10 emissions from each boiler shall not exceed 2.44 pounds per hour.

(b) The NOx emissions shall not exceed 0.05 lb/MMBtu during periods of normal operation and 0.20 lb/MMBtu during periods of startup, shutdown, and malfunction.

(c) NOx emissions shall be controlled using a low NOx burner/flue gas recirculation system.

(d) The Permittee shall minimize the CO emissions through the use of combustion controls on each boiler. The controls will measure the oxygen content of the flue gas to determine the efficient operating conditions.

D.10.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.10.4 NOx and CO Control

(a) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with Condition D.10.2(b), the flue gas recirculation system, used to control NOx emissions, shall be in operation at all times Boiler 1 or Boiler 2 is in operation.

(b) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with Condition D.10.2(d), the combustion controls, used to minimize CO emissions, shall be in operation at all times Boiler 1 or Boiler 2 is in operation. The controls will measure the oxygen content of the flue gas to determine the efficient operating conditions.

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

D.10.5 Continuous Emissions Monitoring [326 IAC 3-5]

(a) Pursuant to 326 IAC 3-5, continuous emission monitoring systems (CEMS) for Boiler 1 and Boiler 2 shall be installed, calibrated, maintained, and operated for measuring NOx and O_2 which meet all applicable performance specifications of 326 IAC 3-5-2.

(b) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.

(c) Pursuant to 326 IAC 3-5-4, if revisions are made to the continuous monitoring standard operating procedures (SOP), the Permittee shall submit updates to the department biennially.

(d) Relative accuracy tests and routine quarterly audits shall be performed in accordance with the contents of the standard operating procedures (SOP) pursuant to 326 IAC 3-5-5.

(e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 and 40 CFR Part 60.

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

D.10.6 Record Keeping Requirements

(a) To document compliance with Condition D.10.5, the Permittee shall maintain records of the continuous emission monitoring data for NO_x and O_2 in accordance with 326 IAC 3-5.

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

New Source Performance Standards (NSPS) Requirements – 40 CFR Part 60, Subpart Db [326 IAC 2-7-5(1)]

D.10.7 General Provisions Relating to New Source Performance Standards under 40 CFR Part 60 [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR Part 60, Subpart Db, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, for Boiler 1 and Boiler 2 except as otherwise specified in 40 CFR Part 60, Subpart Db.

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

D.10.8 New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units: Requirements [40 CFR Part 60, Subpart Db]

Pursuant to 40 CFR 60.40b, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart Db for Boiler 1 and Boiler 2 as specified as follows:

Subpart Db—Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

§ 60.40b Applicability and delegation of authority.

(a) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).

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

(1) Section 60.44b(f).

(2) Section 60.44b(g).

(3) Section 60.49b(a)(4).

(j) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1986 is not subject to Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators, §60.40).

[52 FR 47842, Dec. 16, 1987, as amended at 63 FR 49454, Sept. 16, 1998; 65 FR 61752, Oct. 17, 2000; 71 FR 9881, Feb. 27, 2006; 71 FR 33400, June 9, 2006]

§ 60.41b Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility in a calendar year.

Byproduct/waste means any liquid or gaseous substance produced at chemical manufacturing plants, petroleum refineries, or pulp and paper mills (except natural gas, distillate oil, or residual oil) and combusted in a steam generating unit for heat recovery or for disposal. Gaseous substances with carbon dioxide levels greater than 50 percent or carbon monoxide levels greater than 10 percent are not byproduct/waste for the purpose of this subpart.

Chemical manufacturing plants means industrial plants which are classified by the Department of Commerce under Standard Industrial Classification (SIC) Code 28.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388–77, 90, 91, 95, or 98a, Standard Specification for Classification of Coals by Rank (IBR—see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any byproduct of coal mining or coal cleaning operations with an ash content greater than 50 percent, by weight, and a heating value less than 13,900 kJ/kg (6,000 Btu/lb) on a dry basis.

Cogeneration, also known as combined heat and power, means a facility that simultaneously produces both electric (or mechanical) and useful thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source, such as a gas turbine, internal combustion engine, kiln, etc., provides exhaust gas to a heat recovery steam generating unit.

Conventional technology means wet flue gas desulfurization (FGD) technology, dry FGD technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396–78, 89, 90, 92, 96, or 98, Standard Specifications for Fuel Oils (incorporated by reference—see §60.17).

Dry flue gas desulfurization technology means a sulfur dioxide control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline slurries or solutions used in dry flue gas desulfurization technology include but are not limited to lime and sodium.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.

Emerging technology means any sulfur dioxide control system that is not defined as a conventional technology under this section, and for which the owner or operator of the facility has applied to the Administrator and received approval to operate as an emerging technology under §60.49b(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State Implementation Plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed combustion technology means combustion of fuel in a bed or series of beds (including but not limited to bubbling bed units and circulating bed units) of limestone aggregate (or other sorbent materials) in which these materials are forced upward by the flow of combustion air and the gaseous products of combustion.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Full capacity means operation of the steam generating unit at 90 percent or more of the maximum steady-state design heat input capacity.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

Heat release rate means the steam generating unit design heat input capacity (in MW or Btu/hour) divided by the furnace volume (in cubic meters or cubic feet); the furnace volume is that volume bounded by the front furnace wall where the burner is located, the furnace side waterwall, and extending to the level just below or in front of the first row of convection pass tubes.

Heat transfer medium means any material that is used to transfer heat from one point to another point.

High heat release rate means a heat release rate greater than 730,000 J/sec-m ^{3} (70,000 Btu/hour-ft ^{3}).

Lignite means a type of coal classified as lignite A or lignite B by the American Society of Testing and Materials in ASTM D388–77, 90, 91, 95, or 98a, Standard Specification for Classification of Coals by Rank (IBR—see §60.17).

Low heat release rate means a heat release rate of 730,000 J/sec-m ^{3} (70,000 Btu/hour-ft ^{3}) or less.

Mass-feed stoker steam generating unit means a steam generating unit where solid fuel is introduced directly into a retort or is fed directly onto a grate where it is combusted.

Maximum heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel on a steady state basis, as determined by the physical design and characteristics of the steam generating unit.

Municipal-type solid waste means refuse, more than 50 percent of which is waste consisting of a mixture of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials, and noncombustible materials such as glass and rock.

Natural gas means (1) a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or (2) liquid petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835–82, 86, 87, 91, or 97, “Standard Specification for Liquid Petroleum Gases” (IBR—see §60.17).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil.

Petroleum refinery means industrial plants as classified by the Department of Commerce under Standard Industrial Classification (SIC) Code 29.

Potential sulfur dioxide emission rate means the theoretical sulfur dioxide emissions (ng/J, lb/million Btu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Pulp and paper mills means industrial plants which are classified by the Department of Commerce under North American Industry Classification System (NAICS) Code 322 or Standard Industrial Classification (SIC) Code 26.

Pulverized coal-fired steam generating unit means a steam generating unit in which pulverized coal is introduced into an air stream that carries the coal to the combustion chamber of the steam generating unit where it is fired in suspension. This includes both conventional pulverized coal-fired and micropulverized coal-fired steam generating units.

Residual oil means crude oil, fuel oil numbers 1 and 2 that have a nitrogen content greater than 0.05 weight percent, and all fuel oil numbers 4, 5 and 6, as defined by the American Society of Testing and Materials in ASTM D396–78, Standard Specifications for Fuel Oils (IBR—see §60.17).

Spreader stoker steam generating unit means a steam generating unit in which solid fuel is introduced to the combustion zone by a mechanism that throws the fuel onto a grate from above. Combustion takes place both in suspension and on the grate.

Steam generating unit means a device that combusts any fuel or byproduct/waste to produce steam or to heat water or any other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Very low sulfur oil for units constructed, reconstructed, or modified on or before February 28, 2005, means an oil that contains no more than 0.5 weight percent sulfur or that, when combusted without sulfur dioxide emission control, has a sulfur dioxide emission rate equal to or less than 215 ng/J (0.5 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28, 2005, *very low sulfur oil* means an oil that contains no more than 0.3 weight percent sulfur or that, when combusted without sulfur dioxide emission control, has a sulfur dioxide emission rate equal to or less than 140 ng/J (0.32 lb/MMBtu) heat input.

Wet flue gas desulfurization technology means a sulfur dioxide control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gas with an alkaline slurry or solution and forming a liquid material. This definition applies to devices where the aqueous liquid material product of this contact is

subsequently converted to other forms. Alkaline reagents used in wet flue gas desulfurization technology include, but are not limited to, lime, limestone, and sodium.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of particulate matter or sulfur dioxide.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including, but not limited to, sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51819, Dec. 18, 1989; 65 FR 61752, Oct. 17, 2000; 66 FR 49834, Oct. 1, 2001; 71 FR 9881, Feb. 27, 2006]

§ 60.44b Standard for nitrogen oxides.

(a) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that is subject to the provisions of this section and that combusts only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO_2) in excess of the following emission limits:

Fuel/Steam generating unit type	Nitrogen oxide emission limits ng/J (lb/million Btu) (expressed as NO2) heat input
(1) Natural gas and distillate oil, except (4):	
(i) Low heat release rate	43 (0.10)
(ii) High heat release rate	86 (0.20)
(2) Residual oil:	
(i) Low heat release rate	130 (0.30)
(ii) High heat release rate	170 (0.40)
(3) Coal:	
(i) Mass-feed stoker	210 (0.50)
(ii) Spreader stoker and fluidized bed combustion	260 (0.60)
(iii) Pulverized coal	300 (0.70)
(iv) Lignite, except (v)	260 (0.60)
(v) Lignite mined in North Dakota, South Dakota, or Montana and combusted in a slag tap furnace	340 (0.80)
(vi) Coal-derived synthetic fuels	210 (0.50)
(4) Duct burner used in a combined cycle system:	
(i) Natural gas and distillate oil	86 (0.20)
(ii) Residual oil	170 (0.40)

(f) Any owner or operator of an affected facility that combusts byproduct/waste with either natural gas or oil may petition the Administrator within 180 days of the initial startup of the affected facility to establish a nitrogen oxides emission limit which shall apply specifically to that affected facility when the byproduct/waste is combusted. The petition shall include sufficient and appropriate data, as determined by the Administrator, such as nitrogen oxides emissions from the affected facility, waste composition (including nitrogen content), and combustion conditions to allow the Administrator to confirm that the affected facility is unable to comply with the emission limits in paragraph (e) of this section and to determine the appropriate emission limit for the affected facility.

(1) Any owner or operator of an affected facility petitioning for a facility-specific nitrogen oxides emission limit under this section shall:

(i) Demonstrate compliance with the emission limits for natural gas and distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) of this section, as appropriate, by conducting a 30-day performance test as provided in §60.46b(e). During the performance test only natural gas, distillate oil, or residual oil shall be combusted in the affected facility; and

(ii) Demonstrate that the affected facility is unable to comply with the emission limits for natural gas and distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) of this section, as appropriate, when gaseous or liquid byproduct/waste is combusted in the affected facility under the same conditions and using the same technological system of emission reduction applied when demonstrating compliance under paragraph (f)(1)(i) of this section.

(2) The nitrogen oxides emission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) of this section, as appropriate, shall be applicable to the affected facility until and unless the petition is approved by the Administrator. If the petition is approved by the Administrator, a facility-specific nitrogen oxides emission limit will be established at the nitrogen oxides emission level achievable when the affected facility is combusting oil or natural gas and byproduct/waste in a manner that the Administrator determines to be consistent with minimizing nitrogen oxides emissions.

(h) For purposes of paragraph (i) of this section, the nitrogen oxide standards under this section apply at all times including periods of startup, shutdown, or malfunction.

(i) Except as provided under paragraph (j) of this section, compliance with the emission limits under this section is determined on a 30-day rolling average basis.

(l) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility which commenced construction or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO_2) in excess of the following limits:

(1) If the affected facility combusts coal, oil, or natural gas, or a mixture of these fuels, or with any other fuels: A limit of 86 ng/J_l (0.20 lb/million Btu) heat input unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas; or

(2) If the affected facility has a low heat release rate and combusts natural gas or distillate oil in excess of 30 percent of the heat input from the combustion of all fuels, a limit determined by use of the following formula:

$E_n = [(0.10 * H_{go}) + (0.20 * H_r)]/(H_{go} + H_r)$

Where:

E_n is the NO_X emission limit, (lb/million Btu),

H_{go} is the heat input from combustion of natural gas or distillate oil, and

H_r is the heat input from combustion of any other fuel.

(3) After February 27, 2006, units may comply with an optional limit of 270 ng/J (2.1 lb/MWh) gross energy output, based on a 30-day rolling average. Units complying with this output-based limit must demonstrate compliance according to the procedures of §60.46a (i)(1), and must monitor emissions according to §60.47a(c)(1), (c)(2), (k), and (l).

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51825, Dec. 18, 1989; 63 FR 49454, Sept. 16, 1998; 66 FR 42610, Aug. 14, 2001; 71 FR 9882, Feb. 27, 2006]

§ 60.46b Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.

(c) Compliance with the nitrogen oxides emission standards under §60.44b shall be determined through performance testing under paragraph (e) or (f), or under paragraphs (g) and (h) of this section, as applicable.

(e) To determine compliance with the emission limits for nitrogen oxides required under §60.44b, the owner or operator of an affected facility shall conduct the performance test as required under §60.8 using the continuous system for monitoring nitrogen oxides under §60.48(b).

(1) For the initial compliance test, nitrogen oxides from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the nitrogen oxides emission standards under §60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(4) Following the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, the owner or operator of an affected facility which has a heat input capacity of 73 MW (250 million Btu/hour) or less and which combusts natural gas, distillate oil, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the nitrogen oxides standards under §60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, nitrogen oxides emissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the nitrogen oxides emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days.

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51820, 51825, Dec. 18, 1989; 55 FR 18876, May 7, 1990; 65 FR 61752, Oct. 17, 2000; 66 FR 18553, Apr. 10, 2001; 71 FR 9883, Feb. 27, 2006]

§ 60.48b Emission monitoring for particulate matter and nitrogen oxides.

(b) Except as provided under paragraphs (g), (h), and (i) of this section, the owner or operator of an affected facility subject to a nitrogen oxides standard under §60.44b shall comply with either paragraphs (b)(1) or (b)(2) of this section.

(1) Install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere; or

(2) If the owner or operator has installed a nitrogen oxides emission rate continuous emission monitoring system (CEMS) to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of this section, except that the owner or operator shall also meet the requirements of §60.49b. Data reported to meet the requirements of §60.49b shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.

(c) The continuous monitoring systems required under paragraph (b) of this section shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(d) The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor required by paragraph (b) of this section and required under §60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.44b. The 1-hour averages shall be calculated using the data points required under §60.13(h)(2).

(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.

(2) For affected facilities combusting coal, oil, or natural gas, the span value for nitrogen oxides is determined as follows:

Fuel	Span values for nitrogen oxides (PPM)
Natural gas	500
Oil	500
Coal	1,000
Mixtures	500(x+y)+1,000z

Where:

x is the fraction of total heat input derived from natural gas,

y is the fraction of total heat input derived from oil, and

z is the fraction of total heat input derived from coal.

(f) When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51825, Dec. 18, 1989; 63 FR 49455, Sept. 16, 1998; 66 FR 18553, Apr. 10, 2001; 71 FR 9884, Feb. 27, 2006]

§ 60.49b Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility,

(2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §§60.42b(d)(1), 60.43b(a)(2), (a)(3)(iii), (c)(2)(ii), (d)(2)(iii), 60.44b(c), (d), (e), (i), (j), (k), 60.45b(d), (g), 60.46b(h), or 60.48b(i),

(3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired, and,

(4) Notification that an emerging technology will be used for controlling emissions of sulfur dioxide. The Administrator will examine the description of the emerging technology and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42b(a) unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the sulfur dioxide, particulate matter, and/or nitrogen oxides emission limits under §§60.42b, 60.43b, and 60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B. The owner or operator of each affected facility described in §60.44b(j) or §60.44b(k) shall submit to the Administrator the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility.

(c) The owner or operator of each affected facility subject to the nitrogen oxides standard of §60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions under the provisions of §60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored under §60.48b(g)(2) and the records to be

maintained under §60.49b(j). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. The plan shall:

(1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and nitrogen oxides emission rates (i.e., ng/J or lbs/million Btu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas oxygen level);

(2) Include the data and information that the owner or operator used to identify the relationship between nitrogen oxides emission rates and these operating conditions;

(3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(j).

If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan.

(d) The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

(g) Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the nitrogen oxides standards under §60.44b shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date.

(2) The average hourly nitrogen oxides emission rates (expressed as NO_2) (ng/J or lb/million Btu heat input) measured or predicted.

(3) The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.

(4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.

(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.

(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.

(7) Identification of “F” factor used for calculations, method of determination, and type of fuel combusted.

(8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

(9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

(h) The owner or operator of any affected facility in any category listed in paragraphs (h) (1) or (2) of this section is required to submit excess emission reports for any excess emissions which occurred during the reporting period.

(2) Any affected facility that is subject to the nitrogen oxides standard of §60.44b, and that

(i) Combusts natural gas, distillate oil, or residual oil with a nitrogen content of 0.3 weight percent or less, or

(ii) Has a heat input capacity of 73 MW (250 million Btu/hour) or less and is required to monitor nitrogen oxides emissions on a continuous basis under §60.48b(g)(1) or steam generating unit operating conditions under §60.48b(g)(2).

(i) The owner or operator of any affected facility subject to the continuous monitoring requirements for nitrogen oxides under §60.48(b) shall submit reports containing the information recorded under paragraph (g) of this section.

(j) The owner or operator of any affected facility subject to the sulfur dioxide standards under §60.42b shall submit reports.

(o) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of 2 years following the date of such record.

(v) The owner or operator of an affected facility may submit electronic quarterly reports for SO_2 and/or NO_X and/or opacity in lieu of submitting the written reports required under paragraphs (h), (i), (j), (k) or (l) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

(w) The reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51820, 51825, Dec. 18, 1989; 60 FR 28062, May 30, 1995; 61 FR 14031, Mar. 29, 1996; 62 FR 52641, Oct. 8, 1997; 63 FR 49455, Sept. 16, 1998; 64 FR 7464, Feb. 12, 1999; 65 FR 13243, Mar. 13, 2000; 69 FR 40773, July 7, 2004; 71 FR 66685, Nov. 16, 2006]

SECTION D.11 FACILITY OPERATION CONDITIONS

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

(e) One (1) process water cooling tower, installed in March 2000, cooling hot process water received from the source processes at a nominal design rate of 18,000,000 pounds per hour, with particulate mist controlled by one (1) mist elimination system, identified as APC38.

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

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

D.11.1 Prevention of Significant Deterioration [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the PM/PM10 emissions from the process water cooling tower:

(a) Shall not exceed 4.5 pounds per hour.

(b) Shall be controlled by mist elimination system APC38;

D.11.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.11.3 Particulate Control

Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and in order to comply with Condition D.11.1, the mist elimination system, used to control PM emissions, shall be in operation at all times the process water cooling tower is in operation.

SECTION D.12 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities

(a) Paved and unpaved roads and parking lots with public access [326 IAC 6-4] [326 IAC 6-5].

(b) Stationary fire pumps: One (1) 425 horsepower, No. 2 distillate oil-fired emergency fire water pump engine, installed in March 2000, with all emissions exhausted through Stack UP57 [326 IAC 2-2].

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

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

D.12.1 Prevention of Significant Deterioration [326 IAC 2-2]

Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the amount of diesel fuel burned in the insignificant emergency fire pump engine shall be limited to 1,128 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit will render the requirements of 326 IAC 2-2 not applicable.

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

D.12.2 Record Keeping Requirements

To document compliance with Condition D.12.1, the Permittee shall maintain daily records of the amount of diesel fuel consumed by the emergency fire pump engine.

D.12.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.12.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.13 FACILITY OPERATION CONDITIONS

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

All facilities used to process corn, a corn product or a derivative thereof.

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

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

D.13.1 SO2 Emissions [326 IAC 2-2]

The IDEM, OAQ has information that indicates that the SO2 emissions from various emission units located at the source have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

SECTION E.1 FACILITY OPERATION CONDITIONS

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

All facilities subject to 40 CFR Part 60, Subpart VV - including pumps, compressors, pressure relief devices, sampling connection systems, and valves.

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

New Source Performance Standards (NSPS) Requirements – 40 CFR Part 60, Subpart VV [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to New Source Performance Standards under 40 CFR Part 60 [326 IAC 12-1] [40 CFR Part 60, Subpart A]

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

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 New Source Performance Standards for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry: Requirements [40 CFR Part 60, Subpart VV]

Pursuant to 40 CFR 60.480, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart VV for tanks for all affected facilities as specified as follows:

Subpart VV—Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Source: 48 FR 48335, Oct. 18, 1983, unless otherwise noted.

§ 60.480 Applicability and designation of affected facility.

(a)(1) The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry.

(2) The group of all equipment (defined in §60.481) within a process unit is an affected facility.

(b) Any affected facility under paragraph (a) of this section that commences construction or modification after January 5, 1981, shall be subject to the requirements of this subpart.

(c) Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(d)(1) If an owner or operator applies for one or more of the exemptions in this paragraph, then the owner or operator shall maintain records as required in §60.486(i).

(2) Any affected facility that has the design capacity to produce less than 1,000 Mg/yr (1,102 ton/yr) is exempt from §60.482.

(3) If an affected facility produces heavy liquid chemicals only from heavy liquid feed or raw materials, then it is exempt from §60.482.

(4) Any affected facility that produces beverage alcohol is exempt from §60.482.

(5) Any affected facility that has no equipment in VOC service is exempt from §60.482.

(e) *Alternative means of compliance*—(1) *Option to comply with part 65.* Owners or operators may choose to comply with the provisions of 40 CFR part 65, subpart F, to satisfy the requirements of §§60.482 through 60.487 for an affected facility. When choosing to comply with 40 CFR part 65, subpart F, the requirements of §60.485(d), (e), and (f), and §60.486(i) and (j) still apply. Other provisions applying to an owner or operator who chooses to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

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

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22607, May 30, 1984; 65 FR 61762, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000]

§ 60.481 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of part 60, and the following terms shall have the specific meanings given them.

Capital expenditure means, in addition to the definition in 40 CFR 60.2, an expenditure for a physical or operational change to an existing facility that:

(a) Exceeds P, the product of the facility's replacement cost, R, and an adjusted annual asset guideline repair allowance, A, as reflected by the following equation: $P = R \times A$, where

(1) The adjusted annual asset guideline repair allowance, A, is the product of the percent of the replacement cost, Y, and the applicable basic annual asset guideline repair allowance, B, divided by 100 as reflected by the following equation:

$A = Y \times (B \div 100)$;

(2) The percent Y is determined from the following equation: $Y = 1.0 - 0.575 \log X$, where X is 1982 minus the year of construction; and

(3) The applicable basic annual asset guideline repair allowance, B, is selected from the following table consistent with the applicable subpart:

Table for Determining Applicable for B

Subpart applicable to facility	Value of B to be used in equation
VV	12.5
DDD	12.5
GGG	7.0
KKK	4.5

Closed vent system means a system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.

Connector means flanged, screwed, welded, or other joined fittings used to connect two pipe lines or a pipe line and a piece of process equipment.

Control device means an enclosed combustion device, vapor recovery system, or flare.

Distance piece means an open or enclosed casing through which the piston rod travels, separating the compressor cylinder from the crankcase.

Double block and bleed system means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

Duct work means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.

Equipment means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart.

First attempt at repair means to take rapid action for the purpose of stopping or reducing leakage of organic material to atmosphere using best practices.

Fuel gas means gases that are combusted to derive useful work or heat.

Fuel gas system means the offsite and onsite piping and flow and pressure control system that gathers gaseous stream(s) generated by onsite operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in-process combustion equipment, such as furnaces and gas turbines, either singly or in combination.

Hard-piping means pipe or tubing that is manufactured and properly installed using good engineering judgement and standards such as ASME B31.3, Process Piping (available from the American Society of Mechanical Engineers, PO Box 2900, Fairfield, NJ 07007–2900).

In gas/vapor service means that the piece of equipment contains process fluid that is in the gaseous state at operating conditions.

In heavy liquid service means that the piece of equipment is not in gas/vapor service or in light liquid service.

In light liquid service means that the piece of equipment contains a liquid that meets the conditions specified in §60.485(e).

In-situ sampling systems means nonextractive samplers or in-line samplers.

In vacuum service means that equipment is operating at an internal pressure which is at least 5 kilopascals (kPa)(0.7 psia) below ambient pressure.

In VOC service means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight. (The provisions of §60.485(d) specify how to determine that a piece of equipment is not in VOC service.)

Liquids dripping means any visible leakage from the seal including spraying, misting, clouding, and ice formation.

Open-ended valve or line means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

Pressure release means the emission of materials resulting from system pressure being greater than set pressure of the pressure relief device.

Process improvement means routine changes made for safety and occupational health requirements, for energy savings, for better utility, for ease of maintenance and operation, for correction of design deficiencies, for bottleneck removal, for changing product requirements, or for environmental control.

Process unit means components assembled to produce, as intermediate or final products, one or more of the chemicals listed in §60.489 of this part. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

Process unit shutdown means a work practice or operational procedure that stops production from a process unit or part of a process unit. An unscheduled work practice or operational procedure that stops

production from a process unit or part of a process unit for less than 24 hours is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.

Quarter means a 3-month period; the first quarter concludes on the last day of the last full month during the 180 days following initial startup.

Repaired means that equipment is adjusted, or otherwise altered, in order to eliminate a leak as indicated by one of the following: an instrument reading of 10,000 ppm or greater, indication of liquids dripping, or indication by a sensor that a seal or barrier fluid system has failed.

Replacement cost means the capital needed to purchase all the depreciable components in a facility.

Sampling connection system means an assembly of equipment within a process unit used during periods of representative operation to take samples of the process fluid. Equipment used to take nonroutine grab samples is not considered a sampling connection system.

Sensor means a device that measures a physical quantity or the change in a physical quantity such as temperature, pressure, flow rate, pH, or liquid level.

Synthetic organic chemicals manufacturing industry means the industry that produces, as intermediates or final products, one or more of the chemicals listed in §60.489.

Volatile organic compounds or VOC means, for the purposes of this subpart, any reactive organic compounds as defined in §60.2 Definitions.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22607, May 30, 1984; 49 FR 26738, June 29, 1984; 60 FR 43258, Aug. 18, 1995; 65 FR 61762, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000]

§ 60.482-1 Standards: General.

(a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§60.482–1 through 60.482–10 or §60.480(e) for all equipment within 180 days of initial startup.

(b) Compliance with §§60.482–1 to 60.482–10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in §60.485.

(c)(1) An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of §§60.482–2, 60.482–3, 60.482–5, 60.482–6, 60.482–7, 60.482–8, and 60.482–10 as provided in §60.484.

(2) If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of §§60.482–2, 60.482–3, 60.482–5, 60.482–6, 60.482–7, 60.482–8, or 60.482–10, an owner or operator shall comply with the requirements of that determination.

(d) Equipment that is in vacuum service is excluded from the requirements of §§60.482–2 to 60.482–10 if it is identified as required in §60.486(e)(5).

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22608, May 30, 1984; 65 FR 78276, Dec. 14, 2000]

§ 60.482-2 Standards: Pumps in light liquid service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485(b), except as provided in §60.482–1(c) and paragraphs (d), (e), and (f) of this section.

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), *Provided* the following requirements are met:

(1) Each dual mechanical seal system is—

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipment with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482–10; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(5)(i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm, and

(ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii), a leak is detected.

(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.

(iii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) Any pump that is designated, as described in §60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump:

(1) Has no externally actuated shaft penetrating the pump housing,

(2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in §60.485(c), and

(3) Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of §60.482–10, it is exempt from paragraphs (a) through (e) of this section.

(g) Any pump that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:

(1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and

(2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000]

§ 60.482-3 Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in §60.482–1(c) and paragraph (h) and (i) of this section.

(b) Each compressor seal system as required in paragraph (a) shall be:

(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482–10; or

(3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

(d) Each barrier fluid system as described in paragraph (a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in paragraph (d) shall be checked daily or shall be equipped with an audible alarm.

(2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e)(2), a leak is detected.

(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of §60.482–10, except as provided in paragraph (i) of this section.

(i) Any compressor that is designated, as described in §60.486(e) (1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a)–(h) if the compressor:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in §60.485(c); and

(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.

(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of §60.14 or §60.15 is exempt from §60.482(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of paragraphs (a) through (e) and (h) of this section.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000]

§ 60.482-4 Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in §60.485(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in §60.482–9.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in §60.485(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in §60.482–10 is exempted from the requirements of paragraphs (a) and (b) of this section.

(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §60.482–9.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000]

§ 60.482-5 Standards: Sampling connection systems.

(a) Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in §60.482–1(c). Gases displaced during filling of the sample container are not required to be collected or captured.

(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall comply with the requirements specified in paragraphs (b)(1) through (4) of this section:

(1) Return the purged process fluid directly to the process line; or

(2) Collect and recycle the purged process fluid to a process; or

(3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of §60.482–10; or

(4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(i) A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;

(ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or

(iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.

(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

[60 FR 43258, Aug. 18, 1995, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000]

§ 60.482-6 Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482–1(c).

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of this section.

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22607, May 30, 1984; 65 FR 78277, Dec. 14, 2000]

§ 60.482-7 Standards: Valves in gas/vapor service and in light liquid service.

(a) Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485(b) and shall comply with paragraphs (b) through (e), except as provided in paragraphs (f), (g), and (h), §60.483–1, 2, and §60.482–1(c).

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §60.482–9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;

(3) Tightening of packing gland nuts;

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:

(1) Has no external actuating mechanism in contact with the process fluid,

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in §60.485(c), and

(3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(g) Any valve that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:

(1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a), and

(2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in §60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:

(1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The process unit within which the valve is located either becomes an affected facility through §60.14 or §60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22608, May 30, 1984; 65 FR 61762, Oct. 17, 2000]

§ 60.482-8 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures:

(1) The owner or operator shall monitor the equipment within 5 days by the method specified in §60.485(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.

(2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under §60.482–7(e).

[48 CFR 48335, Oct. 18, 1983, as amended at 65 FR 78277, Dec. 14, 2000]

§ 60.482-9 Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves will be allowed if:

(1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with §60.482–10.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 78277, Dec. 14, 2000]

§ 60.482-10 Standards: Closed vent systems and control devices.

(a) Owners or operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.

(b) Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.

(c) Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.

(d) Flares used to comply with this subpart shall comply with the requirements of §60.18.

(e) Owners or operators of control devices used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.

(f) Except as provided in paragraphs (i) through (k) of this section, each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2) of this section.

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the requirements specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this section:

(i) Conduct an initial inspection according to the procedures in §60.485(b); and

(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:

(i) Conduct an initial inspection according to the procedures in §60.485(b); and

(ii) Conduct annual inspections according to the procedures in §60.485(b).

(g) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (h) of this section.

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

(h) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(i) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section.

(j) Any parts of the closed vent system that are designated, as described in paragraph (l)(1) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (j)(1) and (j)(2) of this section:

(1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (f)(1)(i) or (f)(2) of this section; and

(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(k) Any parts of the closed vent system that are designated, as described in paragraph (l)(2) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (k)(1) through (k)(3) of this section:

(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) The process unit within which the closed vent system is located becomes an affected facility through §§60.14 or 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

(3) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

(l) The owner or operator shall record the information specified in paragraphs (l)(1) through (l)(5) of this section.

(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(3) For each inspection during which a leak is detected, a record of the information specified in §60.486(c).

(4) For each inspection conducted in accordance with §60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(5) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(m) Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

[48 FR 48335, Oct. 18, 1983, as amended at 51 FR 2702, Jan. 21, 1986; 60 FR 43258, Aug. 18, 1995; 61 FR 29878, June 12, 1996; 65 FR 78277, Dec. 14, 2000]

§ 60.483-1 Alternative standards for valves—allowable percentage of valves leaking.

(a) An owner or operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

(b) The following requirements shall be met if an owner or operator wishes to comply with an allowable percentage of valves leaking:

(1) An owner or operator must notify the Administrator that the owner or operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in §60.487(d).

(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.

(3) If a valve leak is detected, it shall be repaired in accordance with §60.482–7(d) and (e).

(c) Performance tests shall be conducted in the following manner:

(1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in §60.485(b).

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.

(d) Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000]

§ 60.483-2 Alternative standards for valves—skip period leak detection and repair.

(a)(1) An owner or operator may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.

(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in §60.487(d).

(b)(1) An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in §60.482–7.

(2) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(3) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(4) If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in §60.482–7 but can again elect to use this section.

(5) The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of this section.

(6) An owner or operator must keep a record of the percent of valves found leaking during each leak detection period.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000]

§ 60.485 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the standards in §§60.482, 60.483, and 60.484 as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(c) The owner or operator shall determine compliance with the no detectable emission standards in §§60.482–2(e), 60.482–3(i), 60.482–4, 60.482–7(f), and 60.482–10(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260–73, 91, or 96, E168–67, 77, or 92, E169–63, 77, or 93 (incorporated by reference—see §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d)(1) and (2) of this section shall be used to resolve the disagreement.

(e) The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 °C (1.2 in. H_2O at 68 °F). Standard reference texts or ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H_2O at 68 °F) is equal to or greater than 20 percent by weight.

(3) The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

(g) The owner or operator shall determine compliance with the standards of flares as follows:

(1) Method 22 shall be used to determine visible emissions.

(2) A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.

(3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:

$$V_{max} = K_1 + K_2 H_T$$

Where:

V_{max} = Maximum permitted velocity, m/sec (ft/sec)

H_T = Net heating value of the gas being combusted, MJ/scm (Btu/scf).

K_1 = 8.706 m/sec (metric units)

= 28.56 ft/sec (English units)

K_2 = 0.7084 m^4 /(MJ-sec) (metric units)

= 0.087 ft^4 /(Btu-sec) (English units)

(4) The net heating value (HT) of the gas being combusted in a flare shall be computed using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

Where:

K = Conversion constant, 1.740×10^7 (g-mole)(MJ)/ (ppm-scm-kcal) (metric units)

= 4.674×10^8 [(g-mole)(Btu)/(ppm-scf-kcal)] (English units)

C_i = Concentration of sample component “i,” ppm

H_i = net heat of combustion of sample component “i” at 25 °C and 760 mm Hg (77 °F and 14.7 psi), kcal/g-mole

(5) Method 18 and ASTM D2504–67, 77, or 88 (Reapproved 1993) (incorporated by reference—see §60.17) shall be used to determine the concentration of sample component “i.”

(6) ASTM D2382–76 or 88 or D4809–95 (incorporated by reference—see §60.17) shall be used to determine the net heat of combustion of component “i” if published values are not available or cannot be calculated.

(7) Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.

[54 FR 6678, Feb. 14, 1989, as amended at 54 FR 27016, June 27, 1989; 65 FR 61763, Oct. 17, 2000]

§ 60.486 Recordkeeping requirements.

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.

(b) When each leak is detected as specified in §§60.482–2, 60.482–3, 60.482–7, 60.482–8, and 60.483–2, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482–7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in §§60.482–2, 60.482–3, 60.482–7, 60.482–8, and 60.483–2, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

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

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

(4) “Above 10,000” if the maximum instrument reading measured by the methods specified in §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

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

(6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

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

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

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

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in §60.482–10 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in §60.482–10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(4) Periods when the closed vent systems and control devices required in §§60.482–2, 60.482–3, 60.482–4, and 60.482–5 are not operated as designed, including periods when a flare pilot light does not have a flame.

(5) Dates of startups and shutdowns of the closed vent systems and control devices required in §§60.482–2, 60.482–3, 60.482–4, and 60.482–5.

(e) The following information pertaining to all equipment subject to the requirements in §§60.482–1 to 60.482–10 shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of this subpart.

(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §§60.482–2(e), 60.482–3(i) and 60.482–7(f).

(ii) The designation of equipment as subject to the requirements of §60.482–2(e), §60.482–3(i), or §60.482–7(f) shall be signed by the owner or operator.

(3) A list of equipment identification numbers for pressure relief devices required to comply with §60.482–4.

(4)(i) The dates of each compliance test as required in §§60.482–2(e), 60.482–3(i), 60.482–4, and 60.482–7(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(f) The following information pertaining to all valves subject to the requirements of §60.482–7(g) and (h) and to all pumps subject to the requirements of §60.482–2(g) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.

(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) The following information shall be recorded for valves complying with §60.483–2:

(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.

(h) The following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in §§60.482–2(d)(5) and 60.482–3(e)(2) and explanation of the design criterion; and

(2) Any changes to this criterion and the reasons for the changes.

(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in §60.480(d):

(1) An analysis demonstrating the design capacity of the affected facility,

(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

(3) An analysis demonstrating that equipment is not in VOC service.

(j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(k) The provisions of §60.7 (b) and (d) do not apply to affected facilities subject to this subpart.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61763, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000]

§ 60.487 Reporting requirements.

(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial startup date.

(b) The initial semiannual report to the Administrator shall include the following information:

(1) Process unit identification.

(2) Number of valves subject to the requirements of §60.482–7, excluding those valves designated for no detectable emissions under the provisions of §60.482–7(f).

(3) Number of pumps subject to the requirements of §60.482–2, excluding those pumps designated for no detectable emissions under the provisions of §60.482–2(e) and those pumps complying with §60.482–2(f).

(4) Number of compressors subject to the requirements of §60.482–3, excluding those compressors designated for no detectable emissions under the provisions of §60.482–3(i) and those compressors complying with §60.482–3(h).

(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in §60.486:

(1) Process unit identification.

(2) For each month during the semiannual reporting period,

(i) Number of valves for which leaks were detected as described in §60.482(7)(b) or §60.483–2,

(ii) Number of valves for which leaks were not repaired as required in §60.482–7(d)(1),

(iii) Number of pumps for which leaks were detected as described in §60.482–2(b) and (d)(6)(i),

(iv) Number of pumps for which leaks were not repaired as required in §60.482–2(c)(1) and (d)(6)(ii),

(v) Number of compressors for which leaks were detected as described in §60.482–3(f),

(vi) Number of compressors for which leaks were not repaired as required in §60.482–3(g)(1), and

(vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.

(d) An owner or operator electing to comply with the provisions of §§60.483–1 or 60.483–2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.

(e) An owner or operator shall report the results of all performance tests in accordance with §60.8 of the General Provisions. The provisions of §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

(f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of this section, provided that they comply with the requirements established by the State.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22608, May 30, 1984; 65 FR 61763, Oct. 17, 2000]

SECTION E.2 FACILITY OPERATION CONDITIONS

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

All facilities subject to 40 CFR Part 63, Subpart EEEE - including storage tanks, transfer racks, equipment leak components, transport vehicles and containers identified in 40 CFR 63.2338.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements – 40 CFR Part 63, Subpart EEEE [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 12-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR Part 63, Subpart EEEE, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, except as otherwise specified in 40 CFR Part 63, Subpart EEEE.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

E.2.1 National Emission Standards for Hazardous Air Pollutants - Organic Liquids Distribution: Requirements [40 CFR Part 63, Subpart EEEE]

Pursuant to 40 CFR 63.2342, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart EEEE for all affected facilities as specified as follows on and after February 2, 2007:

Subpart EEEE—National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)

Source: 69 FR 5063, Feb. 3, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.2330 What is the purpose of this subpart?

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

§ 63.2334 Am I subject to this subpart?

(a) Except as provided for in paragraphs (b) and (c) of this section, you are subject to this subpart if you own or operate an OLD operation that is located at, or is part of, a major source of HAP emissions. An OLD operation may occupy an entire plant site or be collocated with other industrial (*e.g.,* manufacturing) operations at the same plant site.

(b) Organic liquid distribution operations located at research and development facilities, consistent with section 112(c)(7) of the Clean Air Act (CAA), are not subject to this subpart.

(c) Organic liquid distribution operations do not include the activities and equipment, including product loading racks, used to process, store, or transfer organic liquids at facilities listed in paragraph (c) (1) and (2) of this section.

(1) Oil and natural gas production field facilities, as the term “facility” is defined in §63.761 of subpart HH.

(2) Natural gas transmission and storage facilities, as the term “facility” is defined in §63.1271 of subpart HHH.

§ 63.2338 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing OLD operation affected source.

(b) Except as provided in paragraph (c) of this section, the affected source is the collection of activities and equipment used to distribute organic liquids into, out of, or within a facility that is a major source of HAP. The affected source is composed of:

(1) All storage tanks storing organic liquids.

(2) All transfer racks at which organic liquids are loaded into or unloaded out of transport vehicles and/or containers.

(3) All equipment leak components in organic liquids service that are associated with:

(i) Storage tanks storing organic liquids;

(ii) Transfer racks loading or unloading organic liquids;

(iii) Pipelines that transfer organic liquids directly between two storage tanks that are subject to this subpart;

(iv) Pipelines that transfer organic liquids directly between a storage tank subject to this subpart and a transfer rack subject to this subpart; and

(v) Pipelines that transfer organic liquids directly between two transfer racks that are subject to this subpart.

(4) All transport vehicles while they are loading or unloading organic liquids at transfer racks subject to this subpart.

(5) All containers while they are loading or unloading organic liquids at transfer racks subject to this subpart.

(c) The equipment listed in paragraphs (c)(1) through (4) of this section and used in the identified operations is excluded from the affected source.

(1) Storage tanks, transfer racks, transport vehicles, containers, and equipment leak components that are part of an affected source under another 40 CFR part 63 national emission standards for hazardous air pollutants (NESHAP).

(2) Non-permanent storage tanks, transfer racks, transport vehicles, containers, and equipment leak components when used in special situation distribution loading and unloading operations (such as maintenance or upset liquids management).

(3) Storage tanks, transfer racks, transport vehicles, containers, and equipment leak components when used to conduct maintenance activities, such as stormwater management, liquid removal from tanks for inspections and maintenance, or changeovers to a different liquid stored in a storage tank.

(d) An affected source is a new affected source if you commenced construction of the affected source after April 2, 2002, and you meet the applicability criteria in §63.2334 at the time you commenced operation.

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

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

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42904, July 28, 2006]

§ 63.2342 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to the schedule identified in paragraph (a)(1), (a)(2), or (a)(3) of this section, as applicable.

(1)(i) Except as provided in paragraph (a)(1)(ii) of this section, if you startup your new affected source on or before February 3, 2004 or if you reconstruct your affected source on or before February 3, 2004, you must comply with the emission limitations, operating limits, and work practice standards for new and reconstructed sources in this subpart no later than February 3, 2004.

(ii) For any emission source listed in paragraph §63.2338(b) at an affected source that commenced construction or reconstruction after April 2, 2002, but before February 3, 2004, that is required to be controlled based on the applicability criteria in this subpart, but:

(A) Would not have been required to be controlled based on the applicability criteria as proposed for this subpart, you must comply with the emission limitations, operating limits, and work practice standards for each such emission source based on the schedule found in paragraph (b) of this section or at startup, whichever is later; or

(B) Would have been subject to a less stringent degree of control requirement as proposed for this subpart, you must comply with the emission limitations, operating limits, and work practice standards in this subpart for each such emission source based on the schedule found in paragraph (b) of this section or at startup, whichever is later, and if you start up your affected new or reconstructed source before February 5, 2007, you must comply with the emission limitations, operating limits, and work practice standards for each such emission source as proposed for this subpart, until you are required to comply with the emission limitations, operating limits, and work practice standards in this subpart for each such emission source based on the schedule found in paragraph (b) of this section.

(2) If you commence construction of or reconstruct your affected source after February 3, 2004, you must comply with the emission limitations, operating limits, and work practice standards for new and reconstructed sources in this subpart upon startup of your affected source.

(3) If, after startup of a new affected source, the total actual annual facility-level organic liquid loading volume at that source exceeds the criteria for control in Table 2 to this subpart, items 9 and 10, the owner or operator must comply with the transfer rack requirements specified in §63.2346(b) immediately; that is, be in compliance the first day of the period following the end of the 3-year period triggering the control criteria.

(b)(1) If you have an existing affected source, you must comply with the emission limitations, operating limits, and work practice standards for existing affected sources no later than February 5, 2007, except as provided in paragraphs (b)(2) and (3) of this section.

(2) Floating roof storage tanks at existing affected sources must be in compliance with the work practice standards in Table 4 to this subpart, item 1, at all times after the next degassing and cleaning activity or within 10 years after February 3, 2004, whichever occurs first. If the first degassing and cleaning activity occurs during the 3 years following February 3, 2004, the compliance date is February 5, 2007.

(3)(i) If an addition or change other than reconstruction as defined in §63.2 is made to an existing affected facility that causes the total actual annual facility-level organic liquid loading volume to exceed the criteria for control in Table 2 to this subpart, items 7 and 8, the owner or operator must comply with the transfer rack requirements specified in §63.2346(b) immediately; that is, be in compliance the first day of the period following the end of the 3-year period triggering the control criteria.

(ii) If the owner or operator believes that compliance with the transfer rack emission limits cannot be achieved immediately, as specified in paragraph (b)(3)(i) of this section, the owner or operator may submit a request for a compliance extension, as specified in paragraphs (b)(3)(ii)(A) through (I) of this section. Subject to paragraph (b)(3)(ii)(B) of this section, until an extension of compliance has been granted by the Administrator (or a State with an approved permit program) under this paragraph (b)(3)(ii), the owner or operator of the transfer rack subject to the requirements of this section shall comply with all applicable requirements of this subpart. Advice on requesting an extension of compliance may be obtained from the Administrator (or the State with an approved permit program).

(A) *Submittal.* The owner or operator shall submit a request for a compliance extension to the Administrator (or a State, when the State has an approved 40 CFR part 70 permit program and the source is required to obtain a 40 CFR part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) seeking an extension allowing the source up to 1 additional year to comply with the transfer rack standard, if such additional period is necessary for the installation of controls. The owner or operator of the affected source who has requested an extension of compliance under this paragraph (b)(3)(ii)(A) and who is otherwise required to obtain a title V permit shall apply for such permit, or apply to have the source's title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph (b)(3)(ii)(A) will be incorporated into the affected source's title V permit according to the provisions of 40 CFR part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever are applicable.

(B) *When to submit.* (*1*) Any request submitted under paragraph (b)(3)(ii)(A) of this section must be submitted in writing to the appropriate authority no later than 120 days prior to the affected source's compliance date (as specified in paragraph (b)(3)(i) of this section), except as provided for in paragraph (b)(3)(ii)(B)(*2*) of this section. Nonfrivolous requests submitted under this paragraph (b)(3)(ii)(B)(*1*) will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the date of denial.

(*2*) An owner or operator may submit a compliance extension request after the date specified in paragraph (b)(3)(ii)(B)(*1*) of this section provided the need for the compliance extension arose after that date, and before the otherwise applicable compliance date and the need arose due to circumstances beyond reasonable control of the owner or operator. This request must include, in addition to the information required in paragraph (b)(3)(ii)(C) of this section, a statement of the reasons additional time is needed and the date when the owner or operator first learned of the problems. Nonfrivolous requests submitted under this paragraph (b)(3)(ii)(B)(*2*) will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the original compliance date.

(C) *Information required.* The request for a compliance extension under paragraph (b)(3)(ii)(A) of this section shall include the following information:

(*1*) The name and address of the owner or operator and the address of the existing source if it differs from the address of the owner or operator;

(*2*) The name, address, and telephone number of a contact person for further information;

(*3*) An identification of the organic liquid distribution operation and of the specific equipment for which additional compliance time is required;

(*4*) A description of the controls to be installed to comply with the standard;

(*5*) Justification for the length of time being requested; and

(*6*) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:

(*i*) The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated;

(*ii*) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and

(*iii*) The date by which final compliance is to be achieved.

(D) *Approval of request for extension of compliance.* Based on the information provided in any request made under paragraph (b)(3)(ii)(C) of this section, or other information, the Administrator (or the State with an approved permit program) may grant an extension of compliance with the transfer rack emission standard, as specified in paragraph (b)(3)(ii) of this section. The extension will be in writing and will—

(*1*) Identify each affected source covered by the extension;

(*2*) Specify the termination date of the extension;

(*3*) Specify the dates by which steps toward compliance are to be taken, if appropriate;

(*4*) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests);

(*5*) Specify the contents of the progress reports to be submitted and the dates by which such reports are to be submitted, if required pursuant to paragraph (b)(3)(ii)(E) of this section.

(*6*) Under paragraph (b)(3)(ii) of this section, specify any additional conditions that the Administrator (or the State) deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period.

(E) *Progress reports.* The owner or operator of an existing source that has been granted an extension of compliance under paragraph (b)(3)(ii)(D) of this section may be required to submit to the Administrator (or the State with an approved permit program) progress reports indicating whether the steps toward compliance outlined in the compliance schedule have been reached.

(F) *Notification of approval or intention to deny.*

(*1*) The Administrator (or the State with an approved permit program) will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (b)(3)(ii) of this section. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application; that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. Failure by the Administrator to act within 30 calendar days to approve or disapprove a request submitted under paragraph (b)(3)(ii) of this section does not constitute automatic approval of the request.

(*2*) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(*3*) Before denying any request for an extension of compliance, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of the Administrator's (or the State's) intention to issue the denial, together with:

(*i*) Notice of the information and findings on which the intended denial is based; and

(*ii*) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator (or the State) before further action on the request.

(*4*) The Administrator's final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(G) *Termination of extension of compliance.* The Administrator (or the State with an approved permit program) may terminate an extension of compliance at an earlier date than specified if any specification under paragraph (b)(3)(ii)(D)(*3*) or paragraph (b)(3)(ii)(D)(*4*) of this section is not met. Upon a determination to terminate, the Administrator will notify, in writing, the owner or operator of the Administrator's determination to terminate, together with:

(*1*) Notice of the reason for termination; and

(*2*) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the determination to terminate, additional information or arguments to the Administrator before further action on the termination.

(*3*) A final determination to terminate an extension of compliance will be in writing and will set forth the specific grounds on which the termination is based. The final determination will be made within 30 calendar days after presentation of additional information or arguments, or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(H) The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the CAA.

(I) *Limitation on use of compliance extension.* The owner or operator may request an extension of compliance under the provisions specified in paragraph (b)(3)(ii) of this section only once for each facility.

(c) If you have an area source that does not commence reconstruction but increases its emissions or its potential to emit such that it becomes a major source of HAP emissions and an existing affected source subject to this subpart, you must be in compliance by 3 years after the area source becomes a major source.

(d) You must meet the notification requirements in §§63.2343 and 63.2382(a), as applicable, according to the schedules in §63.2382(a) and (b)(1) through (3) and in subpart A of this part. Some of these notifications must be submitted before the compliance dates for the emission limitations, operating limits, and work practice standards in this subpart.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42905, July 28, 2006]

§ 63.2343 What are my requirements for emission sources not requiring control?

This section establishes the notification, recordkeeping, and reporting requirements for emission sources identified in §63.2338 that do not require control under this subpart (i.e., under paragraphs (a) through (e) of §63.2346). Such emission sources are not subject to any other notification, recordkeeping, or reporting sections in this subpart, including §63.2350(c), except as indicated in paragraphs (a) through (d) of this section.

(a) For each storage tank subject to this subpart having a capacity of less than 18.9 cubic meters (5,000 gallons) and for each transfer rack subject to this subpart that only unloads organic liquids (i.e., no organic liquids are loaded at any of the transfer racks), you must keep documentation that verifies that each storage tank and transfer rack identified in paragraph (a) of this section is not required to be controlled. The documentation must be kept up-to-date (i.e., all such emission sources at a facility are identified in the documentation regardless of when the documentation was last compiled) and must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form in a separate location. The documentation may consist of identification of the tanks and transfer racks identified in paragraph (a) of this section on a plant site plan or process and instrumentation diagram (P&ID).

(b) For each storage tank subject to this subpart having a capacity of 18.9 cubic meters (5,000 gallons) or more that is not subject to control based on the criteria specified in Table 2 to this subpart, items 1 through 6, you must comply with the requirements specified in paragraphs (b)(1) through (3) of this section.

(1)(i) You must submit the information in §63.2386(c)(1), (2), (3), and (10)(i) in either the Notification of Compliance Status, according to the schedule specified in Table 12 to this subpart, or in your first Compliance report, according to the schedule specified in §63.2386(b), whichever occurs first.

(ii)(A) If you submit your first Compliance report before your Notification of Compliance Status, the Notification of Compliance Status must contain the information specified in §63.2386(d)(3) and (4) if any of the changes identified in paragraph (d) of this section have occurred since the filing of the first Compliance report. If none of the changes identified in paragraph (d) of this section have occurred since the filing of the first Compliance report, you do not need to report the information specified in §63.2386(c)(10)(i) when you submit your Notification of Compliance Status.

(B) If you submit your Notification of Compliance Status before your first Compliance report, your first Compliance report must contain the information specified in §63.2386(d)(3) and (4) if any of the changes specified in paragraph (d) of this section have occurred since the filing of the Notification of Compliance Status.

(iii) If you are already submitting a Notification of Compliance Status or a first Compliance report under §63.2386(c), you do not need to submit a separate Notification of Compliance Status or first Compliance report for each storage tank that meets the conditions identified in paragraph (b) of this section (i.e., a single Notification of Compliance Status or first Compliance report should be submitted).

(2)(i) You must submit a subsequent Compliance report according to the schedule in §63.2386(b) whenever any of the events in paragraph (d) of this section occur, as applicable.

(ii) Your subsequent Compliance reports must contain the information in §63.2386(c)(1), (2), (3) and, as applicable, in §63.2386(d)(3) and (4). If you are already submitting a subsequent Compliance report under §63.2386(d), you do not need to submit a separate subsequent Compliance report for each storage tank that meets the conditions identified in paragraph (b) of this section (i.e., a single subsequent Compliance report should be submitted).

(3) For each storage tank that meets the conditions identified in paragraph (b) of this section, you must keep documentation, including a record of the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid, that verifies the storage tank is not required to be controlled under this subpart. The documentation must be kept up-to-date and must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form in a separate location.

(c) For each transfer rack subject to this subpart that loads organic liquids but is not subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, you must comply with the requirements specified in paragraphs (c)(1) through (3) of this section.

(1)(i) You must submit the information in §63.2386(c)(1), (2), (3), and (10)(i) in either the Notification of Compliance Status, according to the schedule specified in Table 12 to this subpart, or a first Compliance report, according to the schedule specified in §63.2386(b), whichever occurs first.

(ii)(A) If you submit your first Compliance report before your Notification of Compliance Status, the Notification of Compliance Status must contain the information specified in §63.2386(d)(3) and (4) if any of the changes identified in paragraph (d) of this section have occurred since the filing of the first Compliance report. If none of the changes identified in paragraph (d) of this section have occurred since the filing of the first Compliance report, you do not need to report the information specified in §63.2386(c)(10)(i) when you submit your Notification of Compliance Status.

(B) If you submit your Notification of Compliance Status before your first Compliance report, your first Compliance report must contain the information specified in §63.2386(d)(3) and (4) if any of the changes specified in paragraph (d) of this section have occurred since the filing of the Notification of Compliance Status.

(iii) If you are already submitting a Notification of Compliance Status or a first Compliance report under §63.2386(c), you do not need to submit a separate Notification of Compliance Status or first Compliance report for each transfer rack that meets the conditions identified in paragraph (b) of this section (i.e., a single Notification of Compliance Status or first Compliance report should be submitted).

(2)(i) You must submit a subsequent Compliance report according to the schedule in §63.2386(b) whenever any of the events in paragraph (d) of this section occur, as applicable.

(ii) Your subsequent Compliance reports must contain the information in §63.2386(c)(1), (2), (3) and, as applicable, in §63.2386(d)(3) and (4). If you are already submitting a subsequent Compliance report under §63.2386(d), you do not need to submit a separate subsequent Compliance report for each transfer rack that meets the conditions identified in paragraph (c) of this section (i.e., a single subsequent Compliance report should be submitted).

(3) For each transfer rack that meets the conditions identified in paragraph (c) of this section, you must keep documentation, including the records specified in §63.2390(d), that verifies the transfer rack is not required to be controlled under this subpart. The documentation must be kept up-to-date and must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form in a separate location.

(d) If one or more of the events identified in paragraphs (d)(1) through (4) of this section occur since the filing of the Notification of Compliance Status or the last Compliance report, you must submit a subsequent Compliance report as specified in paragraphs (b)(3) and (c)(3) of this section.

(1) Any storage tank or transfer rack became subject to control under this subpart EEEE; or

(2) Any storage tank equal to or greater than 18.9 cubic meters (5,000 gallons) became part of the affected source but is not subject to any of the emission limitations, operating limits, or work practice standards of this subpart; or

(3) Any transfer rack (except those racks at which only unloading of organic liquids occurs) became part of the affected source; or

(4) Any of the information required in §63.2386(c)(1), §63.2386(c)(2), or §63.2386(c)(3) has changed.

[71 FR 42906, July 28, 2006]

Emission Limitations, Operating Limits, and Work Practice Standards

§ 63.2346 What emission limitations, operating limits, and work practice standards must I meet?

(a) *Storage tanks.* For each storage tank storing organic liquids that meets the tank capacity and liquid vapor pressure criteria for control in Table 2 to this subpart, items 1 through 5, you must comply with paragraph (a)(1), (a)(2), (a)(3), or (a)(4) of this section. For each storage tank storing organic liquids that meets the tank capacity and liquid vapor pressure criteria for control in Table 2 to this subpart, item 6, you must comply with paragraph (a)(1), (a)(2), or (a)(4) of this section.

(1) Meet the emission limits specified in Table 2 to this subpart and comply with the applicable requirements specified in 40 CFR part 63, subpart SS, for meeting emission limits, except substitute the term “storage tank” at each occurrence of the term “storage vessel” in subpart SS.

(2) Route emissions to fuel gas systems or back into a process as specified in 40 CFR part 63, subpart SS.

(3) Comply with 40 CFR part 63, subpart WW (control level 2).

(4) Use a vapor balancing system that complies with the requirements specified in paragraphs (a)(4)(i) through (vii) of this section and with the recordkeeping requirements specified in §63.2390(e).

(i) The vapor balancing system must be designed and operated to route organic HAP vapors displaced from loading of the storage tank to the transport vehicle from which the storage tank is filled.

(ii) Transport vehicles must have a current certification in accordance with the United States Department of Transportation (U.S. DOT) pressure test requirements of 49 CFR part 180 for cargo tanks and 49 CFR 173.31 for tank cars.

(iii) Organic liquids must only be unloaded from cargo tanks or tank cars when vapor collection systems are connected to the storage tank's vapor collection system.

(iv) No pressure relief device on the storage tank, or on the cargo tank or tank car, shall open during loading or as a result of diurnal temperature changes (breathing losses).

(v) Pressure relief devices must be set to no less than 2.5 pounds per square inch gauge (psig) at all times to prevent breathing losses. Pressure relief devices may be set at values less than 2.5 psig if the owner or operator provides rationale in the notification of compliance status report explaining why the alternative value is sufficient to prevent breathing losses at all times. The owner or operator shall comply with paragraphs (a)(4)(iv)(A) through (C) of this section for each pressure relief valve.

(A) The pressure relief valve shall be monitored quarterly using the method described in §63.180(b).

(B) An instrument reading of 500 parts per million by volume (ppmv) or greater defines a leak.

(C) When a leak is detected, it shall be repaired as soon as practicable, but no later than 5 days after it is detected, and the owner or operator shall comply with the recordkeeping requirements of §63.181(d)(1) through (4).

(vi) Cargo tanks and tank cars that deliver organic liquids to a storage tank must be reloaded or cleaned at a facility that utilizes the control techniques specified in paragraph (a)(4)(vi)(A) or (a)(4)(vi)(B) of this section.

(A) The cargo tank or tank car must be connected to a closed-vent system with a control device that reduces inlet emissions of total organic HAP by 95 percent by weight or greater or to an exhaust concentration less than or equal to 20 ppmv, on a dry basis corrected to 3 percent oxygen for combustion devices using supplemental combustion air.

(B) A vapor balancing system designed and operated to collect organic HAP vapor displaced from the cargo tank or tank car during reloading must be used to route the collected vapor to the storage tank from which the liquid being transferred originated or to another storage tank connected to a common header.

(vii) The owner or operator of the facility where the cargo tank or tank car is reloaded or cleaned must comply with paragraphs (a)(4)(vii)(A) through (D) of this section.

(A) Submit to the owner or operator of the storage tank and to the Administrator a written certification that the reloading or cleaning facility will meet the requirements of paragraph (a)(4)(vii)(A) through (C) of this section. The certifying entity may revoke the written certification by sending a written statement to the owner or operator of the storage tank giving at least 90 days notice that the certifying entity is rescinding acceptance of responsibility for compliance with the requirements of this paragraph (a)(4)(vii) of this section.

(B) If complying with paragraph (a)(4)(vi)(A) of this section, comply with the requirements for a closed vent system and control device as specified in this subpart EEEE. The notification requirements in §63.2382 and the reporting requirements in §63.2386 do not apply to the owner or operator of the offsite cleaning or reloading facility.

(C) If complying with paragraph (a)(4)(vi)(B) of this section, keep the records specified in §63.2390(e)(3) or equivalent recordkeeping approved by the Administrator.

(D) After the compliance dates specified in §63.2342, at an offsite reloading or cleaning facility subject to §63.2346(a)(4), compliance with the monitoring, recordkeeping, and reporting provisions of any other subpart of this part 63 that has monitoring, recordkeeping, and reporting provisions constitutes compliance with the monitoring, recordkeeping and reporting provisions of §63.2346(a)(4)(vii)(B) or §63.2346(a)(4)(vii)(C). You must identify in your notification of compliance status report required by §63.2382(d) the subpart of this part 63 with which the owner or operator of the offsite reloading or cleaning facility complies.

(b) *Transfer racks.* For each transfer rack that is part of the collection of transfer racks that meets the total actual annual facility-level organic liquid loading volume criterion for control in Table 2 to this subpart, items 7 through 10, you must comply with paragraph (b)(1), (b)(2), or (b)(3) of this section for each arm in the transfer rack loading an organic liquid whose organic HAP content meets the organic HAP criterion for control in Table 2 to this subpart, items 7 through 10. For existing affected sources, you must comply with paragraph (b)(1), (b)(2), or (b)(3)(i) of this section during the loading of organic liquids into transport vehicles. For new affected sources, you must comply with paragraph (b)(1), (b)(2), or (b)(3)(i) and (ii) of this section during the loading of organic liquids into transport vehicles and containers. If the total actual annual facility-level organic liquid loading volume at any affected source is equal to or greater than the loading volume criteria for control in Table 2 to this subpart, but at a later date is less than the loading volume criteria for control, compliance with paragraph (b)(1), (b)(2), or (b)(3) of this section is no longer required. For new sources and reconstructed sources, as defined in §63.2338(d) and (e), if at a later date, the total actual annual facility-level organic liquid loading volume again becomes equal to or greater than the loading volume criteria for control in Table 2 to this subpart, the owner or operator must comply with paragraph (b)(1), (b)(2), or (b)(3)(i) and (ii) of this section immediately, as specified in §63.2342(a)(3). For existing sources, as defined in §63.2338(f), if at a later date, the total actual annual facility-level organic liquid loading volume again becomes equal to or greater than the loading volume criteria for control in Table 2 to this subpart, the owner or operator must comply with paragraph (b)(1), (b)(2), or (b)(3)(i) of this section immediately, as specified in §63.2342(b)(3)(i), unless an alternative compliance schedule has been approved under §63.2342(b)(3)(ii) and subject to the use limitation specified in §63.2342(b)(3)(ii)(I).

(1) Meet the emission limits specified in Table 2 to this subpart and comply with the applicable requirements for transfer racks specified in 40 CFR part 63, subpart SS, for meeting emission limits.

(2) Route emissions to fuel gas systems or back into a process as specified in 40 CFR part 63, subpart SS.

(3)(i) Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into transport vehicles to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header.

(ii) Use a vapor balancing system that routes the organic HAP vapors displaced from the loading of organic liquids into containers directly (e.g., no intervening tank or containment area such as a room) to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header.

(c) *Equipment leak components.* For each pump, valve, and sampling connection that operates in organic liquids service for at least 300 hours per year, you must comply with the applicable requirements under 40 CFR part 63, subpart TT (control level 1), subpart UU (control level 2), or subpart H. Pumps, valves, and sampling connectors that are insulated to provide protection against persistent sub-freezing temperatures are subject to the “difficult to monitor” provisions in the applicable subpart selected by the owner or operator. This paragraph only applies if the affected source has at least one storage tank or transfer rack that meets the applicability criteria for control in Table 2 to this subpart.

(d) *Transport vehicles.* For each transport vehicle equipped with vapor collection equipment that is loaded at a transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, you must comply with paragraph (d)(1) of this section. For each transport vehicle without vapor collection equipment that is loaded at a transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, you must comply with paragraph (d)(2) of this section.

(1) Follow the steps in 40 CFR 60.502(e) to ensure that organic liquids are loaded only into vapor-tight transport vehicles and comply with the provisions in 40 CFR 60.502(f) through (i), except substitute the term “transport vehicle” at each occurrence of the term “tank truck” or “gasoline tank truck” in those paragraphs.

(2) Ensure that organic liquids are loaded only into transport vehicles that have a current certification in accordance with the U.S. Department of Transportation (DOT) pressure test requirements in 49 CFR part 180 for cargo tanks or 49 CFR 173.31 for tank cars.

(e) *Operating limits.* For each high throughput transfer rack, you must meet each operating limit in Table 3 to this subpart for each control device used to comply with the provisions of this subpart whenever emissions from the loading of organic liquids are routed to the control device. For each storage tank and low throughput transfer rack, you must comply with the requirements for monitored parameters as specified in subpart SS of this part for storage vessels and, during the loading of organic liquids, for low throughput transfer racks, respectively. Alternatively, you may comply with the operating limits in Table 3 to this subpart.

(f) If you elect to demonstrate compliance with a percent reduction requirement in Table 2 to this subpart using total organic compounds (TOC) rather than organic HAP, you must first demonstrate, subject to approval of the Administrator, that TOC is an appropriate surrogate for organic HAP in your case; that is, for your storage tank(s) and/or transfer rack(s), the percent destruction of organic HAP is equal to or higher than the percent destruction of TOC. This demonstration must be conducted prior to or during the initial compliance test.

(g) As provided in §63.6(g), you may request approval from the Administrator to use an alternative to the emission limitations, operating limits, and work practice standards in this section. You must follow the procedures in §63.177(b) through (e) in applying for permission to use such an alternative. If you apply for permission to use an alternative to the emission limitations, operating limits, and work practice standards in this section, you must submit the information described in §63.6(g)(2).

(h) [Reserved]

(i) Opening of a safety device is allowed at any time that it is required to avoid unsafe operating conditions.

(j) If you elect to comply with this subpart by combining emissions from different emission sources subject to this subpart in a single control device, then you must comply with the provisions specified in §63.982(f).

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42908, July 28, 2006]

General Compliance Requirements

§ 63.2350 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations, operating limits, and work practice standards in this subpart at all times when the equipment identified in §63.2338(b)(1) through (4) is in OLD operation.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(c) Except for emission sources not required to be controlled as specified in §63.2343, you must develop a written startup, shutdown, and malfunction (SSM) plan according to the provisions in §63.6(e)(3).

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 20463, Apr. 20, 2006; 71 FR 42909, July 28, 2006]

Testing and Initial Compliance Requirements

§ 63.2354 What performance tests, design evaluations, and performance evaluations must I conduct?

(a)(1) For each performance test that you conduct, you must use the procedures specified in subpart SS of this part and the provisions specified in paragraph (b) of this section.

(2) For each design evaluation you conduct, you must use the procedures specified in subpart SS of this part.

(3) For each performance evaluation of a continuous emission monitoring system (CEMS) you conduct, you must follow the requirements in §63.8(e).

(b)(1) For nonflare control devices, you must conduct each performance test according to the requirements in §63.7(e)(1), and either §63.988(b), §63.990(b), or §63.995(b), using the procedures specified in §63.997(e).

(2) You must conduct three separate test runs for each performance test on a nonflare control device as specified in §§63.7(e)(3) and 63.997(e)(1)(v). Each test run must last at least 1 hour, except as provided in §63.997(e)(1)(v)(A) and (B).

(3)(i) In addition to EPA Method 25 or 25A of 40 CFR part 60, appendix A, to determine compliance with the organic HAP or TOC emission limit, you may use EPA Method 18 of 40 CFR part 60, appendix A, as specified in paragraph (b)(3)(i) of this section. As an alternative to EPA Method 18, you may use ASTM D6420–99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (incorporated by reference, see §63.14), under the conditions specified in paragraph (b)(3)(ii) of this section.

(A) If you use EPA Method 18 to measure compliance with the percentage efficiency limit, you must first determine which organic HAP are present in the inlet gas stream (i.e., uncontrolled emissions) using knowledge of the organic liquids or the screening procedure described in EPA Method 18. In conducting the performance test, you must analyze samples collected as specified in EPA Method 18, simultaneously at the inlet and outlet of the control device. Quantify the emissions for the same organic HAP identified as present in the inlet gas stream for both the inlet and outlet gas streams of the control device.

(B) If you use EPA Method 18 of 40 CFR part 60, appendix A, to measure compliance with the emission concentration limit, you must first determine which organic HAP are present in the inlet gas stream using knowledge of the organic liquids or the screening procedure described in EPA Method 18. In conducting the performance test, analyze samples collected as specified in EPA Method 18 at the outlet of the control device. Quantify the control device outlet emission concentration for the same organic HAP identified as present in the inlet or uncontrolled gas stream.

(ii) You may use ASTM D6420–99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (incorporated by reference, see §63.14), as an alternative to EPA Method 18 if the target concentration is between 150 parts per billion by volume and 100 ppmv and either of the conditions specified in paragraph (b)(2)(ii)(A) or (B) of this section exists. For target compounds not listed in Section 1.1 of ASTM D6420–99 (Reapproved 2004) and not amenable to detection by mass spectrometry, you may not use ASTM D6420–99 (Reapproved 2004).

(A) The target compounds are those listed in Section 1.1 of ASTM D6420–99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (incorporated by reference, see §63.14),; or

(B) For target compounds not listed in Section 1.1 of ASTM D6420–99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (incorporated by reference, see §63.14), but potentially detected by mass spectrometry, the additional system continuing calibration check after each run, as detailed in ASTM D6420–99 (Reapproved 2004), Section 10.5.3, must be followed, met, documented, and submitted with the data report, even if there is no moisture condenser used or the compound is not considered water-soluble.

(4) If a principal component of the uncontrolled or inlet gas stream to the control device is formaldehyde, you may use EPA Method 316 of appendix A of this part instead of EPA Method 18 of 40 CFR part 60, appendix A, for measuring the formaldehyde. If formaldehyde is the predominant organic HAP in the inlet gas stream, you may use EPA Method 316 alone to measure formaldehyde either at the inlet and outlet of the control device using the formaldehyde control efficiency as a surrogate for total organic HAP or TOC efficiency, or at the outlet of a combustion device for determining compliance with the emission concentration limit.

(5) You may not conduct performance tests during periods of SSM, as specified in §63.7(e)(1).

(c) To determine the HAP content of the organic liquid, you may use EPA Method 311 of 40 CFR part 63, appendix A, or other method approved by the Administrator. In addition, you may use other means, such as voluntary consensus standards, material safety data sheets (MSDS), or certified product data sheets, to determine the HAP content of the organic liquid. If the method you select to determine the HAP content provides HAP content ranges, you must use the upper end of each HAP content range in determining the total HAP content of the organic liquid. The EPA may require you to test the HAP content of an organic liquid using EPA Method 311 or other method approved by the Administrator. If the results of the EPA Method 311 (or any other approved method) are different from the HAP content determined by another means, the EPA Method 311 (or approved method) results will govern.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42909, July 28, 2006]

§ 63.2358 By what date must I conduct performance tests and other initial compliance demonstrations?

(a) You must conduct initial performance tests and design evaluations according to the schedule in §63.7(a)(2), or by the compliance date specified in any applicable State or Federal new source review construction permit to which the affected source is already subject, whichever is earlier.

(b)(1) For storage tanks and transfer racks at existing affected sources complying with the emission limitations listed in Table 2 to this subpart, you must demonstrate initial compliance with the emission limitations within 180 days after February 5, 2007.

(2) For storage tanks and transfer racks at reconstructed or new affected sources complying with the emission limitations listed in Table 2 to this subpart, you must conduct your initial compliance demonstration with the emission limitations within 180 days after the initial startup date for the affected source or February 3, 2004, whichever is later.

(c)(1) For storage tanks at existing affected sources complying with the work practice standard in Table 4 to this subpart, you must conduct your initial compliance demonstration the next time the storage tank is emptied and degassed, but not later than 10 years after February 3, 2004.

(2) For transfer racks and equipment leak components at existing affected sources complying with the work practice standards in Table 4 to this subpart, you must conduct your initial compliance demonstration within 180 days after February 5, 2007.

(d) For storage tanks, transfer racks, and equipment leak components at reconstructed or new affected sources complying with the work practice standards in Table 4 to this subpart, you must conduct your initial compliance demonstration within 180 days after the initial startup date for the affected source.

§ 63.2362 When must I conduct subsequent performance tests?

(a) For nonflare control devices, you must conduct subsequent performance testing required in Table 5 to this subpart, item 1, at any time the EPA requests you to in accordance with section 114 of the CAA.

(b)(1) For each transport vehicle that you own that is equipped with vapor collection equipment and that is loaded with organic liquids at a transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, you must perform the vapor tightness testing required in Table 5 to this subpart, item 2, on that transport vehicle at least once per year.

(2) For transport vehicles that you own that do not have vapor collection equipment, you must maintain current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR part 180 for cargo tanks or 49 CFR 173.31 for tank cars.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42910, July 28, 2006]

§ 63.2366 What are my monitoring installation, operation, and maintenance requirements?

(a) You must install, operate, and maintain a CMS on each control device required in order to comply with this subpart. If you use a continuous parameter monitoring system (CPMS) (as defined in §63.981), you must comply with the applicable requirements for CPMS in subpart SS of this part for the control device being used. If you use a continuous emissions monitoring system (CEMS), you must comply with the requirements in §63.8.

(b) For nonflare control devices controlling storage tanks and low throughput transfer racks, you must submit a monitoring plan according to the requirements in subpart SS of this part for monitoring plans.

§ 63.2370 How do I demonstrate initial compliance with the emission limitations, operating limits, and work practice standards?

(a) You must demonstrate initial compliance with each emission limitation and work practice standard that applies to you as specified in Tables 6 and 7 to this subpart.

(b) You demonstrate initial compliance with the operating limits requirements specified in §63.2346(e) by establishing the operating limits during the initial performance test or design evaluation.

(c) You must submit the results of the initial compliance determination in the Notification of Compliance Status according to the requirements in §63.2382(d).

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42910, July 28, 2006]

Continuous Compliance Requirements

§ 63.2374 When do I monitor and collect data to demonstrate continuous compliance and how do I use the collected data?

(a) You must monitor and collect data according to subpart SS of this part and paragraphs (b) and (c) of this section.

(b) When using a control device to comply with this subpart, you must monitor continuously or collect data at all required intervals at all times that the emission source and control device are in OLD operation, except for CMS malfunctions (including any malfunction preventing the CMS from operating properly), associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments).

(c) Do not use data recorded during CMS malfunctions, associated repairs, required quality assurance or control activities, or periods when emissions from organic liquids are not routed to the control device in

data averages and calculations used to report emission or operating levels. Do not use such data in fulfilling a minimum data availability requirement, if applicable. You must use all of the data collected during all other periods, including periods of SSM, in assessing the operation of the control device.

§ 63.2378 How do I demonstrate continuous compliance with the emission limitations, operating limits, and work practice standards?

(a) You must demonstrate continuous compliance with each emission limitation, operating limit, and work practice standard in Tables 2 through 4 to this subpart that applies to you according to the methods specified in subpart SS of this part and in Tables 8 through 10 to this subpart, as applicable.

(b) You must follow the requirements in §63.6(e)(1) and (3) during periods of startup, shutdown, malfunction, or nonoperation of the affected source or any part thereof. In addition, the provisions of paragraphs (b)(1) through (3) of this section apply.

(1) The emission limitations in this subpart apply at all times except during periods of nonoperation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies. The emission limitations of this subpart apply during periods of SSM, except as provided in paragraphs (b)(2) and (3) of this section. However, if a SSM, or period of nonoperation of one portion of the affected source does not affect the ability of a particular emission source to comply with the emission limitations to which it is subject, then that emission source is still required to comply with the applicable emission limitations of this subpart during the startup, shutdown, malfunction, or period of nonoperation.

(2) The owner or operator must not shut down control devices or monitoring systems that are required or utilized for achieving compliance with this subpart during periods of SSM while emissions are being routed to such items of equipment if the shutdown would contravene requirements of this subpart applicable to such items of equipment. This paragraph (b)(2) does not apply if the item of equipment is malfunctioning. This paragraph (b)(2) also does not apply if the owner or operator shuts down the compliance equipment (other than monitoring systems) to avoid damage due to a contemporaneous SSM of the affected source or portion thereof. If the owner or operator has reason to believe that monitoring equipment would be damaged due to a contemporaneous SSM of the affected source of portion thereof, the owner or operator must provide documentation supporting such a claim in the next Compliance report required in Table 11 to this subpart, item 1. Once approved by the Administrator, the provision for ceasing to collect, during a SSM, monitoring data that would otherwise be required by the provisions of this subpart must be incorporated into the SSM plan.

(3) During SSM, you must implement, to the extent reasonably available, measures to prevent or minimize excess emissions. For purposes of this paragraph (b)(3), the term “excess emissions” means emissions greater than those allowed by the emission limits that apply during normal operational periods. The measures to be taken must be identified in the SSM plan, and may include, but are not limited to, air pollution control technologies, recovery technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the affected source. Back-up control devices are not required, but may be used if available.

(c) Periods of planned routine maintenance of a control device used to control storage tanks or transfer racks, during which the control device does not meet the emission limits in Table 2 to this subpart, must not exceed 240 hours per year.

(d) If you elect to route emissions from storage tanks or transfer racks to a fuel gas system or to a process, as allowed by §63.982(d), to comply with the emission limits in Table 2 to this subpart, the total aggregate amount of time during which the emissions bypass the fuel gas system or process during the calendar year without being routed to a control device, for all reasons (except SSM or product changeovers of flexible operation units and periods when a storage tank has been emptied and degassed), must not exceed 240 hours.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 20463, Apr. 20, 2006]

Notifications, Reports, and Records

§ 63.2382 What notifications must I submit and when and what information should be submitted?

(a) You must submit each notification in subpart SS of this part, Table 12 to this subpart, and paragraphs (b) through (d) of this section that applies to you. You must submit these notifications according to the schedule in Table 12 to this subpart and as specified in paragraphs (b) through (d) of this section.

(b)(1) *Initial Notification.* If you startup your affected source before February 3, 2004, you must submit the Initial Notification no later than 120 calendar days after February 3, 2004.

(2) If you startup your new or reconstructed affected source on or after February 3, 2004, you must submit the Initial Notification no later than 120 days after initial startup.

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

(d)(1) *Notification of Compliance Status.* If you are required to conduct a performance test, design evaluation, or other initial compliance demonstration as specified in Table 5, 6, or 7 to this subpart, you must submit a Notification of Compliance Status.

(2) The Notification of Compliance Status must include the information required in §63.999(b) and in paragraphs (d)(2)(i) through (viii) of this section.

(i) The results of any applicability determinations, emission calculations, or analyses used to identify and quantify organic HAP emissions from the affected source.

(ii) The results of emissions profiles, performance tests, engineering analyses, design evaluations, flare compliance assessments, inspections and repairs, and calculations used to demonstrate initial compliance according to Tables 6 and 7 to this subpart. For performance tests, results must include descriptions of sampling and analysis procedures and quality assurance procedures.

(iii) Descriptions of monitoring devices, monitoring frequencies, and the operating limits established during the initial compliance demonstrations, including data and calculations to support the levels you establish.

(iv) Descriptions of worst-case operating and/or testing conditions for the control device(s).

(v) Identification of emission sources subject to overlapping requirements described in §63.2396 and the authority under which you will comply.

(vi) The applicable information specified in §63.1039(a)(1) through (3) for all pumps and valves subject to the work practice standards for equipment leak components in Table 4 to this subpart, item 4.

(vii) If you are complying with the vapor balancing work practice standard for transfer racks according to Table 4 to this subpart, item 3.a, include a statement to that effect and a statement that the pressure vent settings on the affected storage tanks are greater than or equal to 2.5 psig.

(viii) The information specified in §63.2386(c)(10)(i), unless the information has already been submitted with the first Compliance report. If the information specified in §63.2386(c)(10)(i) has already been submitted with the first Compliance report, the information specified in §63.2386(d)(3) and (4), as applicable, shall be submitted instead.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42910, July 28, 2006]

§ 63.2386 What reports must I submit and when and what information is to be submitted in each?

(a) You must submit each report in subpart SS of this part, Table 11 to this subpart, Table 12 to this subpart, and in paragraphs (c) through (e) of this section 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 according to Table 11 to this subpart and by the dates shown in paragraphs (b)(1) through (3) of this section, by the dates shown in subpart SS of this part, and by the dates shown in Table 12 to this subpart, whichever are applicable.

(1)(i) The first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.2342 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 affected source in §63.2342.

(ii) The first Compliance report must be postmarked 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 §63.2342.

(2)(i) 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.

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

(3) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, 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) and (2) of this section.

(c) *First Compliance report.* The first Compliance report must contain the information specified in paragraphs (c)(1) through (10) of this section.

(1) Company name and address.

(2) Statement by a responsible official, including the official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

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

(4) Any changes to the information listed in §63.2382(d)(2) that have occurred since the submittal of the Notification of Compliance Status.

(5) If you had a SSM during the reporting period and you took actions consistent with your SSM plan, the Compliance report must include the information described in §63.10(d)(5)(i).

(6) If there are no deviations from any emission limitation or operating limit that applies to you and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations, operating limits, or work practice standards during the reporting period.

(7) If there were no periods during which the CMS 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.

(8) For closed vent systems and control devices used to control emissions, the information specified in paragraphs (c)(8)(i) and (ii) of this section for those planned routine maintenance activities that would require the control device to not meet the applicable emission limit.

(i) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description must include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(ii) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description must include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the applicable emission limit due to planned routine maintenance.

(9) A listing of all transport vehicles into which organic liquids were loaded at transfer racks that are subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, during the previous 6 months for which vapor tightness documentation as required in §63.2390(c) was not on file at the facility.

(10)(i) A listing of all transfer racks (except those racks at which only unloading of organic liquids occurs) and of tanks greater than or equal to 18.9 cubic meters (5,000 gallons) that are part of the affected source but are not subject to any of the emission limitations, operating limits, or work practice standards of this subpart.

(ii) If the information specified in paragraph (c)(10)(i) of this section has already been submitted with the Notification of Compliance Status, the information specified in paragraphs (d)(3) and (4) of this section, as applicable, shall be submitted instead.

(d) *Subsequent Compliance reports* . Subsequent Compliance reports must contain the information in paragraphs (c)(1) through (9) of this section and, where applicable, the information in paragraphs (d)(1) through (4) of this section.

(1) For each deviation from an emission limitation occurring at an affected source where you are using a CMS to comply with an emission limitation in this subpart, you must include in the Compliance report the applicable information in paragraphs (d)(1)(i) through (xii) of this section. This includes periods of SSM.

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

(ii) The dates and times that each CMS was inoperative, except for zero (low-level) and high-level checks.

(iii) For each CMS that was out of control, the information in §63.8(c)(8).

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

(v) A summary of the total duration of the deviations during the reporting period, and the total duration as a percentage of the total emission source operating time during that reporting period.

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

(vii) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percentage of the total emission source operating time during that reporting period.

(viii) An identification of each organic HAP that was potentially emitted during each deviation based on the known organic HAP contained in the liquid(s).

(ix) A brief description of the emission source(s) at which the CMS deviation(s) occurred.

(x) A brief description of each CMS that was out of control during the period.

(xi) The date of the latest certification or audit for each CMS.

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

(2) Include in the Compliance report the information in paragraphs (d)(2)(i) through (iii) of this section, as applicable.

(i) For each storage tank and transfer rack subject to control requirements, include periods of planned routine maintenance during which the control device did not comply with the applicable emission limits in Table 2 to this subpart.

(ii) For each storage tank controlled with a floating roof, include a copy of the inspection record (required in §63.1065(b)) when inspection failures occur.

(iii) If you elect to use an extension for a floating roof inspection in accordance with §63.1063(c)(2)(iv)(B) or (e)(2), include the documentation required by those paragraphs.

(3)(i) A listing of any storage tank that became subject to controls based on the criteria for control specified in Table 2 to this subpart, items 1 through 6, since the filing of the last Compliance report.

(ii) A listing of any transfer rack that became subject to controls based on the criteria for control specified in Table 2 to this subpart, items 7 through 10, since the filing of the last Compliance report.

(4)(i) A listing of tanks greater than or equal to 18.9 cubic meters (5,000 gallons) that became part of the affected source but are not subject to any of the emission limitations, operating limits, or work practice standards of this subpart, since the last Compliance report.

(ii) A listing of all transfer racks (except those racks at which only the unloading of organic liquids occurs) that became part of the affected source but are not subject to any of the emission limitations, operating limits, or work practice standards of this subpart, since the last Compliance report.

(e) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 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 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 11 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission limitation in this subpart, we will consider submission of the Compliance report as satisfying any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report will not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the applicable title V permitting authority.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42910, July 28, 2006]

§ 63.2390 What records must I keep?

(a) For each emission source identified in §63.2338 that does not require control under this subpart, you must keep all records identified in §63.2343.

(b) For each emission source identified in §63.2338 that does require control under this subpart:

(1) You must keep all records identified in subpart SS of this part and in Table 12 to this subpart that are applicable, including records related to notifications and reports, SSM, performance tests, CMS, and performance evaluation plans; and

(2) You must keep the records required to show continuous compliance, as required in subpart SS of this part and in Tables 8 through 10 to this subpart, with each emission limitation, operating limit, and work practice standard that applies to you.

(c) For each transport vehicle into which organic liquids are loaded at a transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, you must keep the applicable records in paragraphs (c)(1) and (2) of this section or alternatively the verification records in paragraph (c)(3) of this section.

(1) For transport vehicles equipped with vapor collection equipment, the documentation described in 40 CFR 60.505(b), except that the test title is: Transport Vehicle Pressure Test-EPA Reference Method 27.

(2) For transport vehicles without vapor collection equipment, current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR part 180 for cargo tanks or 49 CFR 173.31 for tank cars.

(3) In lieu of keeping the records specified in paragraph (c)(1) or (2) of this section, as applicable, the owner or operator shall record that the verification of U.S. DOT tank certification or Method 27 of appendix A to 40 CFR part 60 testing, required in Table 5 to this subpart, item 2, has been performed. Various methods for the record of verification can be used, such as: A check-off on a log sheet, a list of U.S. DOT serial numbers or Method 27 data, or a position description for gate security showing that the security guard will not allow any trucks on site that do not have the appropriate documentation.

(d) You must keep records of the total actual annual facility-level organic liquid loading volume as defined in §63.2406 through transfer racks to document the applicability, or lack thereof, of the emission limitations in Table 2 to this subpart, items 7 through 10.

(e) An owner or operator who elects to comply with §63.2346(a)(4) shall keep the records specified in paragraphs (e)(1) through (3) of this section.

(1) A record of the U.S. DOT certification required by §63.2346(a)(4)(ii).

(2) A record of the pressure relief vent setting specified in §63.2348(a)(4)(v).

(3) If complying with §63.2348(a)(4)(vi)(B), keep the records specified in paragraphs (e)(3)(i) and (ii) of this section.

(i) A record of the equipment to be used and the procedures to be followed when reloading the cargo tank or tank car and displacing vapors to the storage tank from which the liquid originates.

(ii) A record of each time the vapor balancing system is used to comply with §63.2348(a)(4)(vi)(B).

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42910, July 28, 2006]

§ 63.2394 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 inspection and review according to §63.10(b)(1), including records stored in electronic form at a separate location.

(b) As specified in §63.10(b)(1), you must keep your files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You may keep the records off site for the remaining 3 years.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42911, July 28, 2006]

Other Requirements and Information

§ 63.2396 What compliance options do I have if part of my plant is subject to both this subpart and another subpart?

(a) *Compliance with other regulations for storage tanks* . (1) After the compliance dates specified in §63.2342, you are in compliance with the provisions of this subpart for any storage tank that is assigned to the OLD affected source and that is both controlled with a floating roof and is in compliance with the provisions of either 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, except that records shall be kept for 5 years rather than 2 years for storage tanks that are assigned to the OLD affected source.

(2) After the compliance dates specified in §63.2342, you are in compliance with the provisions of this subpart for any storage tank with a fixed roof that is assigned to the OLD affected source and that is both controlled with a closed vent system and control device and is in compliance with either 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, except that you must comply with the monitoring, recordkeeping, and reporting requirements in this subpart.

(3) As an alternative to paragraphs (a)(1) and (2) of this section, if a storage tank assigned to the OLD affected source is subject to control under 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, you may elect to comply only with the requirements of this subpart for storage tanks meeting the applicability criteria for control in Table 2 to this subpart.

(b) *Compliance with other regulations for transfer racks* . After the compliance dates specified in §63.2342, if you have a transfer rack that is subject to 40 CFR part 61, subpart BB, and that transfer rack is in OLD operation, you must meet all of the requirements of this subpart for that transfer rack when the transfer rack is in OLD operation during the loading of organic liquids.

(c) *Compliance with other regulations for equipment leak components.* (1) After the compliance dates specified in §63.2342, if you have pumps, valves, or sampling connections that are subject to a 40 CFR part 60 subpart, and those pumps, valves, and sampling connections are in OLD operation and in organic liquids service, as defined in this subpart, you must comply with the provisions of each subpart for those equipment leak components.

(2) After the compliance dates specified in §63.2342, if you have pumps, valves, or sampling connections subject to 40 CFR part 63, subpart GGG, and those pumps, valves, and sampling connections are in OLD operation and in organic liquids service, as defined in this subpart, you may elect to comply with the provisions of this subpart for all such equipment leak components. You must identify in the Notification of Compliance Status required by §63.2382(b) the provisions with which you will comply.

(d) [Reserved]

(e) *Overlap with other regulations for monitoring, recordkeeping, and reporting* . (1) *Control devices* . After the compliance dates specified in §63.2342, if any control device subject to this subpart is also subject to monitoring, recordkeeping, and reporting requirements of another 40 CFR part 63 subpart, the owner or operator must be in compliance with the monitoring, recordkeeping, and reporting requirements of this subpart EEEE. If complying with the monitoring, recordkeeping, and reporting requirements of the other subpart satisfies the monitoring, recordkeeping, and reporting requirements of this subpart, the owner or operator may elect to continue to comply with the monitoring, recordkeeping, and reporting requirements of the other subpart. In such instances, the owner or operator will be deemed to be in compliance with the monitoring, recordkeeping, and reporting requirements of this subpart. The owner or operator must identify the other subpart being complied with in the Notification of Compliance Status required by §63.2382(b).

(2) *Equipment leak components* . After the compliance dates specified in §63.2342, if you are applying the applicable recordkeeping and reporting requirements of another 40 CFR part 63 subpart to the valves, pumps, and sampling connection systems associated with a transfer rack subject to this subpart that only unloads organic liquids directly to or via pipeline to a non-tank process unit component or to a storage tank subject to the other 40 CFR part 63 subpart, the owner or operator must be in compliance with the recordkeeping and reporting requirements of this subpart EEEE. If complying with the recordkeeping and reporting requirements of the other subpart satisfies the recordkeeping and reporting requirements of this subpart, the owner or operator may elect to continue to comply with the recordkeeping and reporting requirements of the other subpart. In such instances, the owner or operator will be deemed to be in compliance with the recordkeeping and reporting requirements of this subpart. The owner or operator must identify the other subpart being complied with in the Notification of Compliance Status required by §63.2382(b).

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42911, July 28, 2006]

§ 63.2398 What parts of the General Provisions apply to me?

Table 12 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.2402 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. Environmental Protection Agency (U.S. EPA) or a delegated authority such as your State, local, or eligible tribal agency. If the EPA Administrator has delegated authority to your State, local, or eligible tribal agency, then that agency, as well as the EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office (see list in §63.13) to find out if this subpart is delegated to your State, local, or eligible tribal agency.

(b) In delegating implementation and enforcement authority for this subpart to a State, local, or eligible tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraphs (b)(1) through (4) of this section are retained by the EPA Administrator and are not delegated to the State, local, or eligible tribal agency.

(1) Approval of alternatives to the nonopacity emission limitations, operating limits, and work practice standards in §63.2346(a) through (c) under §63.6(g).

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

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

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

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42911, July 28, 2006]

§ 63.2406 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in §63.2, 40 CFR part 63, subparts H, PP, SS, TT, UU, and WW, and in this section. If the same term is defined in another subpart and in this section, it will have the meaning given in this section for purposes of this subpart. Notwithstanding the introductory language in §63.921, the terms “container” and “safety device” shall have the meaning found in this subpart and not in §63.921.

Actual annual average temperature, for organic liquids, means the temperature determined using the following methods:

(1) For heated or cooled storage tanks, use the calculated annual average temperature of the stored organic liquid as determined from a design analysis of the storage tank.

(2) For ambient temperature storage tanks:

(i) Use the annual average of the local (nearest) normal daily mean temperatures reported by the National Climatic Data Center; or

(ii) Use any other method that the EPA approves.

Annual average true vapor pressure means the equilibrium partial pressure exerted by the total Table 1 organic HAP in the stored or transferred organic liquid. For the purpose of determining if a liquid meets the definition of an organic liquid, the vapor pressure is determined using standard conditions of 77 degrees F and 29.92 inches of mercury. For the purpose of determining whether an organic liquid meets the applicability criteria in Table 2, items 1 through 6, to this subpart, use the actual annual average temperature as defined in this subpart. The vapor pressure value in either of these cases is determined:

(1) In accordance with methods described in American Petroleum Institute Publication 2517, Evaporative Loss from External Floating-Roof Tanks (incorporated by reference, see §63.14);

(2) Using standard reference texts;

(3) By the American Society for Testing and Materials Method D2879–83, 96 (incorporated by reference, see §63.14); or

(4) Using any other method that the EPA approves.

Bottoms receiver means a tank that collects distillation bottoms before the stream is sent for storage or for further processing downstream.

Cargo tank means a liquid-carrying tank permanently attached and forming an integral part of a motor vehicle or truck trailer. This term also refers to the entire cargo tank motor vehicle or trailer. For the purpose of this subpart, vacuum trucks used exclusively for maintenance or spill response are not considered cargo tanks.

Closed vent system means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapors from an emission point to a control device. This system does not include the vapor collection system that is part of some transport vehicles or the loading arm or hose that is used for vapor return. For transfer racks, the closed vent system begins at, and includes, the first block valve on the downstream side of the loading arm or hose used to convey displaced vapors.

Combustion device means an individual unit of equipment, such as a flare, oxidizer, catalytic oxidizer, process heater, or boiler, used for the combustion of organic emissions.

Container means a portable unit in which a material can be stored, transported, treated, disposed of, or otherwise handled. Examples of containers include, but are not limited to, drums and portable cargo containers known as “portable tanks” or “totes.”

Control device means any combustion device, recovery device, recapture device, or any combination of these devices used to comply with this subpart. Such equipment or devices include, but are not limited to, absorbers, adsorbers, condensers, and combustion devices. Primary condensers, steam strippers, and fuel gas systems are not considered control devices.

Crude oil means any of the naturally occurring liquids commonly referred to as crude oil, regardless of specific physical properties. Only those crude oils downstream of the first point of custody transfer after the production field are considered crude oils in this subpart.

Custody transfer means the transfer of hydrocarbon liquids after processing and/or treatment in the producing operations, or from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

Design evaluation means a procedure for evaluating control devices that complies with the requirements in §63.985(b)(1)(i).

Deviation means any instance in which an affected source subject to this subpart, or portion thereof, 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 (including any operating limit) or work practice standard;

(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 (including any operating limit) or work practice standard in this subpart during SSM.

Emission limitation means an emission limit, opacity limit, operating limit, or visible emission limit.

Equipment leak component means each pump, valve, and sampling connection system used in organic liquids service at an OLD operation. Valve types include control, globe, gate, plug, and ball. Relief and check valves are excluded.

Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals (4.0 pounds per square inch absolute (psia)) or greater which is used as a fuel for internal combustion engines. Aviation gasoline is included in this definition.

High throughput transfer rack means those transfer racks that transfer into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) a total of 11.8 million liters per year or greater of organic liquids.

In organic liquids service means that an equipment leak component contains or contacts organic liquids having 5 percent by weight or greater of the organic HAP listed in Table 1 to this subpart.

Low throughput transfer rack means those transfer racks that transfer into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) less than 11.8 million liters per year of organic liquids.

On-site or *on site* means, with respect to records required to be maintained by this subpart or required by another subpart referenced by this subpart, that records are stored at a location within a major source which encompasses the affected source. On-site includes, but is not limited to, storage at the affected source to which the records pertain, storage in central files elsewhere at the major source, or electronically available at the site.

Organic liquid means:

(1) Any non-crude oil liquid or liquid mixture that contains 5 percent by weight or greater of the organic HAP listed in Table 1 to this subpart, as determined using the procedures specified in §63.2354(c).

(2) Any crude oils downstream of the first point of custody transfer.

(3) Organic liquids for purposes of this subpart do not include the following liquids:

(i) Gasoline (including aviation gasoline), kerosene (No. 1 distillate oil), diesel (No. 2 distillate oil), asphalt, and heavier distillate oils and fuel oils;

(ii) Any fuel consumed or dispensed on the plant site directly to users (such as fuels for fleet refueling or for refueling marine vessels that support the operation of the plant);

(iii) Hazardous waste;

(iv) Wastewater;

(v) Ballast water: or

(vi) Any non-crude oil liquid with an annual average true vapor pressure less than 0.7 kilopascals (0.1 psia).

Organic liquids distribution (OLD) operation means the combination of activities and equipment used to store or transfer organic liquids into, out of, or within a plant site regardless of the specific activity being performed. Activities include, but are not limited to, storage, transfer, blending, compounding, and packaging.

Permitting authority means one of the following:

(1) The State Air Pollution Control Agency, local agency, or other agency authorized by the EPA Administrator to carry out a permit program under 40 CFR part 70; or

(2) The EPA Administrator, in the case of EPA-implemented permit programs under title V of the CAA (42 U.S.C. 7661) and 40 CFR part 71.

Plant site means all contiguous or adjoining surface property that is under common control, including surface properties that are separated only by a road or other public right-of-way. Common control includes surface properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination.

Research and development facility means laboratory and pilot plant operations whose primary purpose is to conduct research and development into new processes and products, where the operations are under the close supervision of technically trained personnel, and which are not engaged in the manufacture of products for commercial sale, except in a *de minimis* manner.

Responsible official means responsible official as defined in 40 CFR 70.2 and 40 CFR 71.2, as applicable.

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device that functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event.

Shutdown means the cessation of operation of an OLD affected source, or portion thereof (other than as part of normal operation of a batch-type operation), including equipment required or used to comply with this subpart, or the emptying and degassing of a storage tank. Shutdown as defined here includes, but is not limited to, events that result from periodic maintenance, replacement of equipment, or repair.

Startup means the setting in operation of an OLD affected source, or portion thereof (other than as part of normal operation of a batch-type operation), for any purpose. Startup also includes the placing in operation of any individual piece of equipment required or used to comply with this subpart including, but not limited to, control devices and monitors.

Storage tank means a stationary unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, or reinforced plastic) that provide structural support and is designed to hold a bulk quantity of liquid. Storage tanks do not include:

(1) Units permanently attached to conveyances such as trucks, trailers, rail cars, barges, or ships;

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

(3) Bottoms receivers;

(4) Surge control vessels;

(5) Vessels storing wastewater; or

(6) Reactor vessels associated with a manufacturing process unit.

Tank car means a car designed to carry liquid freight by rail, and including a permanently attached tank.

Total actual annual facility-level organic liquid loading volume means the total facility-level actual volume of organic liquid loaded for transport within or out of the facility through transfer racks that are part of the affected source into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) based on a 3-year rolling average, calculated annually.

(1) For existing affected sources, each 3-year rolling average is based on actual facility-level loading volume during each calendar year (January 1 through December 31) in the 3-year period. For calendar year 2004 only (the first year of the initial 3-year rolling average), if an owner or operator of an affected source does not have actual loading volume data for the time period from January 1, 2004, through February 2, 2004 (the time period prior to the effective date of the OLD NESHAP), the owner or operator shall compute a facility-level loading volume for this time period as follows: At the end of the 2004 calendar year, the owner or operator shall calculate a daily average facility-level loading volume (based on the actual loading volume for February 3, 2004, through December 31, 2004) and use that daily average to estimate the facility-level loading volume for the period of time from January 1, 2004, through February 2, 2004. The owner or operator shall then sum the estimated facility-level loading volume from January 1, 2004, through February 2, 2004, and the actual facility-level loading volume from February 3, 2004, through December 31, 2004, to calculate the annual facility-level loading volume for calendar year 2004.

(2)(i) For new affected sources, the 3-year rolling average is calculated as an average of three 12-month periods. An owner or operator must select as the beginning calculation date with which to start the calculations as either the initial startup date of the new affected source or the first day of the calendar month following the month in which startup occurs. Once selected, the date with which the calculations begin cannot be changed.

(ii) The initial 3-year rolling average is based on the projected maximum facility-level annual loading volume for each of the 3 years following the selected beginning calculation date. The second 3-year rolling average is based on actual facility-level loading volume for the first year of operation plus a new projected maximum facility-level annual loading volume for second and third years following the selected beginning calculation date. The third 3-year rolling average is based on actual facility-level loading volume for the first 2 years of operation plus a new projected maximum annual facility-level loading volume for the third year following the beginning calculation date. Subsequent 3-year rolling averages are based on actual facility-level loading volume for each year in the 3-year rolling average.

Transfer rack means a single system used to load organic liquids into, or unload organic liquids out of, transport vehicles or containers. It includes all loading and unloading arms, pumps, meters, shutoff valves, relief valves, and other piping and equipment necessary for the transfer operation. Transfer equipment and operations that are physically separate (i.e., do not share common piping, valves, and other equipment) are considered to be separate transfer racks.

Transport vehicle means a cargo tank or tank car.

Vapor balancing system means: (1) A piping system that collects organic HAP vapors displaced from transport vehicles or containers during loading and routes the collected vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. For containers, the piping system must route the displaced vapors directly to the appropriate storage tank or to another storage tank connected to a common header in order to qualify as a vapor balancing system; or (2) a piping system that collects organic HAP vapors displaced from the loading of a storage tank and routes the collected vapors to the transport vehicle from which the storage tank is filled.

Vapor collection system means any equipment located at the source (i.e., at the OLD operation) that is not open to the atmosphere; that is composed of piping, connections, and, if necessary, flow-inducing devices; and that is used for:

(1) Containing and conveying vapors displaced during the loading of transport vehicles to a control device;

(2) Containing and directly conveying vapors displaced during the loading of containers; or

(3) Vapor balancing. This does not include any of the vapor collection equipment that is installed on the transport vehicle.

Vapor-tight transport vehicle means a transport vehicle that has been demonstrated to be vapor-tight. To be considered vapor-tight, a transport vehicle equipped with vapor collection equipment must undergo a pressure change of no more than 250 pascals (1 inch of water) within 5 minutes after it is pressurized to 4,500 pascals (18 inches of water). This capability must be demonstrated annually using the procedures specified in EPA Method 27 of 40 CFR part 60, appendix A. For all other transport vehicles, vapor

tightness is demonstrated by performing the U.S. DOT pressure test procedures for tank cars and cargo tanks.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42911, July 28, 2006]

Table 1 to Subpart EEEE of Part 63—Organic Hazardous Air Pollutants

You must use the organic HAP information listed in the following table to determine which of the liquids handled at your facility meet the HAP content criteria in the definition of Organic Liquid in §63.2406.

Compound name	CAS No.[1]
2,4-D salts and esters	94–75–7
Acetaldehyde	75–07–0
Acetonitrile	75–05–8
Acetophenone	98–86–2
Acrolein	107–02–8
Acrylamide	79–06–1
Acrylic acid	79–10–7
Acrylonitrile	107–13–1
Allyl chloride	107–05–1
Aniline	62–53–3
Benzene	71–43–2
Biphenyl	92–52–4
Butadiene (1,3-)	106–99–0
Carbon tetrachloride	56–23–5
Chloroacetic acid	79–11–8
Chlorobenzene	108–90–7
2-Chloro-1,3-butadiene (Chloroprene)	126–99–8
Chloroform	67–66–3
m-Cresol	108–39–4
o-Cresol	95–48–7
p-Cresol	106–44–5
Cresols/cresylic acid	1319–77–3
Cumene	98–82–8
Dibenzofurans	132–64–9
Dibutylphthalate	84–74–2
Dichloroethane (1,2-) (Ethylene dichloride) (EDC)	107–06–2
Dichloropropene (1,3-)	542–75–6
Diethanolamine	111–42–2

Compound name	CAS No.[1]
Diethyl aniline (N,N-)	121–69–7
Diethylene glycol monobutyl ether	112–34–5
Diethylene glycol monomethyl ether	111–77–3
Diethyl sulfate	64–67–5
Dimethyl formamide	68–12–2
Dimethylhydrazine (1,1-)	57–14–7
Dioxane (1,4-) (1,4-Diethyleneoxide)	123–91–1
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	106–89–8
Epoxybutane (1,2-)	106–88–7
Ethyl acrylate	140–88–5
Ethylbenzene	100–41–4
Ethyl chloride (Chloroethane)	75–00–3
Ethylene dibromide (Dibromomethane)	106–93–4
Ethylene glycol	107–21–1
Ethylene glycol dimethyl ether	110–71–4
Ethylene glycol monomethyl ether	109–86–4
Ethylene glycol monomethyl ether acetate	110–49–6
Ethylene glycol monophenyl ether	122–99–6
Ethylene oxide	75–21–8
Ethylidene dichloride (1,1-Dichloroethane)	75–34–3
Formaldehyde	50–00–0
Hexachloroethane	67–72–1
Hexane	110–54–3
Hydroquinone	123–31–9
Isophorone	78–59–1
Maleic anhydride	108–31–6
Methanol	67–56–1
Methyl chloride (Chloromethane)	74–87–3
Methylene chloride (Dichloromethane)	75–09–2
Methylenedianiline (4,4′-)	101–77–9
Methylene diphenyl diisocyanate	101–68–8
Methyl hydrazine	60–34–4
Methyl isobutyl ketone (Hexone) (MIBK)	108–10–1
Methyl methacrylate	80–62–6
Methyl tert-butyl ether (MTBE)	1634–04–4

Compound name	CAS No.[1]
Naphthalene	91–20–3
Nitrobenzene	98–95–3
Phenol	108–9–52
Phthalic anhydride	85–44–9
Polycyclic organic matter	50–32–8
Propionaldehyde	123–38–6
Propylene dichloride (1,2-Dichloropropane)	78–87–5
Propylene oxide	75–56–9
Quinoline	91–22–5
Styrene	100–42–5
Styrene oxide	96–09–3
Tetrachloroethane (1,1,2,2-)	79–34–5
Tetrachloroethylene (Perchloroethylene)	127–18–4
Toluene	108–88–3
Toluene diisocyanate (2,4-)	584–84–9
o-Toluidine	95–53–4
Trichlorobenzene (1,2,4-)	120–82–1
Trichloroethane (1,1,1-) (Methyl chloroform)	71–55–6
Trichloroethane (1,1,2-) (Vinyl trichloride)	79–00–5
Trichloroethylene	79–01–6
Triethylamine	121–44–8
Trimethylpentane (2,2,4-)	540–84–1
Vinyl acetate	108–05–4
Vinyl chloride (Chloroethylene)	75–01–4
Vinylidene chloride (1,1-Dichloroethylene)	75–35–4
Xylene (m-)	108–38–3
Xylene (o-)	95–47–6
Xylene (p-)	106–42–3
Xylenes (isomers and mixtures)	1330–20–7

[1]CAS numbers refer to the Chemical Abstracts Services registry number assigned to specific compounds, isomers, or mixtures of compounds.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42913, July 28, 2006]

Table 2 to Subpart EEEE of Part 63—Emission Limits

As stated in §63.2346, you must comply with the emission limits for the organic liquids distribution emission sources as follows:

If you own or operate . . .	And if . . .	Then you must . . .
1. A storage tank at an existing affected source with a capacity ≥18.9 cubic meters (5,000 gallons) and <189.3 cubic meters (50,000 gallons)	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is ≥27.6 kilopascals (4.0 psia) and <76.6 kilopascals (11.1 psia)	i. Reduce emissions of total organic HAP (or, upon approval, TOC) by at least 95 weight-percent or, as an option, to an exhaust concentration less than or equal to 20 ppmv, on a dry basis corrected to 3 percent oxygen for combustion devices using supplemental combustion air, by venting emissions through a closed vent system to any combination of control devices meeting the applicable requirements of 40 CFR part 63, subpart SS; OR
		ii. Comply with the work practice standards specified in Table 4 to this subpart, items 1.a, 1.b, or 1.c for tanks storing liquids described in that table.
	b. The stored organic liquid is crude oil	i. See the requirement in item 1.a.i or 1.a.ii of this table.
2. A storage tank at an existing affected source with a capacity ≥189.3 cubic meters (50,000 gallons).	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is <76.6 kilopascals (11.1 psia).	i. See the requirement in item 1.a.i or 1.a.ii of this table.
	b. The stored organic liquid is crude oil.	i. See the requirement in item 1.a.i or 1.a.ii of this table.
3. A storage tank at a reconstructed or new affected source with a capacity ≥18.9 cubic meters (5,000 gallons) and <37.9 cubic meters (10,000 gallons).	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is ≥27.6 kilopascals (4.0 psia) and <76.6 kilopascals (11.1 psia).	i. See the requirement in item 1.a.i or 1.a.ii of this table.
	b. The stored organic liquid is crude oil.	i. See the requirement in item 1.a.i or 1.a.ii of this table.
4. A storage tank at a reconstructed or new affected source with a capacity ≥37.9	a. The stored organic liquid is not crude oil and if the annual average true vapor	i. See the requirement in item 1.a.i or 1.a.ii of this table.

If you own or operate . . .	And if . . .	Then you must . . .
cubic meters (10,000 gallons) and <189.3 cubic meters (50,000 gallons).	pressure of the total Table 1 organic HAP in the stored organic liquid is ≥0.7 kilopascals (0.1 psia) and <76.6 kilopascals (11.1 psia).	
	b. The stored organic liquid is crude oil.	i. See the requirement in item 1.a.i or 1.a.ii of this table.
5. A storage tank at a reconstructed or new affected source with a capacity ≥189.3 cubic meters (50,000 gallons).	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is <76.6 kilopascals (11.1 psia).	i. See the requirement in item 1.a.i or 1.a.ii of this table.
	b. The stored organic liquid is crude oil.	i. See the requirement in item 1.a.i or 1.a.ii of this table.
6. A storage tank at an existing, reconstructed, or new affected source meeting the capacity criteria specified in Table 2 of this subpart, items 1 through 5	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is ≥76.6 kilopascals (11.1 psia)	i. Reduce emissions of total organic HAP (or, upon approval, TOC) by at least 95 weight-percent or, as an option, to an exhaust concentration less than or equal to 20 ppmv, on a dry basis corrected to 3 percent oxygen for combustion devices using supplemental combustion air, by venting emissions through a closed vent system to any combination of control devices meeting the applicable requirements of 40 CFR part 63, subpart SS; OR
		ii. Comply with the work practice standards specified in Table 4 to this subpart, item 2.a, for tanks storing the liquids described in that table.
7. A transfer rack at an existing facility where the total actual annual facility-level organic liquid loading volume through transfer racks is equal to or greater than 800,000 gallons and less than 10 million gallons	a. The total Table 1 organic HAP content of the organic liquid being loaded through one or more of the transfer rack's arms is at least 98 percent by weight and is being loaded into a transport vehicle	i. For all such loading arms at the rack, reduce emissions of total organic HAP (or, upon approval, TOC) from the loading of organic liquids either by venting the emissions that occur during loading through a closed vent system to any combination of control devices meeting the applicable requirements of 40 CFR part 63, subpart SS, achieving at least 98 weight-percent HAP reduction, OR, as an option, to an exhaust concentration less than or equal to 20 ppmv, on a dry basis corrected to 3 percent oxygen for combustion devices using supplemental combustion air; OR

If you own or operate . . .	And if . . .	Then you must . . .
		ii. During the loading of organic liquids, comply with the work practice standards specified in item 3 of Table 4 to this subpart.
8. A transfer rack at an existing facility where the total actual annual facility-level organic liquid loading volume through transfer racks is ≥10 million gallons.	a. One or more of the transfer rack's arms is loading an organic liquid into a transport vehicle	i. See the requirements in items 7.a.i and 7.a.ii of this table.
9. A transfer rack at a new facility where the total actual annual facility-level organic liquid loading volume through transfer racks is less than 800,000 gallons	a. The total Table 1 organic HAP content of the organic liquid being loaded through one or more of the transfer rack's arms is at least 25 percent by weight and is being loaded into a transport vehicle	i. See the requirements in items 7.a.i and 7.a.ii of this table.
	b. One or more of the transfer rack's arms is filling a container with a capacity equal to or greater than 55 gallons	i. For all such loading arms at the rack during the loading of organic liquids, comply with the provisions of §§63.924 through 63.927 of 40 CFR part 63, Subpart PP—National Emission Standards for Containers, Container Level 3 controls; OR ii. During the loading of organic liquids, comply with the work practice standards specified in item 3.a of Table 4 to this subpart.
10. A transfer rack at a new facility where the total actual annual facility-level organic liquid loading volume through transfer racks is equal to or greater than 800,000 gallons	a. One or more of the transfer rack's arms is loading an organic liquid into a transport vehicle	i. See the requirements in items 7.a.i and 7.a.ii of this table.
	b. One or more of the transfer rack's arms is filling a container with a capacity equal to or greater than 55 gallons	i. For all such loading arms at the rack during the loading of organic liquids, comply with the provisions of §§63.924 through 63.927 of 40 CFR part 63, Subpart PP—National Emission Standards for Containers, Container Level 3 controls; OR
		ii. During the loading of organic liquids, comply with the work practice standards specified in item 3.a of Table 4 to this subpart.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42913, July 28, 2006]

Table 3 to Subpart EEEE of Part 63—Operating Limits—High Throughput Transfer Racks

As stated in §63.2346(e), you must comply with the operating limits for existing, reconstructed, or new affected sources as follows:

For each existing, each reconstructed, and each new affected source using . . .	You must . . .
1. A thermal oxidizer to comply with an emission limit in Table 2 to this subpart	Maintain the daily average fire box or combustion zone temperature greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
2. A catalytic oxidizer to comply with an emission limit in Table 2 to this subpart	a. Replace the existing catalyst bed before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	b. Maintain the daily average temperature at the inlet of the catalyst bed greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	c. Maintain the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.
3. An absorber to comply with an emission limit in Table 2 to this subpart	a. Maintain the daily average concentration level of organic compounds in the absorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR
	b. Maintain the daily average scrubbing liquid temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	Maintain the difference between the specific gravities of the saturated and fresh scrubbing fluids greater than or equal to the difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.
4. A condenser to comply with an emission limit in Table 2 to this subpart	a. Maintain the daily average concentration level of organic compounds at the condenser exit less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR
	b. Maintain the daily average condenser exit temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
5. An adsorption system with adsorbent regeneration to comply with an emission limit in Table 2 to this subpart	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR
	b. Maintain the total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the reference stream mass flow established during the design evaluation or

For each existing, each reconstructed, and each new affected source using . . .	You must . . .
	performance test that demonstrated compliance with the emission limit; AND
	Before the adsorption cycle commences, achieve and maintain the temperature of the adsorption bed after regeneration less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	Achieve a pressure reduction during each adsorption bed regeneration cycle greater than or equal to the pressure reduction established during the design evaluation or performance test that demonstrated compliance with the emission limit.
6. An adsorption system without adsorbent regeneration to comply with an emission limit in Table 2 to this subpart	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR
	b. Replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	Maintain the temperature of the adsorption bed less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
7. A flare to comply with an emission limit in Table 2 to this subpart	a. Comply with the equipment and operating requirements in §63.987(a); AND b. Conduct an initial flare compliance assessment in accordance with §63.987(b); AND
	c. Install and operate monitoring equipment as specified in §63.987(c).
8. Another type of control device to comply with an emission limit in Table 2 to this subpart	Submit a monitoring plan as specified in §§63.995(c) and 63.2366(b), and monitor the control device in accordance with that plan.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42914, July 28, 2006]

Table 4 to Subpart EEEE of Part 63—Work Practice Standards

As stated in §63.2346, you may elect to comply with one of the work practice standards for existing, reconstructed, or new affected sources in the following table. If you elect to do so, . . .

For each . . .	You must . . .
1. Storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and organic HAP vapor pressure criteria specified in Table 2 to this subpart, items 1 through 5	a. Comply with the requirements of 40 CFR part 63, subpart WW (control level 2), if you elect to meet 40 CFR part 63, subpart WW (control level 2) requirements as an alternative to the emission limit in Table 2 to this subpart, items 1 through 5; OR

For each . . .	You must . . .
	b. Comply with the requirements of §63.984 for routing emissions to a fuel gas system or back to a process; OR
	c. Comply with the requirements of §63.2346(a)(4) for vapor balancing emissions to the transport vehicle from which the storage tank is filled.
2. Storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and organic HAP vapor pressure criteria specified in Table 2 to this subpart, item 6	a. Comply with the requirements of §63.984 for routing emissions to a fuel gas system or back to a process; OR b. Comply with the requirements of §63.2346(a)(4) for vapor balancing emissions to the transport vehicle from which the storage tank is filled.
3. Transfer rack subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, at an existing, reconstructed, or new affected source	a. If the option of a vapor balancing system is selected, install and, during the loading of organic liquids, operate a system that meets the requirements in Table 7 to this subpart, item 3.b.i and item 3.b.ii, as applicable; OR
	b. Comply with the requirements of §63.984 during the loading of organic liquids, for routing emissions to a fuel gas system or back to a process.
4. Pump, valve, and sampling connection that operates in organic liquids service at least 300 hours per year at an existing, reconstructed, or new affected source	Comply with the requirements for pumps, valves, and sampling connections in 40 CFR part 63, subpart TT (control level 1), subpart UU (control level 2), or subpart H.
5. Transport vehicles equipped with vapor collection equipment that are loaded at transfer racks that are subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10	Follow the steps in 40 CFR 60.502(e) to ensure that organic liquids are loaded only into vapor-tight transport vehicles, and comply with the provisions in 40 CFR 60.502(f), (g), (h), and (i), except substitute the term transport vehicle at each occurrence of tank truck or gasoline tank truck in those paragraphs.
6. Transport vehicles equipped without vapor collection equipment that are loaded at transfer racks that are subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10	Ensure that organic liquids are loaded only into transport vehicles that have a current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR 180 (cargo tanks) or 49 CFR 173.31 (tank cars).

[71 FR 42915, July 28, 2006]

Table 5 to Subpart EEEE of Part 63—Requirements for Performance Tests and Design Evaluations

As stated in §§63.2354(a) and 63.2362, you must comply with the requirements for performance tests and design evaluations for existing, reconstructed, or new affected sources as follows:

For . . .	You must conduct . . .	According to . . .	Using . . .	To determine . . .	According to the following requirements . . .
1. Each existing, each reconstructed, and each new affected source using a nonflare	a. A performance test to determine the organic HAP (or, upon	i. §63.985(b)(1)(ii), §63.988(b), §63.990(b), or §63.995(b)	(1) EPA Method 1 or 1A in appendix A of 40 CFR part 60, as appropriate	(A) Sampling port locations and the required number of traverse points	(i) Sampling sites must be located at the inlet and outlet of each control device if complying with

For . . .	You must conduct . . .	According to . . .	Using . . .	To determine . . .	According to the following requirements . . .
control device to comply with an emission limit in Table 2 to this subpart, items 1 through 10	approval, TOC) control efficiency of each nonflare control device, OR the exhaust concentration of each combustion device; OR				the control efficiency requirement or at the outlet of the control device if complying with the exhaust concentration requirement; AND (ii) The outlet sampling site must be located at each control device prior to any releases to the atmosphere.
			(2) EPA Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A of 40 CFR part 60, as appropriate	(A) Stack gas velocity and volumetric flow rate	See the requirements in items 1.a.i.(1)(A)(i) and (ii) of this table.
			(3) EPA Method 3 or 3B in appendix A of 40 CFR part 60, as appropriate	(A) Concentration of $CO_2$and $O_2$and dry molecular weight of the stack gas	See the requirements in items 1.a.i.(1)(A)(i) and (ii) of this table.
			(4) EPA Method 4 in appendix A of 40 CFR part 60	(A) Moisture content of the stack gas	See the requirements in items 1.a.i.(1)(A)(i) and (ii) of this table.
			(5) EPA Method 18, 25, or 25A in appendix A of 40 CFR part 60, as appropriate, or EPA Method 316 in appendix A of 40 CFR part 63 for measuring formaldehyde	(A) Total organic HAP (or, upon approval, TOC), or formaldehyde emissions	(i) The organic HAP used for the calibration gas for EPA Method 25A must be the single organic HAP representing the largest percent by volume of emissions; AND (ii) During the performance test, you must establish the operating parameter limits within which total

For . . .	You must conduct . . .	According to . . .	Using . . .	To determine . . .	According to the following requirements . . .
					organic HAP (or, upon approval, TOC) emissions are reduced by the required weight-percent or, as an option for nonflare combustion devices, to 20 ppmv exhaust concentration.
		b. A design evaluation (for nonflare control devices) to determine the organic HAP (or, upon approval, TOC) control efficiency of each nonflare control device, or the exhaust concentration of each combustion control device.	§63.985(b)(1)(i).		During a design evaluation, you must establish the operating parameter limits within which total organic HAP, (or, upon approval, TOC) emissions are reduced by at least 95 weight-percent for storage tanks or 98 weight-percent for transfer racks, or, as an option for nonflare combustion devices, to 20 ppmv exhaust concentration.
2. Each transport vehicle that you own that is equipped with vapor collection equipment and is loaded with organic liquids at a transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, at an existing, reconstructed, or new affected source	A performance test to determine the vapor tightness of the tank and then repair as needed until it passes the test.		EPA Method 27 in appendix A of 40 CFR part 60	Vapor tightness	The pressure change in the tank must be no more than 250 pascals (1 inch of water) in 5 minutes after it is pressurized to 4,500 pascals (18 inches of water).

[71 FR 42916, July 28, 2006]

Table 6 to Subpart EEEE of Part 63—Initial Compliance With Emission Limits
As stated in §§63.2370(a) and 63.2382(b), you must show initial compliance with the emission limits for existing, reconstructed, or new affected sources as follows:

For each . . .	For the following emission limit . . .	You have demonstrated initial compliance if . . .
1. Storage tank at an existing, reconstructed, or new affected source meeting either set of tank capacity and liquid organic HAP vapor pressure criteria specified in Table 2 to this subpart, items 1 through 6	Reduce total organic HAP (or, upon approval, TOC) emissions by at least 95 weight-percent, or as an option for combustion devices to an exhaust concentration of ≤20 ppmv	Total organic HAP (or, upon approval, TOC) emissions, based on the results of the performance testing or design evaluation specified in Table 5 to this subpart, item 1.a or 1.b, respectively, are reduced by at least 95 weight-percent or as an option for nonflare combustion devices to an exhaust concentration ≤20 ppmv.
2. Transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, at an existing, reconstructed, or new affected source	Reduce total organic HAP (or, upon approval, TOC) emissions from the loading of organic liquids by at least 98 weight-percent, or as an option for nonflare combustion devices to an exhaust concentration of ≤20 ppmv	Total organic HAP (or, upon approval, TOC) emissions from the loading of organic liquids, based on the results of the performance testing or design evaluation specified in Table 5 to this subpart, item 1.a or 1.b, respectively, are reduced by at least 98 weight-percent or as an option for nonflare combustion devices to an exhaust concentration of ≤20 ppmv.

[71 FR 42918, July 28, 2006]

Table 7 to Subpart EEEE of Part 63—Initial Compliance With Work Practice Standards

For each . . .	If you . . .	You have demonstrated initial compliance if . . .
1. Storage tank at an existing affected source meeting either set of tank capacity and liquid organic HAP vapor pressure criteria specified in Table 2 to this subpart, items 1 or 2	a. Install a floating roof or equivalent control that meets the requirements in Table 4 to this subpart, item 1.a	i. After emptying and degassing, you visually inspect each internal floating roof before the refilling of the storage tank and perform seal gap inspections of the primary and secondary rim seals of each external floating roof within 90 days after the refilling of the storage tank.
	b. Route emissions to a fuel gas system or back to a process	i. You meet the requirements in §63.984(b) and submit the statement of connection required by §63.984(c).
	c. Install and, during the filling of the storage tank with organic liquids, operate a vapor balancing system	i. You meet the requirements in §3.2346(a)(4).
2. Storage tank at a reconstructed or new affected source meeting any set of tank capacity and liquid organic HAP vapor pressure criteria specified in Table 2 to this subpart, items 3 through 5	a. Install a floating roof or equivalent control that meets the requirements in Table 4 to this subpart, item 1.a	i. You visually inspect each internal floating roof before the initial filling of the storage tank, and perform seal gap inspections of the primary and secondary rim seals of each external floating roof within 90 days after the initial filling of the storage tank.
	b. Route emissions to a fuel gas system or back to a process	i. See item 1.b.i of this table.

For each . . .	If you . . .	You have demonstrated initial compliance if . . .
	c. Install and, during the filling of the storage tank with organic liquids, operate a vapor balancing system	i. See item 1.c.i of this table.
3. Transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, at an existing, reconstructed, or new affected source	a. Load organic liquids only into transport vehicles having current vapor tightness certification as described in Table 4 to this subpart, item 5 and item 6	i. You comply with the provisions specified in Table 4 to this subpart, item 5 or item 6, as applicable.
	b. Install and, during the loading of organic liquids, operate a vapor balancing system	i. You design and operate the vapor balancing system to route organic HAP vapors displaced from loading of organic liquids into transport vehicles to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. ii. You design and operate the vapor balancing system to route organic HAP vapors displaced from loading of organic liquids into containers directly (e.g., no intervening tank or containment area such as a room) to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header.
	c. Route emissions to a fuel gas system or back to a process	i. See item 1.b.i of this table.
4. Equipment leak component, as defined in §63.2406, that operates in organic liquids service ≥300 hours per year at an existing, reconstructed, or new affected source	a. Carry out a leak detection and repair program or equivalent control according to one of the subparts listed in Table 4 to this subpart, item 4.a	i. You specify which one of the control programs listed in Table 4 to this subpart you have selected, OR ii. Provide written specifications for your equivalent control approach.

[71 FR 42918, July 28, 2006]

Table 8 to Subpart EEEE of Part 63—Continuous Compliance With Emission Limits

As stated in §§63.2378(a) and (b) and 63.2390(b), you must show continuous compliance with the emission limits for existing, reconstructed, or new affected sources according to the following table:

For each . . .	For the following emission limit . . .	You must demonstrate continuous compliance by . . .
1. Storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and liquid organic HAP vapor pressure criteria specified in Table 2 to this subpart, items 1 through 6	a. Reduce total organic HAP (or, upon approval, TOC) emissions from the closed vent system and control device by 95 weight-percent or greater, or as an option to 20 ppmv or less of total organic HAP (or, upon approval, TOC) in the exhaust of combustion devices	i. Performing CMS monitoring and collecting data according to §§63.2366, 63.2374, and 63.2378; AND ii. Maintaining the operating limits established during the design evaluation or performance test that

For each . . .	For the following emission limit . . .	You must demonstrate continuous compliance by . . .
		demonstrated compliance with the emission limit.
2. Transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, at an existing, reconstructed, or new affected source	a. Reduce total organic HAP (or, upon approval, TOC) emissions during the loading of organic liquids from the closed vent system and control device by 98 weight-percent or greater, or as an option to 20 ppmv or less of total organic HAP (or, upon approval, TOC) in the exhaust of combustion devices	i. Performing CMS monitoring and collecting data according to §§63.2366, 63.2374, and 63.2378 during the loading of organic liquids; AND ii. Maintaining the operating limits established during the design evaluation or performance test that demonstrated compliance with the emission limit during the loading of organic liquids.

[71 FR 42919, July 28, 2006]

Table 9 to Subpart EEEE of Part 63—Continuous Compliance With Operating Limits—High Throughput Transfer Racks

As stated in §63.2378(a) and (b) and 63.2390(b), you must show continuous compliance with the operating limits for existing, reconstructed, or new affected sources according to the following table:

For each existing, reconstructed, and each new affected source using . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
1. A thermal oxidizer to comply with an emission limit in Table 2 to this subpart.	a. Maintain the daily average fire box or combustion zone, as applicable, temperature greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.	i. Continuously monitoring and recording fire box or combustion zone, as applicable, temperature every 15 minutes and maintaining the daily average fire box temperature greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
2. A catalytic oxidizer to comply with an emission limit in Table 2 to this subpart	a. Replace the existing catalyst bed before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND	i. Replacing the existing catalyst bed before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
	b. Maintain the daily average temperature at the inlet of the catalyst bed greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND	i. Continuously monitoring and recording the temperature at the inlet of the catalyst bed at least every 15 minutes and maintaining the daily average temperature at the inlet of the catalyst bed greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated

For each existing, reconstructed, and each new affected source using . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
		compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
	c. Maintain the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test that demonstrated compliance with the emission limit	i. Continuously monitoring and recording the temperature at the outlet of the catalyst bed every 15 minutes and maintaining the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
3. An absorber to comply with an emission limit in Table 2 to this subpart	a. Maintain the daily average concentration level of organic compounds in the absorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR	i. Continuously monitoring the organic concentration in the absorber exhaust and maintaining the daily average concentration less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
	b. Maintain the daily average scrubbing liquid temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND Maintain the difference between the specific gravities of the saturated and fresh scrubbing fluids greater than or equal to the difference established during the design evaluation or performance test that demonstrated compliance with the emission limit	i. Continuously monitoring the scrubbing liquid temperature and maintaining the daily average temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Maintaining the difference between the specific gravities greater than or equal to the difference established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND iii. Keeping the applicable records required in §63.998.
4. A condenser to comply with an emission limit in Table 2 to this subpart	a. Maintain the daily average concentration level of organic compounds at the exit of the condenser less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR	i. Continuously monitoring the organic concentration at the condenser exit and maintaining the daily average concentration less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
	b. Maintain the daily average	i. Continuously monitoring and recording

For each existing, reconstructed, and each new affected source using . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
	condenser exit temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit	the temperature at the exit of the condenser at least every 15 minutes and maintaining the daily average temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
5. An adsorption system with adsorbent regeneration to comply with an emission limit in Table 2 to this subpart	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR	i. Continuously monitoring the daily average organic concentration in the adsorber exhaust and maintaining the concentration less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
	b. Maintain the total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the reference stream mass flow established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND Before the adsorption cycle commences, achieve and maintain the temperature of the adsorption bed after regeneration less than or equal to the reference temperature established during the design evaluation or performance test; AND Achieve greater than or equal to the pressure reduction during the adsorption bed regeneration cycle established during the design evaluation or performance test that demonstrated compliance with the emission limit	i. Maintaining the total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the reference stream mass flow established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Maintaining the temperature of the adsorption bed after regeneration less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND iii. Achieving greater than or equal to the pressure reduction during the regeneration cycle established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND iv. Keeping the applicable records required in §63.998.
6. An adsorption system without adsorbent regeneration to comply with an emission limit in Table 2 to this subpart	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR	i. Continuously monitoring the organic concentration in the adsorber exhaust and maintaining the concentration less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.

For each existing, reconstructed, and each new affected source using . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
	b. Replace the existing adsorbent in each segment of the bed before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND Maintain the temperature of the adsorption bed less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit	i. Replacing the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Maintaining the temperature of the adsorption bed less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND iii. Keeping the applicable records required in §63.998.
7. A flare to comply with an emission limit in Table 2 to this subpart	a. Maintain a pilot flame in the flare at all times that vapors may be vented to the flare (§63.11(b)(5)); AND	i. Continuously operating a device that detects the presence of the pilot flame; AND ii. Keeping the applicable records required in §63.998.
	b. Maintain a flare flame at all times that vapors are being vented to the flare (§63.11(b)(5)); AND	i. Maintaining a flare flame at all times that vapors are being vented to the flare; AND ii. Keeping the applicable records required in §63.998.
	c. Operate the flare with no visible emissions, except for up to 5 minutes in any 2 consecutive hours (§63.11(b)(4)); AND EITHER	i. Operating the flare with no visible emissions exceeding the amount allowed; AND ii. Keeping the applicable records required in §63.998.
	d.1. Operate the flare with an exit velocity that is within the applicable limits in §63.11(b)(7) and (8) and with a net heating value of the gas being combusted greater than the applicable minimum value in §63.11(b)(6)(ii); OR	i. Operating the flare within the applicable exit velocity limits; AND ii. Operating the flare with the gas heating value greater than the applicable minimum value; AND iii. Keeping the applicable records required in §63.998.
	d.2. Adhere to the requirements in §63.11(b)(6)(i)	i. Operating the flare within the applicable limits in 63.11(b)(6)(i); AND ii. Keeping the applicable records required in §63.998.
8. Another type of control device to comply with an emission limit in Table 2 to this subpart.	Submit a monitoring plan as specified in §§63.995(c) and 63.2366(c), and monitor the control device in accordance with that plan.	Submitting a monitoring plan and monitoring the control device according to that plan.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42919, July 28, 2006]

Table 10 to Subpart EEEE of Part 63—Continuous Compliance With Work Practice Standards
As stated in §§63.2378(a) and (b) and 63.2386(c)(6), you must show continuous compliance with the work practice standards for existing, reconstructed, or new affected sources according to the following table:

For each . . .	For the following standard . . .	You must demonstrate continuous compliance by . . .
1. Internal floating roof (IFR) storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity, and vapor pressure criteria specified in Table 2 to this subpart, items 1 through 5	a. Install a floating roof designed and operated according to the applicable specifications in §63.1063(a) and (b)	i. Visually inspecting the floating roof deck, deck fittings, and rim seals of each IFR once per year (§63.1063(d)(2)); AND ii. Visually inspecting the floating roof deck, deck fittings, and rim seals of each IFR either each time the storage tank is completely emptied and degassed or every 10 years, whichever occurs first (§63.1063(c)(1), (d)(1), and (e)); AND iii. Keeping the tank records required in §63.1065.
2. External floating roof (EFR) storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and vapor pressure criteria specified in Table 2 to this subpart, items 1 through 5	a. Install a floating roof designed and operated according to the applicable specifications in §63.1063(a) and (b)	i. Visually inspecting the floating roof deck, deck fittings, and rim seals of each EFR either each time the storage tank is completely emptied and degassed or every 10 years, whichever occurs first (§63.1063(c)(2), (d), and (e)); AND ii. Performing seal gap measurements on the secondary seal of each EFR at least once every year, and on the primary seal of each EFR at least every 5 years (§63.1063(c)(2), (d), and (e)); AND iii. Keeping the tank records required in §63.1065.
3. IFR or EFR tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and vapor pressure criteria specified in Table 2 to this subpart, items 1 through 5.	a. Repair the conditions causing storage tank inspection failures (§63.1063(e)).	i. Repairing conditions causing inspection failures: before refilling the storage tank with organic liquid, or within 45 days (or up to 105 days with extensions) for a tank containing organic liquid; AND ii. Keeping the tank records required in §63.1065(b).
4. Transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, at an existing, reconstructed, or new affected source	a. Ensure that organic liquids are loaded into transport vehicles in accordance with the requirements in Table 4 to this subpart, items 5 or 6, as applicable	i. Ensuring that organic liquids are loaded into transport vehicles in accordance with the requirements in Table 4 to this subpart, items 5 or 6, as applicable.
	b. Install and, during the loading of organic liquids, operate a vapor balancing system	i. Monitoring each potential source of vapor leakage in the system quarterly during the loading of a transport vehicle or the filling of a container using the methods and procedures described in the rule requirements selected for the work practice standard for equipment leak components as specified in Table 4 to this subpart, item 4. An instrument reading of 500 ppmv defines a leak. Repair of leaks is performed according to the repair requirements specified in your selected

For each . . .	For the following standard . . .	You must demonstrate continuous compliance by . . .
		equipment leak standards.
	c. Route emissions to a fuel gas system or back to a process	i. Continuing to meet the requirements specified in §63.984(b).
5. Equipment leak component, as defined in §63.2406, that operates in organic liquids service at least 300 hours per year	a. Comply with the requirements of 40 CFR part 63, subpart TT, UU, or H	i. Carrying out a leak detection and repair program in accordance with the subpart selected from the list in item 5.a of this table.
6. Storage tank at an existing, reconstructed, or new affected source meeting any of the tank capacity and vapor pressure criteria specified in Table 2 to this subpart, items 1 through 6	a. Route emissions to a fuel gas system or back to the process	i. Continuing to meet the requirements specified in §63.984(b).
	b. Install and, during the filling of the storage tank with organic liquids, operate a vapor balancing system	i. Monitoring each potential source of vapor leakage in the system quarterly during the loading of a transport vehicle or the filling of a container using the methods and procedures described in the rule requirements selected for the work practice standard for equipment leak components as specified in Table 4 to this subpart, item 4. An instrument reading of 500 ppmv defines a leak. Repair of leaks is performed according to the repair requirements specified in your selected equipment leak standards.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42922, July 28, 2006]

Table 11 to Subpart EEEE of Part 63—Requirements for Reports

As stated in §63.2386(a), (b), and (f), you must submit compliance reports and startup, shutdown, and malfunction reports according to the following table:

You must submit a(n) . . .	The report must contain . . .	You must submit the report . . .
1. Compliance report or Periodic Report	a. The information specified in §63.2386(c), (d), (e). If you had a SSM during the reporting period and you took actions consistent with your SSM plan, the report must also include the information in §63.10(d)(5)(i); AND	Semiannually, and it must be postmarked by January 31 or July 31, in accordance with §63.2386(b).
	b. The information required by 40 CFR part 63, subpart TT, UU, or H, as applicable, for pumps, valves, and sampling connections; AND	See the submission requirement in item 1.a of this table.
	c. The information required by §63.999(c); AND	See the submission requirement in item 1.a of this table.
	d. The information specified in §63.1066(b) including: Notification of	See the submission requirement in item 1.a. of this table.

You must submit a(n) . . .	The report must contain . . .	You must submit the report . . .
	inspection, inspection results, requests for alternate devices, and requests for extensions, as applicable.	
2. Immediate SSM report if you had a SSM that resulted in an applicable emission standard in the relevant standard being exceeded, and you took an action that was not consistent with your SSM plan	a. The information required in §63.10(d)(5)(ii)	i. By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority (§63.10(d)(5)(ii)).

[71 FR 42923, July 28, 2006]

Table 12 to Subpart EEEE of Part 63—Applicability of General Provisions to Subpart EEEE
As stated in §§63.2382 and 63.2398, you must comply with the applicable General Provisions requirements as follows:

Citation	Subject	Brief description	Applies to subpart EEEE
§63.1	Applicability	Initial applicability determination; Applicability after standard established; Permit requirements; Extensions, Notifications	Yes.
§63.2	Definitions	Definitions for part 63 standards	Yes.
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, Severability	Yes.
§63.5	Construction/Reconstruction	Applicability; Applications; Approvals	Yes.
§63.6(a)	Compliance with Standards/O&M Applicability	GP apply unless compliance extension; GP apply to area sources that become major	Yes.
§63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f)	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§63.6(b)(6)	[Reserved].		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major,	Yes.

Citation	Subject	Brief description	Applies to subpart EEEE
		regardless of whether required to comply when they were an area source	
§63.6(c)(1)–(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 days of effective date unless compliance extension	Yes.
§63.6(c)(3)–(4)	[Reserved].		
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources that become major must comply with major source standards by date indicated in this subpart or by equivalent time period (*e.g.*, 3 years)	Yes.
§63.6(d)	[Reserved].		
§63.6(e)(1)	Operation & Maintenance	Operate to minimize emissions at all times; correct malfunctions as soon as practicable; and operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met	Yes.
§63.6(e)(2)	[Reserved].		
§63.6(e)(3)	SSM Plan	Requirement for SSM plan; content of SSM plan; actions during SSM	Yes; however, (1) the 2-day reporting requirement in paragraph §63.6(e)(3)(iv) does not apply and (2) §63.6(e)(3) does not apply to emissions sources not requiring control.
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	Yes.
§63.6(f)(2)–(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g)(1)–(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h)	Opacity/Visible Emission	Requirements for compliance	No; except as it applies

Citation	Subject	Brief description	Applies to subpart EEEE
	Standards	with opacity and visible emission standards	to flares for which Method 22 observations are required as part of a flare compliance assessment.
§63.6(i)(1)–(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.
§63.7(a)(2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
§63.7(a)(3)	Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§63.7(b)(2)	Notification of Rescheduling	If you have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
§63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§63.7(e)(1)	Conditions for Conducting Performance Tests	Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM	Yes.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of	Yes; however, for transfer racks per §§63.987(b)(3)(i)(A)–(B)

Citation	Subject	Brief description	Applies to subpart EEEE
		three runs; conditions when data from an additional test run can be used	and 63.997(e)(1)(v)(A)–(B) provide exceptions to the requirement for test runs to be at least 1 hour each.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes; however, performance test data is to be submitted with the Notification of Compliance Status according to the schedule specified in §63.9(h)(1)–(6) below.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§63.8(a)(3)	[Reserved].		
§63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in §63.11	Yes; however, monitoring requirements in §63.987(c) also apply.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	Yes.
§63.8(c)(1)	Monitoring System	Maintain monitoring system in a	Yes.

Citation	Subject	Brief description	Applies to subpart EEEE
	Operation and Maintenance	manner consistent with good air pollution control practices	
§63.8(c)(1)(i)—(iii)	Routine and Predictable SSM	Keep parts for routine repairs readily available; reporting requirements for SSM when action is described in SSM plan.	Yes.
§63.8(c)(2)–(3)	Monitoring System Installation	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	Yes.
§63.8(c)(4)	CMS Requirements	CMS must be operating except during breakdown, out-of control, repair, maintenance, and high-level calibration drifts; COMS must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period; CEMS must have a minimum of one cycle of operation for each successive 15-minute period	Yes; however, COMS are not applicable.
§63.8(c)(5)	COMS Minimum Procedures	COMS minimum procedures	No.
§63.8(c)(6)–(8)	CMS Requirements	Zero and high level calibration check requirements. Out-of-control periods	Yes, but only applies for CEMS. 40 CFR part 63, subpart SS provides requirements for CPMS.
§63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions	Yes, but only applies for CEMS. 40 CFR part 63, subpart SS provides requirements for CPMS.
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	Yes, but only applies for CEMS.
§63.8(f)(1)–(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	Yes, but 40 CFR part 63, subpart SS also provides procedures for approval of CPMS.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for CEMS	Yes.
§63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points;	Yes; however, COMS are not applicable.

Citation	Subject	Brief description	Applies to subpart EEEE
		CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average	
§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§63.9(b)(1)–(2), (4)–(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate (BACT/LAER)	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§63.9(g)	Additional Notifications When Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative	Yes; however, there are no opacity standards.
§63.9(h)(1)–(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/visible emissions, which are due 30 days after; when to submit to Federal vs. State authority	Yes; however, (1) there are no opacity standards and (2) all initial Notification of Compliance Status, including all performance test data, are to be submitted at the same time, either within 240 days after the compliance date or within 60 days after the last performance test demonstrating compliance has been

Citation	Subject	Brief description	Applies to subpart EEEE
			completed, whichever occurs first.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	No. These changes will be reported in the first and subsequent compliance reports.
§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep for 5 years	Yes.
§63.10(b)(2)(i)–(iv)	Records Related to Startup, Shutdown, and Malfunction	Occurrence of each for operations (process equipment); occurrence of each malfunction of air pollution control equipment; maintenance on air pollution control equipment; actions during SSM	Yes.
§63.10(b)(2)(vi)–(xi)	CMS Records	Malfunctions, inoperative, out-of-control periods	Yes.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§63.10(b)(2)(xiv)	Records	All documentation supporting initial notification and notification of compliance status	Yes.
§63.10(b)(3)	Records	Applicability determinations	Yes.
§63.10(c)	Records	Additional records for CMS	Yes.
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	Yes.
§63.10(d)(4)	Progress Reports	Must submit progress reports	Yes.

Citation	Subject	Brief description	Applies to subpart EEEE
		on schedule if under compliance extension	
§63.10(d)(5)	SSM Reports	Contents and submission	Yes.
§63.10(e)(1)–(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; 2–3 copies of COMS performance evaluation	Yes; however, COMS are not applicable.
§63.10(e)(3)(i)–(iii)	Reports	Schedule for reporting excess emissions and parameter monitor exceedance (now defined as deviations)	Yes; however, note that the title of the report is the compliance report; deviations include excess emissions and parameter exceedances.
§63.10(e)(3)(iv)–(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions or parameter monitoring exceedance (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)–(8) and 63.10(c)(5)–(13)	Yes.
§63.10(e)(3)(vi)–(viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS (now called deviations); requires all of the information in §§63.10(c)(5)–(13) and 63.8(c)(7)–(8)	Yes.
§63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§63.11(b)	Flares	Requirements for flares	Yes; §63.987 requirements apply, and the section references §63.11(b).
§63.12	Delegation	State authority to enforce standards	Yes.

Citation	Subject	Brief description	Applies to subpart EEEE
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§63.14	Incorporation by Reference	Test methods incorporated by reference	Yes.
§63.15	Availability of Information	Public and confidential information	Yes.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 20463, Apr. 20, 2006; 71 FR 42924, July 28, 2006]

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

Source Name: Grain Processing Corporation
Source Address: 1443 South 300 West, Washington, IN 47501
Mailing Address: 1443 South 300 West, Washington, IN 47501
Part 70 Permit No.: T027-14200-00046

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)

☐ Report (specify)

☐ Notification (specify)

☐ Affidavit (specify)

☐ Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Grain Processing Corporation
Source Address: 1443 South 300 West, Washington, IN 47501
Mailing Address: 1443 South 300 West, Washington, IN 47501
Part 70 Permit No.: T027-14200-00046

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

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

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

A certification is not required for this report.

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

PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: Grain Processing Corporation
Source Address: 1443 South 300 West, Washington, IN 47501
Mailing Address: 1443 South 300 West, Washington, IN 47501
Part 70 Permit No.: T027-14200-00046

☐ Natural Gas Only ☐ Alternate Fuel burned From:_____ To:_____

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:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

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

Part 70 Quarterly Report

Source Name: Grain Processing Corporation
Source Address: 1443 South 300 West, Washington, IN 47501
Mailing Address: 1443 South 300 West, Washington, IN 47501
Part 70 Permit No.: T027-14200-00046
Facility: Insignificant fire pump engine
Parameter: Diesel fuel usage
Limit: 1,128 gallons per twelve (12) consecutive month period

QUARTER : YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	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: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Grain Processing Corporation
Source Address: 1443 South 300 West, Washington, IN 47501
Mailing Address: 1443 South 300 West, Washington, IN 47501
Part 70 Permit No.: T027-14200-00046
Facility: Regenerative Thermal Oxidizers FPC34a and FPC34b
Parameter: Amount of biogas and natural gas combusted
Limit: The total amount of biogas combusted shall not exceed 126 million cubic feet (MMCF) per (12) twelve consecutive month period with compliance determined at the end of each month. For every one (1) MMCF of natural gas greater than 90 MMCF combusted by FPC34a and FPC34b, the biogas combustion limit shall be reduced by 1.81 MMCF.

QUARTER : YEAR:

Month	Biogas (BG) Combustion		Natural Gas (NG) Combustion		BG	NG
	This Month	Previous 11 Months	This Month	Previous 11 Months	12 Month Total	12 Month Total
1						
2						
3						

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Grain Processing Corporation
Source Address: 1443 South 300 West, Washington, IN 47501
Mailing Address: 1443 South 300 West, Washington, IN 47501
Part 70 Permit No.: T027-14200-00046

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

Attach a signed certification to complete this report.

Attachment A:
Preventative Maintenance Plan
General Plant Fugitive Dust Emissions
Grain Processing Corporation
Washington, Indiana Facility

This plan is written to comply with the provisions set forth at 326 IAC 1-6-3 Preventative Maintenance Plans

The Grain Processing Corporation plant at Washington contains a number of internal roadways that can be sources of fugitive dust. This document simply describes how internal dust control will be administered.

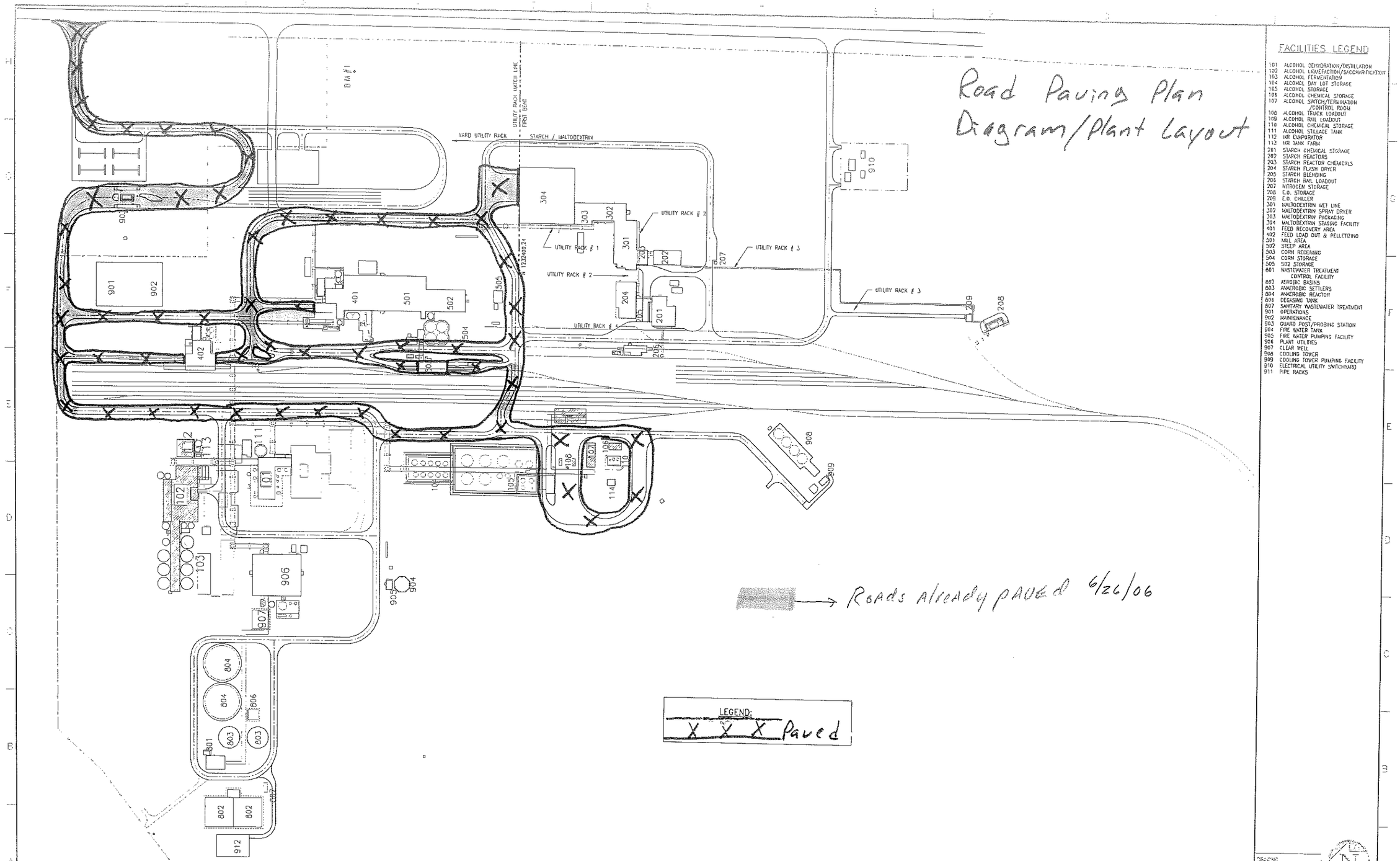
Responsible Individuals

The Manager of Environmental Services or the Plant Manager will be responsible for ensuring that preventative measures are taken to ensure adequate fugitive dust control from the facility. Visible inspections of ambient dust and roadway dust from in-plant traffic, as well as regular review of the PM_{10} monitoring station results, will help the Manager of Environmental Services decide when and what dust reduction measures are necessary.

Schedule for Preventative Maintenance: Fugitive Dust Emissions

<u>Daily</u>
On a daily basis, the plant will be surveyed for relative dust conditions. Based on these conditions, the Manager of Environmental Services will make the decision to chemically treat the roadways with an approved dust abatement chemical for longer term dust control, or to sweep or wet the roadways with clean water for short-term, temporary dust control.

<u>Annually</u>
An ongoing paving program in the facility has been initiated. This capital improvement program's purpose is to have all high traffic roads paved by the end of 2008. High traffic roads are those roads that receive truck traffic for delivery of corn or for shipment of products. The remaining unpaved high traffic roads will be paved at a rate of 20% per year, beginning with the roads closest to the plant fence line. See the attached "Road Paving Plan Diagram/Plant Layout" drawing. This drawing indicated all roads that will be paved by the end of 2008. Other roads receive minimal traffic (approximately one vehicle per hour or less) and will have dust controlled by the methods described above.



FACILITIES LEGEND

101	ALCOHOL DEHYDRATION/DISTILLATION
102	ALCOHOL LIQUEFACTION/SACCHARIFICATION
103	ALCOHOL FERMENTATION
104	ALCOHOL DAY LOT STORAGE
105	ALCOHOL STORAGE
106	ALCOHOL CHEMICAL STORAGE
107	ALCOHOL SWITCH/TERMINATION /CONTROL ROOM
108	ALCOHOL TRUCK LOADOUT
109	ALCOHOL RAIL LOADOUT
110	ALCOHOL CHEMICAL STORAGE
111	ALCOHOL STILLAGE TANK
112	MR EVAPORATOR
113	MR TANK FARM
201	STARCH CHEMICAL STORAGE
202	STARCH REACTORS
203	STARCH REACTOR CHEMICALS
204	STARCH FLASH DRYER
205	STARCH BLENDING
206	STARCH RAIL LOADOUT
207	NITROGEN STORAGE
208	E.O. STORAGE
209	E.O. CHILLER
301	MALTODEXTRIN WET LINE
302	MALTODEXTRIN SPRAY DRYER
303	MALTODEXTRIN PACKAGING
304	MALTODEXTRIN STAGING FACILITY
401	FEED RECOVERY AREA
402	FEED LOAD OUT & PELLETIZING
501	MILL AREA
502	STEEP AREA
503	CORN RECEIVING
504	CORN STORAGE
505	SO2 STORAGE
601	WASTEWATER TREATMENT CONTROL FACILITY
602	AEROBIC BASINS
603	ANAEROBIC SETTLERS
604	ANAEROBIC REACTOR
606	DEGASING TANK
607	SANITARY WASTEWATER TREATMENT
901	OPERATIONS
902	MAINTENANCE
903	GUARD POST/PROBING STATION
904	FIRE WATER TANK
905	FIRE WATER PUMPING FACILITY
906	PLANT UTILITIES
907	CLEAR WELL
908	COOLING TOWER
909	COOLING TOWER PUMPING FACILITY
910	ELECTRICAL UTILITY SWITCHYARD
911	PIPE RACKS

SAFETY IS NOT AN ACCIDENT

112591	D	5/27/98	RE-APPROVED FOR CONSTRUCTION
112301	D	2/8/98	APPROVED FOR CONSTRUCTION
112301	A	12/8/97	NO PURPOSES ONLY

PSI PROCESS SYSTEMS, INC.

GRAIN PROCESSING CORP.
SECOND PLANT (GPC-II)

STRUCTURAL FACILITY LAYOUT
STRUCTURAL ENCLOSURES

PROJECT NO.

DRAWING ABOVE
DRAWING BELOW

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document
for a
Prevention of Significant Deterioration (PSD) Part 70 Operating Permit

Source Background and Description

Source Name:	Grain Processing Corporation
Source Location:	1443 South 300 West, Washington, Indiana 47501
County:	Daviess
SIC Code:	2046, 2048, 2085, 2099
Part 70 Permit No.:	T027-14200-00046
Permit Reviewer:	ERG/BS

On July 25, 2007, the Office of Air Quality (OAQ) had a notice published in the Washington Times Herald of Washington, Indiana, stating that Grain Processing Corporation ("GPC") had applied for a Part 70 Operating Permit for the operation of stationary corn wet milling plant. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On August 17, 2007, GPC submitted comments on the proposed document. The following is a summary of the comments and responses to all comments. Added text is shown as bold and deleted text is shown as strikeout. When conditions are added or deleted, the other conditions are renumbered accordingly, and the Table of Contents modified to reflect these changes.

Comment 1:

Condition C.12(c) - Text is missing from the last sentence.

Response to Comment 1:

Section D.10 of the permit includes continuous emission monitoring requirements for Boiler 1 and Boiler 2 pursuant to 326 IAC 3-5, 326 IAC 12 and 40 CFR Part 60, Subpart Db. The following changes were made to the permit as a result of this comment:

C.12 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.

(b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(c) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to **326 IAC 3-5, 326 IAC 12 and 40 CFR Part 60, Subpart Db.**

Comment 2:

Conditions D.2.3 and D.3.3 - These conditions require the operation of several scrubbers at all times the respective emission units are in operation.

The steep area scrubber, FPC06, controls emissions from the ventilation system for the steep area. During a scrubber malfunction, the scrubber may need to be shutdown for a limited time period for repair; however, the steep tanks may still contain material during this time period. Therefore, the tanks are effectively "in operation" while the scrubber is shutdown. During scrubber shutdown, the ventilation system for this area will also be shutdown and no pollutants will be emitted from the building. GPC will comply with all other applicable permit conditions during these time periods.

The mill area scrubber, FPC07, and feed area scrubber, FP27, control emissions from the ventilation system for the designated area. During a scrubber malfunction, the scrubber may need to be shutdown for a limited time period for repair; however, the steep tanks may still contain material during this time period. Therefore, the tanks are effectively "in operation" while the scrubber is shutdown. During scrubber shutdown, the ventilation system for this area will also be shutdown and no pollutants will be emitted from the building. GPC will comply with all other applicable permit conditions during these time periods.

As a result, please add the phrase "except as otherwise provided by statute or rule or in this permit to Conditions D.2.3 and D.3.3.

Response to Comment 2:

Various permit conditions deal with how the Permittee should proceed during periods of maintenance or emergency. Specifically, the Permittee is required to prepare, maintain and implement a Preventative Maintenance Plan (PMP) for the scrubbers; see Conditions B.10 and D.2.2. Likewise, provisions regarding emergencies are provided in Condition B.11.

No changes were made to the permit as a result of this comment.

Comment 3:

Condition D.4.2 - The rotary germ cooling system is not controlled by FPC12 and exhausts to FP12, not FP13. In addition, the germ dryer exhausts to FP12, not FP13.

Response to Comment 3:

The following changes were made to the permit as a result of this comment:

D.4.2 Prevention of Significant Deterioration [326 IAC 2-2] [326 IAC 8-1-6]

...

(b) Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the PM, PM10 (including filterable and condensable PM10), and NOx emissions shall be limited as follows:

Facility (Control)	Stack	PM Limit	PM10 Limit	NOx limit
germ dryer and discharge conveyor (FPC12)	FP12	0.01 gr/dscf 1.37 lb/hr	-	0.06 lb/MMBtu

Facility (Control)	Stack	PM Limit	PM10 Limit	NOx limit
rotary germ cooling system (FPC09~~, FPC12~~)	~~FP13~~ **FP12**	0.03 gr/dscf 0.77 lb/hr	0.03 gr/dscf 0.77 lb/hr	-
corn gluten feed dryer and gluten dryer (FPC17, FPC23, FPC13)	FP13	0.01 gr/dscf 3.65 lb/hr (total)	0.05 gr/dscf 1.82 lb/hr (total)	0.06 lb/MMBtu (gluten dryer) 0.047 lb/MMBtu (corn gluten feed dryer)

…

(d) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the SO2 emissions shall be limited as follows:

Facility (Control)	Stack	SO2 Limit (lb/hr)
Germ Dryer (FPC12)	~~FP13~~ **FP12**	0.28
Gluten Dryer (FPC13)	FP13	6.67
Thermal Oxidizer FPC23	FP13	2.83

Comment 4:

Condition D.4.5(b) - Replace FPC13a with FPC23. FPC13a does not exist.

Response to Comment 4:

The following changes were made to the permit as a result of this comment:

D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

...

(b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.4.2, the Permittee shall perform VOC testing for thermal oxidizer ~~FPC13a~~ **FPC23** utilizing methods approved by the Commissioner. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test

Comment 5:

Several minimum scrubbant flow rates provided in the permit cannot be achieved based on the design of the scrubbers. The following table provides the appropriate scrubbant flow rates (based on discharge pressure drop, if applicable) for each scrubber at the facility.

Scrubber ID	Permit Condition	Water Flow Monitored Via	Minimum Scrubbant Flow in Permit (gal/min)	Requested Flow (gal/min)	Corresponding Pump Discharge Pressure (psig)

FPC06	D.2.4(d)	Pump Discharge Pressure	10	36	30
FPC07	D.3.5(d)	Pump Discharge Pressure	20	120	40
FPC27	D.3.5(e)	Pump Discharge Pressure	90	190	35
FPC12	D.4.9(a)(3)	Pump Discharge Pressure	450	60	50
FPC13	D.4.9(b)(3)	Pump Discharge Pressure	450	100	40
APC29	D.7.6(a)(3)	Flow Meter	20	no change	NA
APC28	D.7.6(a)(3)	Flow Meter	20	5	NA
APC32	D.7.6(b)(2)	Flow Meter	10	4	NA
APC95	D.7.6(c)	Flow Meter	20	5	NA
APC96	D.7.6(d)	Flow Meter	20	2	NA
APC35	D.7.6(e)(2)	Flow Meter	2	no change	NA
SPC49	D.8.5(c)	Flow Meter	30	400	NA

Response to Comment 5:

The following changes were made to correctly indicate the minimum scrubbant flow rates:

D.2.4 Scrubber Monitoring

...

(d) When for any one reading, the pump discharge pressure indicates that the scrubbant flow rate is less than ~~10~~ **36** gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.3.5 Scrubber Monitoring

...

(d) When for any one reading, the pump discharge pressure indicates that the scrubbant flow rate of FPC07 is less than ~~20~~ **120** gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(e) When for any one reading, the pump discharge pressure indicates that the scrubbant flow rate of FPC27 is less than ~~90~~ **190** gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.4.9 Scrubber Monitoring

(a) The Permittee shall monitor the pH of the scrubbing liquid, exhaust air stream pressure drop, and pump discharge pressure of scrubber FPC12 at least once per day when the wet scrubber is in operation.

...

(3) When for any one reading, the pump discharge pressure indicates that the scrubbant flow rate is less than ~~450~~ **60** gallons per minute, or a minimum

established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) The Permittee shall monitor the pH of the scrubbing liquid, exhaust air stream pressure drop, and pump discharge pressure of scrubber FPC13 at least once per day when the wet scrubber is in operation.

...

(3) When for any one reading, the pump discharge pressure indicates that the scrubbant flow rate is less than ~~450~~ **100** gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

…

D.7.6 Scrubber Monitoring

(a) The Permittee shall monitor the exhaust air stream pressure drop and scrubbant flow rate of scrubbers APC28 and APC29 at least once per day when the wet scrubber is in operation.

...

(3) When for any one reading the scrubbant flow rate **of APC29** is less than 20.0 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(4) When for any one reading the scrubbant flow rate of APC28 is less than 5.0 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) The Permittee shall monitor the exhaust air stream pressure drop and scrubbant flow rate of scrubber APC32 at least once per day when the wet scrubber is in operation.

...

(2) When for any one reading, the scrubbant flow rate is less than ~~10.0~~ **4.0** gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(c) The Permittee shall monitor the scrubbant flow rate of scrubber APC95 at least once per day when the wet scrubber is in operation. When for any one reading, the scrubbant flow

rate is less than ~~20.0~~ **5.0** gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(d) The Permittee shall monitor the scrubbant flow rate of scrubber APC96 at least once per day when the wet scrubber is in operation. When for any one reading, the scrubbant flow rate is less than ~~20.0~~ **2.0** gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.8.5 Scrubber Monitoring

...

(c) When for any one reading, the scrubbant flow rate is less than ~~30~~ **400** gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

…

Comment 6:

Condition D.4.7(b)(2) - The normal supply water pressure range for the MR Evaporator Scrubber, APC40, should be 15 to 20 psig.

Response to Comment 6:

The following change was made to correctly indicate the required supply water pressure range of APC40:

D.4.7 Condenser/Scrubber Monitoring

...

(b) For the scrubber of APC40:

(1) The Permittee shall monitor the supply water pressure at least once per day when the wet scrubber is in operation.

(2) When for any one reading, the supply water pressure is outside the normal range of ~~3.0 and 6.0 inches of water~~ **15.0 to 20.0 psig**, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

…

Comment 7:

Condition D.8.4(b) - As specified in Condition D.8.4(a), the requirement should refer to 'dryer scrubber SPC49' and not the dryer.

Response to Comment 7:

The following changes were made to the permit as a result of this comment:

D.8.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition~~s~~ D.8.1, the Permittee shall perform PM/PM10 and NOx testing for the starch dryer scrubber (SPC49) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.

(b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.8.1, the Permittee shall perform VOC and SO2 testing for the starch dryer **scrubber (SPC49)** utilizing methods approved by the Commissioner.

Testing shall be conducted in accordance with Section C - Performance Testing.

Comment 8:

Condition D.8.6(a) - GPC and IDEM previously agreed that parametric monitoring of the bin vent filter on the starch reactor liquid brine feed system is not necessary. As a result, it was decided that all respective language regarding this bin vent filter was to be removed from the permit. Condition D.8.6 still identifies the starch reactor liquid brine feed system as a unit with a baghouse that must be monitored. As indicated in the Section D.8 facility description, emissions from the starch reactor liquid brine feed system are controlled by bin vent filter SPC65. Please remove the reference to this unit in Condition D.8.6.

Response to Comment 8:

The following changes were made to the permit as a result of this comment:

D.8.6 Baghouse/Collector Monitoring

(a) The Permittee shall record the pressure drop across the baghouses and dust collectors used in conjunction with the ~~starch reactor liquid brine feed system,~~ starch loadout system nonfugitive control system~~,~~ and starch loadout system fugitive control system at least once per day when the respective facilities are in operation.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Prevention of Significant Deterioration (PSD) Part 70 Operating Permit

Source Description and Location

Source Name:	Grain Processing Corporation
Source Location:	1443 South 300 West, Washington, Indiana 47501
County:	Daviess
SIC Code:	2046, 2048, 2085, 2099
Part 70 Permit No.:	T027-14200-00046
Permit Reviewer:	ERG/BS

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit application from Grain Processing Corporation ("GPC") relating to the operation of a stationary corn wet milling plant.

Permitted Emission Units and Pollution Control Equipment

The source consists of:

(a) One (1) corn processing operation, consisting of:

(1) One (1) truck and railcar corn unloading process, installed in March 2000, consisting of:

(A) One (1) truck/railcar unloading pit and one (1) truck unloading pit, each equipped with one (1) totally enclosed drag pit conveyor system, unloading yellow dent corn at a combined nominal design rate of 855,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as CPC01, with all emissions exhausted through Stack CP01.

(B) One (1) totally enclosed discharge conveyor system, conveying corn received from the truck/railcar and/or truck unloading drag pit conveyor systems to the corn storage silo process at a nominal design rate of 855,000 pounds per hour.

(2) One (1) corn storage process, installed in March 2000, consisting of five (5) storage silos with a combined nominal design capacity of 28,000,000 pounds, storing corn received from the truck and railcar corn unloading process discharge conveyor system, with particulate emissions controlled by one (1) baghouse, identified as CPC01, with all emissions exhausted through Stack CP01.

(3) One (1) corn cleaning process, installed in March 2000, consisting of:

(A) One (1) totally enclosed receiving conveyor system, conveying corn received from the corn storage silo system to the corn cleaning system at a nominal design rate of 428,000 pounds per hour;

(B) One (1) corn cleaning system, cleaning corn received from the corn storage process discharge conveyor system at a nominal design rate of 428,000 pounds per hour; with particulate emissions controlled by one

(1) baghouse, identified as FPC05, with all emissions exhausted through Stack FP05.

(C) One (1) totally enclosed discharge conveyor system, conveying corn received from the corn cleaning system to the corn steeping tank system at a nominal design rate of 428,000 pounds per hour.

(4) One (1) corn steeping process, installed in March 2000, consisting of:

(A) One (1) corn steeping tank system, softening corn received from the corn cleaning process discharge conveyor system at a nominal design rate of 428,000 pounds per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC06, with all emissions exhausted through Stack FP06.

(B) One (1) totally enclosed discharge conveyor system, conveying steeped corn received from the corn steeping tank system to the steeped corn dewatering system at a nominal design rate of 318,000 pounds per hour;

(C) One (1) steeped corn dewatering system, consisting of two (2) dewatering screens, separating water from the softened corn received from the corn steeping tank system discharge conveyor system at a nominal design rate of 318,000 pounds per hour, yielding a maximum of 168,000 pounds of steeped corn per hour and 150,000 pounds of steep water per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC06, with all emissions exhausted through Stack FP06;

(D) One (1) totally enclosed steeped corn discharge conveyor system, conveying steeped corn received from the steeped corn dewatering system to the corn germ, fiber, gluten, and starch separation process primary mill at a nominal design rate of 168,000 pounds per hour; and

(E) One (1) totally enclosed steep water discharge conveyor system, conveying steep water received from the steeped corn dewatering system to the alcohol production process starch precook tank at a nominal design rate of 100,000 pounds per hour and/or corn steep and alcohol stillage evaporation system at a nominal design rate of 50,000 pounds per hour.

(5) One (1) corn germ, fiber, gluten, and starch separation process, installed in March 2000, milling corn received from the steeped corn discharge conveyor system, consisting of:

(A) One (1) primary milling system, consisting of:

(i) One (1) primary mill area, grinding softened corn and supplemental water received from the steeped corn discharge conveyor system at a nominal design rate of 368,000 pounds per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC07, with all emissions exhausted through Stack FP07.

(ii) One (1) totally enclosed discharge conveyor system, conveying milled corn received from the primary mill area to the germ separator at a nominal design rate of 368,000 pounds per hour;

(B) One (1) germ separation system, consisting of:

(i) One (1) germ separation area, separating germ from the corn received from the primary milling system discharge conveyor system at nominal design rate of 368,000 pounds per hour, yielding a maximum of 82,300 pounds of germ per hour and 285,700 pounds of remnant corn, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC07, with all emissions exhausted through Stack FP07,

(ii) One (1) totally enclosed germ discharge conveyor system, conveying germ received from the germ separation area to the germ dryer at a nominal design rate of 23,800 pounds per hour, and

(iii) One totally enclosed remnant corn discharge conveyor system, conveying remnant corn received from the germ separation area to the secondary milling system at a nominal design rate of 285,700 pounds per hour;

(C) One (1) secondary milling system, consisting of:

(i) One (1) secondary milling area, grinding softened corn remnants received from the germ separation system remnant corn discharge conveyor system at a nominal design rate of 285,700 pounds per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC07, with all emissions exhausted through Stack FP07, and

(ii) One (1) totally enclosed discharge conveyor system, conveying milled corn remnants received from the secondary milling area to the fiber separation area at a nominal design rate of 285,700 pounds per hour;

(D) One (1) fiber separation system, consisting of:

(i) One (1) fiber separation area, separating fiber received from the secondary milling system discharge conveyor system at a nominal design rate of 285,700 pounds per hour, with a design maximum of 202,500 pounds of supplemental water added per hour, yielding a maximum of 154,900 pounds of fiber per hour and 333,300 pounds of remnant corn per hour, with SO2 emissions from the separation process controlled by one (1) wet scrubber, identified as FPC27, with all emissions exhausted through Stack FP27.

(ii) One (1) totally enclosed fiber discharge conveyor system, conveying fiber received from the fiber separation area to the corn gluten feed dryer at a nominal design rate of 80,000 pounds per hour, and

(iii) One (1) totally enclosed remnant corn discharge conveyor system, conveying remnant corn received from the fiber separation area to the starch and gluten separation area at a nominal design rate of 333,300 pounds per hour.

(E) One (1) starch and gluten separation system, consisting of:

(i) One (1) starch and gluten separation area, separating starch and gluten from the softened corn remnants received from the fiber separation system remnant corn discharge conveyor system at a

nominal design rate of 333,300 pounds per hour, yielding a maximum of 260,000 pounds of starch per hour and 73,300 pounds of gluten per hour, with SO2 emissions controlled by one (1) wet scrubber, identified as FPC27, with all emissions exhausted through Stack FP27,

(ii) One (1) totally enclosed starch discharge conveyor system, conveying starch and supplemental water received from the starch and gluten separation area to the alcohol production process starch precook tank at a nominal design rate of 260,000 pounds per hour, starch production process starch reactors at a nominal design rate of 60,000 pounds per hour, and/or maltodextrin production process at a nominal design rate of 55,000 pounds per hour, and

(iii) One (1) totally enclosed gluten discharge conveyor system, consisting of two (2) totally enclosed conveyors, conveying gluten received from the starch and gluten separation area to the gluten dryer at a nominal design rate of 73,300 pounds per hour.

(6) One (1) germ production process, installed in March 2000, consisting of:

(A) One (1) germ drying system, consisting of:

(i) One (1) 24 MMBtu/hr natural gas and/or biogas fired germ dryer, drying germ received from the germ separation system germ discharge conveyor system at a nominal design rate of 23,800 pounds per hour, yielding a maximum of 11,000 pounds of germ per hour.

Currently, the process PM and SO2 emissions are controlled by wet scrubber FPC12, combustion NOx emissions are controlled by a water quench system, and all emissions are exhausted through Stack FP12.

No later than August 10, 2007, process PM and SO2 emissions will be controlled by wet scrubber FPC12, combustion NOx emissions will be controlled by a water quench system, and process VOC emissions will be controlled by thermal oxidizers FPC34a and FPC34b (in parallel). All emissions will be exhausted through Stack FP34.

(ii) One (1) totally enclosed discharge conveyor system, conveying germ received from the germ dryer to the rotary germ cooler at a nominal design rate of 11,000 pounds per hour;

(B) One (1) rotary germ cooling system, consisting of:

(i) One (1) rotary germ cooler, cooling germ received from the germ drying system discharge conveyor system at a nominal design rate of 11,000 pounds per hour, with all emissions routed through one (1) cyclone, identified as FPC09, with particulate and SO2 emissions controlled by one (1) wet scrubber, identified as FPC12, with all emissions exhausted through Stack FP12.

No later than August 10, 2007, emissions from FPC12 will be exhausted through oxidizers FPC34a and FPC34b to Stack 34; and

(ii) One (1) totally enclosed discharge conveyor system, conveying material received from the rotary germ cooler to the germ transport system at a nominal design rate of 11,000 pounds per hour;

(C) One (1) totally enclosed germ transport system, conveying germ received from the germ cooling system discharge conveyor system to the germ storage bin at a nominal design rate of 11,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC10, with all emissions exhausted through Stack FP10.

(D) One (1) germ storage bin, with a nominal design storage capacity of 160 tons, storing germ received from the germ transport system, with particulate emissions controlled by one (1) bin vent collector, identified as FPC11, with all emissions exhausted through Stack FP11.

(7) One (1) corn gluten feed production process, installed in March 2000, consisting of:

(A) One (1) corn steep and alcohol stillage evaporation system, consisting of:

(i) One (1) evaporation system, evaporating off excess water from the steep system and alcohol distillation still bottom (a.k.a. stillage), yielding a maximum of 5,000 pounds of supplemental gluten feed (a.k.a. syrup) per hour, with VOC emissions controlled by one (1) condenser/scrubber, identified as APC40, with all emissions exhausted through Stack AP40.

(ii) One (1) totally enclosed discharge conveyor system, conveying supplemental gluten feed syrup received from the supplemental gluten feed evaporator system to the corn gluten feed dryer at a nominal design rate of 5,000 pounds per hour;

(B) One (1) corn storage process supplemental gluten feed system, consisting of one (1) totally enclosed corn storage process supplemental corn gluten feed conveyor system, conveying supplemental corn gluten feed collected by the corn storage silo system baghouse, identified as FPC05, and the corn unloading baghouse, identified as CPC01, to the corn gluten feed dryer at a nominal design rate of 550 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC20, with all emissions exhausted through stack FP20.

(C) One (1) 30 MMBtu/hr natural gas fired corn gluten feed (CGF) dryer, drying wet corn gluten feed received from the fiber separation system fiber discharge conveyor system, supplemental gluten feed evaporator system discharge conveyor system, and corn storage process supplemental gluten feed system at a combined nominal design rate of 85,560 pounds per hour, yielding a maximum of 39,450 pounds of dried corn gluten feed per hour.

Currently, all emissions are exhausted through condenser FPC17, thermal oxidizer FPC23, the gluten dryer, wet scrubber FPC13, and exhaust to Stack FP13.

No later than August 10, 2007, combustion NOx emissions will be controlled by a flue gas recirculation system; PM and SO2 emissions will be controlled by condenser FPC17; and VOC emissions will be

controlled by thermal oxidizers (in parallel) FPC34a and FPC34b. All emissions will be exhausted through Stack FP34.

(D) One (1) totally enclosed corn gluten feed transport system, conveying corn gluten feed received from the corn gluten feed dryer to the corn gluten feed storage bin at a nominal design rate of 39,450 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC18, with all emissions exhausted through Stack FP18.

(E) One (1) corn gluten feed storage system, consisting of:

(i) One (1) corn gluten feed storage bin, with a nominal design capacity of 110 tons, storing corn gluten feed received from the corn gluten feed transport system, with particulate emissions controlled by one (1) bin vent collector, identified as FPC22, with all emissions exhausted through Stack FP22.

(ii) One (1) totally enclosed discharge conveyor system, conveying corn gluten feed received from the corn gluten feed storage bin to the corn gluten feed final mill at a nominal design rate of 39,450 pounds per hour.

(F) One (1) corn gluten feed final mill system, consisting of:

(i) One (1) final milling area, milling corn gluten feed received from the corn gluten feed storage system discharge conveyor system at a nominal design rate of 39,450 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC19, with all emissions exhausted through Stack FP19.

(ii) One (1) totally enclosed discharge conveyor system, conveying corn gluten feed received from the final milling area to the corn gluten feed loadout system at a nominal design rate of 39,450 pounds per hour, and/or the pellet mill at a nominal design rate of 39,450 pounds per hour.

(8) One (1) gluten production process, installed in March 2000, consisting of:

(A) One (1) 30 MMBtu/hr natural gas and/or biogas fired gluten dryer, drying gluten received from the gluten discharge conveyor system at a maximum rate of 18,750 pounds per hour, yielding a maximum of 8,333 pounds of dried gluten per hour.

Currently, the combustion NOx emissions are controlled by a water quench system, the combustion and process PM and SO2 emissions controlled by wet scrubber FPC13, and all emissions are exhausted through Stack FP13.

No later than August 10, 2007, combustion NOx emissions will be controlled by a water quench system, the combustion and process PM and SO2 emissions will be controlled by wet scrubber FPC13, and process VOC emissions will be controlled by thermal oxidizers (in parallel) FPC34a and FPC34b. All emissions will be exhausted through Stack FP34.

(B) One (1) totally enclosed gluten transport system, conveying gluten received from the gluten dryer to the gluten storage bin at a nominal design rate of 8,333 pounds per hour, with particulate emissions

controlled by one (1) baghouse, identified as FPC14, with all emissions exhausted through Stack FP14.

(C) One (1) gluten storage system, consisting of:

(i) One (1) gluten storage bin, with a nominal design capacity of 200 tons, storing dried gluten received from the gluten transport system, with particulate emissions controlled by one (1) bin vent collector, identified as FPC15, with all emissions exhausted through Stack FP15.

The bin vent design airflow rate is 100 dscfm, the design pressure drop is 1.0 to 5.0 inches of water, and the design PM and PM10 grain loadings are 0.01 and 0.005 gr/dscf, respectively, and

(ii) One (1) totally enclosed gluten storage system discharge conveyor system, conveying gluten received from the gluten storage bin to the transfer conveyor system at a nominal design rate of 180,000 pounds per hour.

(9) One (1) corn gluten feed pellet production process, installed in March 2000, consisting of:

(A) One (1) pellet milling system, consisting of:

(i) One (1) pellet mill, producing corn gluten feed pellets from corn gluten feed received from the corn gluten feed final mill system discharge conveyor system at a nominal design rate of 39,450 pounds per hour, and

(ii) One (1) totally enclosed discharge conveyor system, conveying corn gluten feed pellets received from the pellet mill to the pellet cooler at a nominal design rate of 39,450 pounds per hour;

(B) One (1) pellet cooling system, consisting of:

(i) One (1) pellet cooler, cooling corn gluten pellets received from the pellet milling system discharge conveyor system at a nominal design rate of 39,450 pounds per hour, discharging to cyclone FPC24, with particulate emissions controlled by baghouse FPC18, with all emissions exhausted through Stack FP18.

(ii) One (1) totally enclosed discharge conveyor system, conveying pellets received from the pellet cooler to the pellet storage bin at a nominal design rate of 39,450 pounds per hour.

(C) One (1) pellet storage bin with a nominal design storage capacity of 240 tons, storing pellets received from the pellet cooling system discharge conveyor system, with particulate emissions controlled by one (1) bin vent collector, identified as FPC25, with all emissions exhausted through Stack FP25.

(10) One (1) germ, gluten, gluten feed, and gluten feed pellet loadout process, installed in March 2000, consisting of:

(A) One (1) totally enclosed loadout transfer conveyor system, conveying product received from the storage bins to the loadout system at a nominal design rate of 180,000 pounds per hour, with particulate

emissions controlled by one (1) baghouse, identified as FPC28, with all emissions exhausted through Stack FP28.

(B) One (1) totally enclosed germ, gluten, gluten feed and gluten feed pellet loadout system, loading germ, gluten, gluten feed and gluten feed pellet received from the transfer conveyor system into trucks and/or railcars at a nominal design rate of 180,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as FPC26, with all emissions exhausted through Stack FP26.

(11) One (1) alcohol production process, installed in March 2000, consisting of:

(A) One (1) totally enclosed starch cooker and precooker tank, the cooker heats liquified starch received from the precooker tank at a nominal design rate of 260,000 pounds per hour, and converting the starch to fermentable sugars at a nominal design rate of 260,000 pounds per hour.

(B) One (1) flash cooler vent condenser system, identified as APC31, cooling fermentable sugars received from the starch cooker, steep water from the steep system, and stillage from the distillation still bases at a combined nominal design rate of 373,000 pounds per hour, yielding a maximum of 373,000 pounds of fermentable sugars per hour, with the fermentable sugars discharged to one (1) secondary liquefaction tank, with all emissions exhausted through Stack AP31.

(C) One (1) alcohol fermentation system, consisting of:

(i) Two (2) pre-fermenters, fermenting sugars received from the flash cooling chamber at a nominal design rate of 210,000 pounds per hour, yielding a maximum of 210,000 pounds of fermenter feed per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC28, with all emissions exhausted through Stack AP28.

(ii) One (1) fermentation system, fermenting sugars received from the flash cooling chamber at a nominal design rate of 163,000 pounds per hour, yielding a maximum of 123,000 pounds of distillation feed per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC29, with all emissions exhausted through Stack AP29.

(D) One (1) alcohol distillation system, consisting of:

(i) One (1) distillation system, processing distillation feed received from the alcohol fermentation system at a nominal design rate of 50,608 gallons per hour, yielding a maximum of 7,082 gallons of crude alcohol per hour, 30 pounds of distillation heads per hour, and 286,400 pounds of excess corn gluten feed (stillage) per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC32, with all emissions exhausted through Stack AP32.

(ii) One (1) totally enclosed supplemental gluten feed (stillage) discharge conveyor system, conveying supplemental gluten feed received from the alcohol distillation system to the alcohol production process supplemental gluten feed system evaporator at a nominal design rate of 286,400 pounds per hour;

(E) One (1) alcohol storage system, identified as AP95/AP96, consisting of eighteen (18) alcohol storage tanks, with a nominal combined design capacity of 3,000,000 gallons of finished alcohol product, storing beverage/industrial and anhydrous grade alcohol received from the alcohol distillation system, with VOC emissions controlled by two (2) wet scrubbers, identified as APC95 and APC96, with all emissions exhausted through Stacks AP95 and AP96. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(F) One (1) 51,700 gallon above ground vertical distillation heads storage tank, identified as Tank AP84, storing distillation heads received from the alcohol distillation system, with VOC emissions controlled by an internal floating roof, with all emissions exhausted through Stack AP84;

(G) One (1) 41,800 gallon above ground vertical distillation heads storage tank, identified as Tank AP94, storing distillation heads received from the alcohol distillation system, with VOC emissions controlled by an internal floating roof, with all emissions exhausted through Stack AP94. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(H) One (1) denaturant storage tank system, consisting of:

(i) One (1) 41,800 gallon above ground vertical storage tank, identified as Tank AP85, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP85. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(ii) One (1) 41,800 gallon above ground vertical storage tank, identified as Tank AP86, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP86. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(iii) One (1) 21,200 gallon above ground vertical storage tank, identified as Tank AP87, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP87. Under 40 CFR Part 60, Subpart Kb, this is considered an affected facility.

(iv) One (1) 2,100 gallon above ground vertical storage tank, identified as Tank AP88, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP88,

(v) One (1) 5,300 gallon above ground vertical storage tank, identified as Tank AP89, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP89,

(vi) One (1) 5,300 gallon above ground vertical storage tank, identified as Tank AP90, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP90, and

(vii) One (1) 1,100 gallon above ground vertical storage tank, identified as Tank AP91, with VOC emissions controlled by one (1) internal floating roof, with all emissions exhausted through Stack AP91; and

(I) One (1) alcohol and distillation heads loadout area, consisting of:

(i) One (1) alcohol loadout system, loading beverage/industrial or anhydrous alcohol received from the alcohol storage system into trucks and/or railcars at a nominal design rate of 7,082 gallons per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC35;

(ii) One (1) distillation heads loadout system, loading distillation heads received from Tanks AP84 and AP94 into trucks and/or railcars at a combined nominal design rate of 7,082 gallons per hour, with VOC emissions controlled by one (1) wet scrubber, identified as APC35; and

(iii) One (1) denaturant delivery system, delivering denaturant received from the denaturant storage tank system to the alcohol loadout system when industrial grade alcohol is being produced, with all non-fugitive VOC emissions controlled by one (1) wet scrubber, identified as APC35, with all non-fugitive emissions exhausted through Stack AP35.

(12) One (1) starch production process, installed in March 2000, consisting of:

(A) One (1) starch reactor system, consisting of:

(i) Eight (8) starch reactors, processing starch received from the starch and gluten separation system starch discharge conveyor system at a nominal design rate of 60,000 pounds per hour, yielding a maximum of 60,000 pounds of processed starch per hour, with all emissions exhausted through Stack SP46,

(ii) One (1) starch reactor liquid brine feed system, consisting of one (1) 50 ton storage tank, storing brine that is converted from dry feed to liquid and fed to the starch reactors, with the dry brine feed particulate emissions controlled by one (1) bin vent collector, identified as SPC65, with all emissions exhausted through Stack SP65.

(iii) One (1) starch reactor liquid ethylene oxide feed system, consisting of one (1) 40,000 gallon storage tank, storing liquid ethylene oxide that is fed to the starch reactors, and

(iv) One (1) starch reactor dry soda ash feed system, consisting of:

(a) One (1) soda ash storage bin with a nominal design capacity of 75 tons, storing soda ash that is fed to the starch reactors, with the dry soda ash feed particulate emissions controlled by one (1) bin vent collector, identified as SPC64, with all emissions exhausted through Stack SP64.

(b) One (1) totally enclosed soda ash discharge conveyor system, delivering soda ash received from the soda ash storage bin to the starch reactors, and

(c) One (1) totally enclosed starch discharge conveyor system, conveying processed starch received from the

starch reactors to the starch filtration system at a nominal design rate of 60,000 pounds per hour;

(B) One (1) starch filtration system, consisting of:

(i) Two (2) starch filters, refining processed starch received from the starch reactor system starch discharge conveyor system at a nominal design rate of 60,000 pounds per hour, and

(ii) One (1) totally enclosed discharge conveyor system, conveying refined starch received from the starch filter to the starch dryer at a nominal design rate of 56,000 pounds per hour;

(C) One (1) starch drying system consisting of:

(i) One (1) 30 MMBtu/hr natural gas fired starch dryer, drying refined starch received from the starch filtration system discharge conveyor system at a nominal design rate of 56,000 pounds per hour, with the process and combustion PM emissions controlled by one (1) wet scrubber, identified as SPC49, with all emissions exhausted through Stack SP49.

(ii) One (1) totally enclosed discharge conveyor system, conveying dried starch received from the starch dryer to the starch storage bin at a nominal design rate of 30,000 pounds per hour;

(D) One (1) starch storage system, consisting of four (4) starch storage bins, with a nominal design capacity of 1,000,000 pounds, storing dried starch received from the starch drying system discharge conveyor system, with particulate emissions controlled by four (4) identical bin vent collectors, identified as SPC50, with all emissions exhausted through four stacks collectively identified as SP50;

(E) One (1) totally enclosed starch loadout system, conveying starch received from the starch storage bin into trucks and/or railcars at a nominal design rate of 80,000 pounds per hour, with non-fugitive particulate emissions controlled by one (1) baghouse, identified as SPC44a, and fugitive particulate emissions controlled by one (1) dust collector identified as SPC44b, with all non-fugitive emissions exhausted through Stack SP44a, and all collected fugitive particulate emissions exhausted through Stack SP44b.

(13) One (1) maltodextrin production process, installed in March 2000, consisting of:

(A) One (1) maltodextrin cooking system, consisting of:

(i) One (1) maltodextrin cooker, processing starch received from the starch and gluten separation system starch discharge conveyor system at a nominal design rate of 55,000 pounds per hour, yielding 55,000 pounds of crude maltodextrin per hour, and

(ii) One totally enclosed discharge conveyor system, conveying crude maltodextrin received from the maltodextrin cooker to the maltodextrin filtration system at a nominal design rate of 55,000 pounds per hour;

(B) One (1) maltodextrin filtration system, consisting of:

(i) One (1) maltodextrin filter, refining crude maltodextrin received from the maltodextrin cooking system discharge conveyor system at a nominal design rate of 42,900 pounds per hour,

(ii) One (1) filtration system dry carbon feed system, consisting of:

(a) One (1) dry carbon storage bin with a nominal design capacity of 100,000 pounds, storing carbon that is fed to the maltodextrin filtration system at a nominal design rate of 50,000 pounds per hour, with the dry carbon feed particulate emissions controlled by one (1) bin vent collector, identified as MPC61, with all emissions exhausted through Stack MP61.

(b) One (1) totally enclosed carbon discharge conveyor system, delivering carbon received from the carbon storage bin to the filtration system,

(iii) One (1) totally enclosed discharge conveyor system, conveying refined maltodextrin from the maltodextrin filter to the matodextrin dryer at a nominal design rate of 42,900 pounds per hour;

(C) One (1) maltodextrin drying system, consisting of one (1) 72 MMBtu/hr natural gas fired maltodextrin dryer, drying maltodextrin received from the maltodextrin filtration system discharge conveyor system a nominal design rate of 42,900 pounds per hour, with the process and combustion PM emissions controlled by one (1) wet scrubber, identified as MPC39, with all emissions exhausted through Stack MP39.

(D) One (1) totally enclosed maltodextrin transfer conveyor system, conveying dried maltodextrin received from the maltodextrin dryer to the maltodextrin storage system at a nominal design rate of 24,000 pounds per hour, with particulate emissions controlled by one (1) baghouse, identified as MPC42, with all emissions exhausted through Stack MP42.

(E) One (1) maltodextrin storage system, consisting of four (4) maltodextrin storage bins with a combined nominal design capacity of 1,000,000 pounds, storing maltodextrin received from the maltodextrin transfer conveyor system, with particulate emissions controlled by four (4) identical bin vent collectors, identified as MPC44, with all emissions exhausted through four stacks collectively identified as MP44.

(F) One (1) totally enclosed maltodextrin loadout system, including one (1) maltodextrin screening process and one (1) loadout process, conveying maltodextrin received from the maltodextrin storage bins to the maltodextrin packaging system at a nominal design rate of 90,000 pounds per hour, with particulate emissions controlled by one (1) dust collector, identified as MPC41, with all emissions exhausted through Stack MP41.

(G) One (1) maltodextrin central vacuum system, identified as MPC43, controlling fugitive particulate emissions generated by the maltodextrin production process, with all emissions exhausted through Stack MP43.

(b) One (1) anaerobic wastewater treatment process, installed in March 2000. Biogas generated by the treatment process can be:

(1) Combusted in one (1) 18 MMBtu/hr flare, identified as UPC54, with all emissions exhausted through Stack UP54;

(2) Used as fuel in the germ dryer. Currently, process PM and SO2 emissions from the germ dryer are controlled by scrubber FPC12 and combustion NOx emissions are controlled by a water quench system. All emissions are exhausted to Stack FP13. No later than August 10, 2007, process PM and SO2 emissions will be controlled by wet scrubber FPC12, NOx emissions will be controlled by a water quench system, and process VOC emissions will be controlled by thermal oxidizers FPC34a and FPC34b (in parallel). All emissions will be exhausted through Stack FP34;

(3) Used as fuel in the gluten dryer. Currently, process PM and SO2 emissions from the germ dryer are controlled by scrubber FPC12 and combustion NOx emissions are controlled by a water quench system. All emissions are exhausted to Stack FP13. No later than August 10, 2007, process PM and SO2 emissions will be controlled by wet scrubber FPC12, NOx emissions will be controlled by a water quench system, and process VOC emissions will be controlled by thermal oxidizers FPC34a and FPC34b (in parallel). All emissions will be exhausted through Stack FP34;

(4) Combusted in thermal oxidizer FPC23 until oxidizers FPC34a and FPC34b are in operation. Emissions from FPC23 are exhausted through Stack FP13; and/or

(5) Combusted in thermal oxidizers FPC34a and FPC34b. Emissions will be exhausted through Stack FP34.

Supporting the wastewater treatment process is a wastewater treatment lime feed system, consisting of:

(1) One (1) lime storage bin with a nominal design capacity of 100,000 pounds, storing lime that is fed to the wastewater treatment system, with the lime feed particulate emissions controlled by one (1) bin vent collector, identified as MPC60, with all emissions exhausted through Stack MP60; and

(2) One (1) totally enclosed lime discharge conveyor system, delivering lime received from the lime storage bin to the maltodextrin filtration system.

(c) Two (2) natural gas or alcohol fired boilers, identified as Boiler 1 and 2, each with a heat input capacity of 244 MMBtu/hr, installed in March 2000, each equipped with one (1) low NOx burner and a flue gas recirculation system to control combustion NOx emissions, with all emissions exhausted through Stack UP51.

(d) One (1) process water cooling tower, installed in March 2000, cooling hot process water received from the source processes at a nominal design rate of 18,000,000 pounds per hour, with particulate mist controlled by one (1) mist elimination system, identified as APC38.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Paved and unpaved roads and parking lots with public access [326 IAC 6-4] [326 IAC 6-5].

(b) Stationary fire pumps: One (1) 425 horsepower, No. 2 distillate oil-fired emergency fire water pump engine, installed in March 2000, with all emissions exhausted through Stack UP57 [326 IAC 2-2].

(c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(d) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) One (1) parts washer with a design capacity of 20 gallons;

(2) Two (2) HCl storage tanks.

(e) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: Four (4) space heaters.

(f) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour (196 hp), except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.

(g) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.

(h) The following VOC and HAP storage containers: Vessels storing lubricating oils, hydraulic oils, and machining fluids.

(i) Solvent recycling systems with batch capacity less than or equal to 100 gallons.

(j) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the owner/operator, that is, an on-site sewage treatment facility.

(k) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(l) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(m) Heat exchanger cleaning and repair.

(n) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(o) Process vessel degassing and cleaning to prepare for internal repairs.

(p) Purge double block and bleed valves.

(q) Purging of gas lines and vessels that are related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(r) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(s) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(t) Farm operations.

Additional Changes to the Source

Specifically, on March 15, 2001, GPC submitted an application for a Part 70 operating permit. During OAQ's review, GPC submitted subsequent requests to account for process VOC emissions from several dryers at the source. See the *Description of Modification* section of this document for more information.

Existing Approvals

The source has been operating under PSD construction permit (CP) 027-7239-00046, issued on June 10, 1997, exemption 027-12885-00046, issued on December 27, 2000, and SSM 037-22018-000046, issued May 17, 2006.

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

The following terms and conditions from previous approvals have been revised in this Part 70 permit:

(a) Conditions 14a and 14b from PSD CP 027-7239-00046, issued on June 10, 1997:
The SO2 emissions shall be limited as follows in order to render the requirements of 326 IAC 2-2 not applicable:

(1) The amount of biogas burned in the biogas flare shall be limited to 8,858,400 cubic feet per 365 consecutive day period; and

(2) The amount of corn processed shall be limited to 26,280,000 bushels per 365 consecutive day period.

Compliance shall be demonstrated at the end of each day based on total usage (corn processed, and biogas burned, respectively) for the most recent 365 day period.

(3) The SO2 emissions from the germ dryer shall not exceed 0.28 pounds per hour.

Revised Conditions:
The IDEM, OAQ has information that indicates that the SO2 emissions from the wastewater treatment process and germ dryer have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

The IDEM, OAQ has information that indicates that the SO2 emissions from various emission units located at the source have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

The IDEM, OAQ has information that indicates that the SO2 emissions from Boiler 1 and Boiler 2 have contributed to a violation of 326 IAC 2-2 (Prevention of Significant

Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2.

Reason Revised:
PSD CP 027-7239-00046, issued on June 10, 1997 established SO2 emission, biogas combustion, and processed corn and diesel fuel usage limits in order to limit the source-wide SO2 emissions to less than the applicable PSD applicability threshold; 40 tons of SO2 per year. During the development of this Part 70 permit, the OAQ determined that the source cannot maintain compliance with the germ dryer SO2 emission, biogas combustion and processed corn limits. The OAQ is reviewing the matter and will take the appropriate actions to ensure compliance with 326 IAC 2-2.

Note that the aggregate SO2 PTE of Boiler 1 and Boiler 2 is 1.2 tons per year. PSD CP 027-7239-00046, issued on June 10, 1997, did not account for these emissions when developing the aforementioned SO2 emission limits. As a result, the OAQ is reviewing the matter and will take the appropriate actions to ensure compliance with 326 IAC 2-2.

(b) Part of Condition 13 from PSD CP 027-7239-00046, issued on June 10, 1997:
VOC emissions from the alcohol fermenter (fermentation system) shall not exceed 1.8 pounds per hour.

Revised Condition:
The IDEM, OAQ has information that indicates that the VOC emissions from the alcohol fermentation system have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

Reason Revised:
The IDEM, OAQ has information that indicates that the VOC emissions from the fermentation system significantly exceed 1.8 pounds per hour.

(c) Condition 12 from PSD CP 027-7239-00046, issued on June 10, 1997 which limits PM10 emissions from the facilities controlled by CPC01, FPC05, CPC03, FPC10, FPC11, FPC14, FPC15, FPC18, FPC19, FPC20, FPC22, FPC25, FPC26, SPC50, SPC44a, SPC44b, MPC60 and MPC61 to 0.005 gr/dscf and their corresponding lb/hr emission rates.

Revised Condition:
The PM/PM10 emissions from the facilities controlled by CPC01, FPC05, CPC03, FPC10, FPC11, FPC14, FPC15, FPC18, FPC19, FPC20, FPC22, FPC25, FPC26, SPC50, SPC44a, SPC44b, MPC60 and MPC61 shall not exceed 0.005 gr/dscf and the corresponding lb/hr emission rates.

Reason Revised:
As stated in the TSD for PSD CP 027-7239-00046, issued on June 10, 1997, the construction of this source was PSD major for PM10 as well as PM. PM10 BACT was reviewed and established for all the particulate emitting facilities at the source. However, the permit did not specifically include PM emission limits for facilities controlled by baghouses. Given that the dry exhaust from those facilities is expected to have negligible condensable particulate fraction, the BACT limits established by that permit should apply to PM10 and PM. Note that the corresponding lb/hr emission rates are included in the tables in the *State Rule Applicability - 326 IAC 2-2* section of this document.

(d) Condition 12 from PSD CP 027-7239-00046, issued on June 10, 1997 which limits PM10 emissions from the germ cooler (FP09), pellet cooler (FP24), starch reactor brine feed system (SP65) and soda ash bin (SP64) to 0.03, 0.03, 0.01 and 0.01 gr/dscf, respectively, and the corresponding emission rates.

Revised Condition:
The PM emissions from the germ cooler (FP09), pellet cooler (FP24) and soda ash bin (SP64) shall not exceed 0.06, 0.06, 0.02 and 0.02 gr/dscf, respectively, and the corresponding lb/hr emission rates. The PM10 emissions from the germ cooler (FP09), pellet cooler (FP24) and soda ash bin (SP64) shall not exceed 0.03, 0.03, 0.01 and 0.01 gr/dscf, respectively, and the corresponding lb/hr emission rates.

Reason Revised:
The TSD for PSD CP 027-7239-00046, issued on June 10, 1997, states that "PM10 emissions will be taken as 50% of the PM. Due to the moisture content of the gaseous emissions it is difficult to measure the PM10 emissions. Therefore, the BACT for PM10 is established in terms of PM. The PM emissions limit relates to a testing method which makes the limit enforceable. A PM10 limit will not be enforceable for these specific operating conditions. If the test for PM meets the limit of 0.01 gr/dscf, then that will also demonstrate the compliance with the PM10 limit of 0.005 gr/dscf." The condition has been revised to clarify both the PM and PM10 BACT limits established by PSD CP 027-7239-00046, issued on June 10, 1997. Note that the corresponding lb/hr emission rates are included in the tables in the *State Rule Applicability - 326 IAC 2-2* section of this document.

(e) Condition 12 from PSD CP 027-7239-00046, issued on June 10, 1997 which limits the PM/PM10 emissions from the germ, gluten, gluten feed and gluten feed pellet loadout system to 0.17 lb/hr.

Revised Condition:
PM/PM10 emissions from the germ, gluten, gluten feed and gluten feed pellet loadout system shall not exceed 0.17 lb/hr.

The IDEM, OAQ has information that indicates that the PM/PM10 emissions from the loadout process (exhausting to stacks FP26 and FP28) have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to that emission unit with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

Reason Revised:
Test results indicate that emissions from the germ, gluten, gluten feed and gluten feed pellet loadout system (exhausting to stack FP26) are out of compliance with the established PM/PM10 limit. .

(f) Condition 12 from PSD CP 027-7239-00046, issued on June 10, 1997:
The PM/PM10 emissions from the filtration filter aid system (controlled by MPC60) shall not exceed 0.005 gr/dscf and 0.03 lb/hr.

Revised Condition:
Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the PM/PM10 emissions from the wastewater treatment lime feed system (controlled by MPC60) shall not exceed 0.005 gr/dscf and 0.03 lb/hr.

Reason revised:

The system fed filter aid to the maltodextrin process when the maltodextrin process was in operation. Since the process has not been in operation for several years, the system was modified to contain lime for the wastewater treatment system instead of filter aid. Only the name of the system has changed and emission limits established pursuant to 326 IAC 2-2 remain in effect.

(g) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and 326 IAC 2-2, the emissions shall not exceed the limits in the following tables:

Facility (Control)	Stack	PM Limit	PM10 Limit	NOx limit
germ dryer and discharge conveyor (FPC12)	FP12	0.01 gr/dscf 1.37 lb/hr	-	0.06 lb/MMBtu
rotary germ cooling system (FPC09, FPC12)	FP13	0.03 gr/dscf 0.77 lb/hr	0.03 gr/dscf 0.77 lb/hr	-
corn gluten feed dryer and gluten dryer (FPC17, FPC23, FPC13)	FP13	0.01 gr/dscf 3.65 lb/hr (total)	0.05 gr/dscf 1.82 lb/hr (total)	0.06 lb/MMBtu (gluten dryer) 0.047 lb/MMBtu (corn gluten feed dryer)
corn storage process supplemental gluten feed system (FPC20)	FP20	0.005 gr/dscf 0.045 lb/hr	0.005 gr/dscf 0.045 lb/hr	-
gluten transport system (FPC14)	FP14	0.005 gr/dscf 0.085 lb/hr	0.005 gr/dscf 0.085 lb/hr	-

Revised Condition:

(1) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, and 326 IAC 2-2, the emissions shall be limited as follows:

Facility (Control)	Stack	PM Limit	PM10 Limit	NOx limit
Germ Dryer and Discharge Conveyor (FPC12)	FP12	0.01 gr/dscf 1.37 lb/hr	-	0.06 lb/MMBtu
Germ Cooling System (FPC09, FPC12)	FP13	0.03 gr/dscf 0.77 lb/hr	0.03 gr/dscf 0.77 lb/hr	-
Corn Gluten Feed Dryer and Gluten Dryer (FPC17, FPC23, FPC13)	FP13	0.01 gr/dscf 3.65 lb/hr (total)	0.05 gr/dscf 1.82 lb/hr (total)	0.06 lb/MMBtu (gluten dryer) 0.047 lb/MMBtu (corn gluten feed dryer)

Facility (Control)	Stack	PM Limit	PM10 Limit
corn storage process supplemental gluten feed system (FPC20)	FP20	0.005 gr/dscf 0.045 lb/hr	0.005 gr/dscf 0.045 lb/hr
gluten transport system (FPC14)	FP14	0.005 gr/dscf 0.085 lb/hr	0.005 gr/dscf 0.085 lb/hr

(2) The IDEM, OAQ has information that indicates that the PM/PM10 emissions from the corn storage process supplemental gluten feed system, germ dryer, gluten dryer, corn gluten feed dryer and gluten transport system have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

Reason Revised:
Test results indicate that emissions from the germ dryer and discharge conveyor, gluten dryer, corn gluten feed dryer, gluten transport system and corn storage process supplemental gluten feed system are out of compliance with established PM/PM10 limits.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this Part 70 permit:

(a) All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

(b) Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the SO2 emissions from AP30 shall not exceed 0.1 lb/hr.

Reason Removed:
Emission point AP30 does not exist. AP30 originally referred to the exhaust from the precooker tank; however, this unit is totally enclosed and not a source of SO2 emissions.

Enforcement Issue

IDEM is aware that GPC is out of compliance with:

(a) Several PSD PM10 hourly limits established under PSD CP 027-7239-00046, issued on June 10, 1997. See the Existing Approvals section for more information.

(b) The PSD VOC limit on the alcohol fermentation system established under PSD CP 027-7239-00046, issued on June 10, 1997. See the Existing Approvals section for more information.

(c) 326 IAC 2-2 with respect to the corn gluten feed dryer, germ dryer, gluten dryer, and starch dryer. See the *Description of Modification* section for more information.

(d) Several SO2 emission limits established under PSD CP 027-7239-00046, issued on June 10, 1997. See the Existing Approvals section for more information.

IDEM and GPC are working together to resolve these matters.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit and PSD modification be approved. This recommendation is based on the following facts and conditions.

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on March 15, 2001.

Emission Calculations

See Appendix A for detailed emissions calculations regarding the operation of the new RTO system. For completeness, emissions calculations of the existing dryers associated with the new RTO system have also been completed.

Description of Modification

GPC currently has four (4) operational dryers at the source; a corn gluten feed dryer, germ dryer, gluten dryer, and starch dryer – all of which were permitted by PSD CP 027-7239-00046, issued June 10, 1997. These dryers combust natural gas to dry the processed products after filtration. The corn gluten feed and gluten dryers exhaust to stack FP13. The germ dryer exhausts to stack FP12. The starch dryer exhausts to stack SP49.

During the development of the Part 70 permit, IDEM determined that the corn gluten feed dryer, germ dryer, gluten dryer, and starch are subject to the requirements of 326 IAC 2-2 for VOC but never went through PSD review. Therefore, a PSD VOC BACT analysis has been conducted for the dryers.

326 IAC 2-2-3 (PSD: BACT)
See Appendix B for the detailed BACT analysis and determination.

326 IAC 2-2-4 (PSD: Air Quality Analysis)
Pursuant to 326 IAC 2-2-4(b)(2)(A), an air quality analysis under 326 IAC 2-2-4 is not required if the emissions increase of a new source or modification would cause air quality impacts less than the relevant de minimis concentration. A de minimis concentration does not exist for ozone so the requirements of 326 IAC 2-2-4 do not apply.

326 IAC 2-2-5 (PSD: Air Quality Impact)
Pursuant to 326 IAC 2-2-5(a), the owner or operator of the proposed major stationary source or major modification shall demonstrate that allowable emissions increases will not cause or contribute to air pollution in violation of any:

(1) Ambient air quality standard, as designated in 326 IAC 1-3, in any air quality control region; or

(2) Applicable maximum allowable increase over the baseline concentration in any area as described in section 6 of this rule.

As described in Appendix B, the modification results in a decrease in VOC emissions. As a result, a significant change in air quality is not expected and the requirements of 326 IAC 2-2-5 do not apply.

326 IAC 2-2-6 (PSD: Increment Consumption)
Pursuant to 326 IAC 2-2-6(a), any modeling completed under 326 IAC 2-2-5 shall demonstrate that the increase in ambient pollutant concentration (resulting from the modification) does not exceed eighty percent (80%) of the available Maximum Allowable Increment (MAI) over the baseline concentration for that pollutant.

An increment does not exist for ozone so the requirements of 326 IAC 2-2-6 do not apply.

326 IAC 2-2-7 (PSD: Additional Analyses)

As shown in Appendix B, the modification results in a decrease in VOC emissions. As a result, a significant change in air quality is not expected and the requirements of 326 IAC 2-2-7 do not apply.

The new RTO system (FPC34a and FPC34b) will have the capability to combust biogas generated by the wastewater treatment plant. The SO2 and NOx PTE of the new RTO system, based on a worst-case scenario of 100% biogas combustion, is greater than the respective PSD major modification thresholds. As a result, GPC has accepted the following limit:

The total amount of biogas combusted by FPC34a and FPC34b shall not exceed 126 million cubic feet (MMCF) per twelve consecutive month period with compliance determined at the end of each month. The SO2 and NOx emissions from FPC34a and FPC34b shall not exceed 8.63 and 8.50 pounds per hour, respectively. Compliance with these limits is equivalent to a SO2 net emission increase of less than 36.2 tons per year, a NOx net emission increase of less than 33.5 tons per year and renders the requirements of 326 IAC 2-2 not applicable.

(See Appendix A for the supporting emission calculations.)

After installation of the new RTO system (FPC34a and FPC34b), the corn gluten feed, gluten and germ dryers will exhaust to stack FP34. These units currently have separate PSD PM/PM10 emissions limits that must be restructured to accommodate the implementation of VOC BACT. See the *Existing Approvals* section of this document for details.

Potential to Emit of Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, inclulding air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential to Emit (tons/yr)
PM	Greater than 100
PM_{10}	Greater than 100
$PM_{2.5}$	Greater than 100
SO_2	Greater than 100
VOC	Greater than 100
CO	Greater than 100
NO_x	Greater than 100

HAP	Potential to Emit (tons/yr)
Acetaldehyde	Greater than 10
Formaldehyde	Greater than 10
Acrolein	Less than 10
Methanol	Less than 10
Other HAPs	Less than 10
Total	Greater than 25

Note: Following installation and operation of RTOs FPC34a and FPC34b, the source is expected to be a minor source for HAPs.

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of $PM_{2.5}$, PM_{10}, SO_2, VOC, CO, and NO_x are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

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

(c) Fugitive Emissions
This source is in one of the twenty-eight (28) listed source categories ("fossil fuel-fired boilers (or combinations thereof) totaling more than 250 MMBtu/hr") under 326 IAC 2-2. Therefore, the fugitive emissions are counted toward determination of PSD applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2002 OAQ emission data. Actual emissions data later than 2002 is not available.

Pollutant	Actual Emissions (tons/year)
PM	Not reported
PM_{10}	70
$PM_{2.5}$	38
SO_2	9
VOC	169
CO	116
NO_x	83

County Attainment Status

The source is located in Daviess County.

Pollutant	Status
PM10	Attainment or Unclassifiable
PM2.5	Attainment or Unclassifiable
SO_2	Attainment or Unclassifiable
NO_2	Attainment or Unclassifiable
8-hr Ozone	Attainment or Unclassifiable
CO	Attainment or Unclassifiable
Lead	Attainment or Unclassifiable

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx are considered when evaluating the rule applicability relating to ozone. Daviess County has been designated as attainment or unclassifiable for the 8-hr ozone standard. Therefore, VOC emissions and NOx were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the *State Rule Applicability – Entire Source* section of this document.

(b) Daviess County has been classified as attainment or unclassifiable in Indiana for all criteria pollutants and lead. Therefore, these emissions were reviewed in Indiana pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the *State Rule Applicability – Entire Source* section of this document.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) The requirements of 326 IAC 12 and 40 CFR Part 60, Subpart D (New Source Performance Standards (NSPS) for Fossil Fuel Fired Steam Generators) are not included in this permit. Boiler 1 and Boiler 2 each have an input capacity less than 250 MMBtu/hr.

(b) The requirements of 326 IAC 12 and 40 CFR Part 60, Subpart Da (New Source Performance Standards (NSPS) for Fossil Fuel Fired Electric Utility Steam Generating Units) are not included in this permit. Boiler 1 and Boiler 2 are not electric utility steam generating units as defined in 40 CFR 60.41a.

(c) The source is subject to 40 CFR Part 60, Subpart Db (New Source Performance Standards (NSPS) for Industrial-Commercial-Institutional Steam Generating Units) which is incorporated by reference in 326 IAC 12.

Pursuant to 40 CFR 60.40b(a), the affected facility to which this Subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, with a heat input capacity greater than 100 MMBtu/hr.

Pursuant to 40 CFR 60.41b, Boiler 1 and Boiler 2 are steam generating units because they each combust fuel (natural gas and ethanol) to produce steam or to heat water or any other heat transfer medium.

Nonapplicable portions of the NSPS will not be included in the permit. Boiler 1 and Boiler 2 are subject to the following portions of 40 CFR Part 60, Subpart Db:

40 CFR 60.40b(a), (g), and (j)
40 CFR 60.41b
40 CFR 60.44b(a), (f), (h) (i) and (l)
40 CFR 60.46b(c), (e)(1), (e)(4)
40 CFR 60.48b(b), (c), (d), (e)(2) and (f)
40 CFR 60.49(a) – (d), (g), (h)(2), (i), (j), (o), (v) and (w)

The provisions of 40 CFR Part 60, Subpart A (General Provisions), which are incorporated as 326 IAC 12-1, apply to Boiler 1 and Boiler 2, except as otherwise specified in 40 CFR Part 60, Subpart Db.

(d) The requirements of 326 IAC 12 and 40 CFR Part 60, Subpart Dc (New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units) are not included in this permit. Boiler 1 and Boiler 2 each have a heat input capacity outside the range of 10 to 100 MMBtu/hr.

(e) The requirements of 326 IAC 12 and 40 CFR Part 60, Subpart K (New Source Performance Standards (NSPS) for Petroleum Liquid Storage Vessels) are not included in

this permit. All of the petroleum storage tanks at this source were constructed after May 19, 1978.

(f) The requirements of 326 IAC 12 and 40 CFR Part 60, Subpart Ka (New Source Performance Standards (NSPS) for Petroleum Liquid Storage Vessels) are not included in this permit. All of the petroleum storage tanks at this source were constructed after July 23, 1984.

(g) The source is subject to 40 CFR Part 60, Subpart Kb (New Source Performance Standards (NSPS) for Volatile Organic Storage Vessels) which is incorporated by reference in 326 IAC 12. The source contains vessels, constructed after July 23, 1984, used to store volatile organic liquids (VOL) with capacities greater than 75 m^3.

Pursuant to 40 CFR 60.110b(a), the requirements of 40 CFR Part 60, Subpart Kb are not included in this permit for tanks AP88, AP89, AP90 and AP91. Those tanks have a storage capacity less than 75 m^3.

Pursuant to 40 CFR 60.110b(d)(7), the requirements of 40 CFR Part 60, Subpart Kb are not included in this permit for any other tanks located at this source that storage VOL because they store beverage grade alcohol.

Pursuant to 40 CFR 60.110b(a) and 40 CFR 60.116b, for the tanks comprising AP95/AP96 and tank AP94, the Permittee shall keep readily accessible records of the following:

(1) The dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source.

(2) The VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. These records shall be kept for at least 2 years.

Nonapplicable portions of the NSPS will not be included in the permit. Tanks AP85, AP86, AP87 are subject to the following portions of 40 CFR Part 60, Subpart Kb:

40 CFR 60.110b
40 CFR 60.111b
40 CFR 60.112b(a)
40 CFR 60.113b
40 CFR 60.114b
40 CFR 60.115b
40 CFR 60.116b

(h) The requirements of 326 IAC 12 and 40 CFR Part 60, Subpart DD (New Source Performance Standards (NSPS) for Grain Elevator Standards) are not included in this permit.

Pursuant to 40 CFR 60.300(a) and (b), the provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator which commences construction, modification, or reconstruction after August 3, 1978.

Pursuant to 40 CFR 60.301(c), a grain terminal elevator is defined as a grain elevator which has a permanent storage capacity of more than 2.5 million bushels, except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, and livestock feedlots.

Pursuant to 40 CFR 60.301(f), a grain storage elevator is defined as a grain elevator located at any wheat flour mill, wet corn mill, dry corn mill, rice mill, or soybean extraction plant which has a permanent grain storage capacity of more than 1.0 million bushels.

The grain elevator at this source was constructed after August 3, 1978. However, the grain elevator is not a “grain terminal elevator” or a “grain storage elevator” because it has permanent grain storage capacity less than 1.0 million bushels.

(i) Ethanol is one of the chemicals listed in 40 CFR 60.489 that are produced by process units covered by 40 CFR Part 60, Subpart VV. Therefore, pursuant to 40 CFR 60.480, the ethanol production plant located at the source is subject to 40 CFR Part 60, Subpart VV (New Source Performance Standards (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry) which is incorporated by reference in 326 IAC 12.

Pursuant to 40 CFR 60.480(a)(2), the affected facilities are the process units, which are defined as components assembled to produce ethanol (as intermediate or final products).

Nonapplicable portions of the NSPS are not included in the permit. Pumps, compressors, pressure relief devices, sampling connection systems, and valves are subject to the following portions of 40 CFR 60, Subpart VV:

40 CFR 60.480
40 CFR 60.481
40 CFR 60.482-1
40 CFR 60.482-2
40 CFR 60.482-3
40 CFR 60.482-4
40 CFR 60.482-5
40 CFR 60.482-6
40 CFR 60.482-7
40 CFR 60.482-8
40 CFR 60.482-9
40 CFR 60.482-10
40 CFR 60.483-1
40 CFR 60.483-2
40 CFR 60.485
40 CFR 60.486
40 CFR 60.487

The provisions of 40 CFR Part 60, Subpart A (General Provisions), which are incorporated as 326 IAC 12-1, apply to the affected facilities, except as otherwise specified in 40 CFR Part 60, Subpart VV.

(j) The requirements of 326 IAC 12 and 40 CFR Part 60, Subpart III (New Source Performance Standards (NSPS) for Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Process Units) are not included in this permit. Pursuant to 40 CFR 60.610, the provisions of this Subpart apply to various types of air oxidation reactors. The source does not own or operate an air oxidation reactor associated with the alcohol production process.

(k) Ethanol is one of the chemicals listed in 40 CFR 60.667 that are subject to 40 CFR Part 60, Subpart NNN. However, according to the EPA memorandum from Mr. George T. Czerniak, dated December 6, 2002, the manufacture of ethanol using a fermentation process (biological synthesis) was excluded from the scope of 40 CFR Part 60, Subpart NNN. Therefore, the requirements of 326 IAC 12 and 40 CFR Part 60, Subpart NNN (New Source Performance Standards (NSPS) for VOC Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations) are not included in this permit.

(l) The requirements of 326 IAC 12 and 40 CFR Part 60, Subpart RRR (New Source Performance Standards (NSPS) for Synthetic Organic Chemical Manufacturing Industry

(SOCMI) Reactor Processes) are not included in this permit. Pursuant to 40 CFR 60.700, the provisions of the Subpart apply to various types of reactor processes. The source does not own or operate a reactor process described in 40 CFR 60.700 associated with the alcohol production process.

(m) The requirements of 326 IAC 12 and 40 CFR Part 60, Subpart IIII (New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines) are not included in this permit. The source operates only one compression - ignition internal combustion engine. That engine commenced construction prior to July 11, 2005.

(n) The requirements of 326 IAC 20 and 40 CFR Part 63, Subpart F (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Synthetic Organic Chemical Manufacturing Industry (SOCMI)) are not included in this permit. Pursuant to 40 CFR 63.100(b), the provisions of 40 CFR Part 63, Subparts F, G and H apply to chemical manufacturing process units that meet all of the following:

(1) Manufacture, as a primary product, one or more of the chemicals listed in Subpart F, tetrahydrobenzaldehyde, or crotonaldehyde.

(2) Use, as a reactant or manufacture as a product or co-product, one or more of the organic hazardous air pollutants listed in Table 2 of Subpart F, and

(3) Are located at a plant that is a major source of HAPs.

GPC does not manufacture as a primary product any of the chemicals listed in Table 1 of Subpart F.

(o) The requirements of 326 IAC 20 and 40 CFR Part 63, Subpart G (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Synthetic Organic Chemical Manufacturing Industry (SOCMI) – Process Vents, Storage Vessels, Transfer Operations, and Wastewater) are not included in this permit. As explained above, GPC does not manufacture as a primary product any of the chemicals listed in Table 1 of Subpart F.

(p) The requirements of 326 IAC 20 and 40 CFR Part 63, Subpart H (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Equipment Leaks) are not included in this permit. As explained above, GPC does not manufacture as a primary product any of the chemicals listed in Table 1 of Subpart F.

(q) The requirements of 326 IAC 20 and 40 CFR Part 63, Subpart I (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks) are not included in this permit. Pursuant to 40 CFR 63.190, the provisions of Subpart I apply to emissions of the designated organic HAP from the processes specified in paragraphs (b)(1) through (b)(6) of 40 CFR 63.190 that are located at a plant site that is a major source of HAPs. GPC does not emit the designated organic HAP from processes specified in paragraphs (b)(1) through (b)(6) of 40 CFR 63.190.

(r) The requirements of 326 IAC 20 and 40 CFR Part 63, Subpart Q (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial Cooling Towers) are not included in this permit. GPC does not use chromium-based water treatment chemicals.

(s) This source is subject to the requirements of 40 CFR Part 63, Subpart EEEE (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Organic Liquids Distribution) which is incorporated by reference in 326 IAC 20.

Pursuant to 40 CFR 63.2334, the provisions of Subpart EEEE apply to a Organic Liquids Distribution (OLD) operation that is located at a major source of HAPs. Pursuant to 40 CFR 63.2406, an OLD operation is defined as the combination of activities and equipment

used to store or transfer organic liquids into, out of, or within a plant site regardless of the specific activity being performed.

GPC stores and transfers gasoline from storage tanks to other tanks or transport vehicles as ethanol denaturants. Pursuant to 40 CFR 63.2406, gasoline is not an organic liquid for the purposes of Subpart EEEE.

GPC stores and transports ethylene oxide. Ethylene oxide is a listed organic HAP in Table 1 of Subpart EEEE; however, the ethylene oxide is stored in a pressure vessel designed to operate in excess of 204.9 kPa (15 psig) and does not exhaust to the atmosphere. As a result, the requirements of this subpart are not included for the ethylene oxide reactor, pressure vessel and associated equipment leak components.

GPC stores and transfers methanol and MIBK from storage tanks to other tanks or transport vehicles as ethanol denaturants. The affected source is comprised of the methanol and MIBK storage tanks, transfer racks, equipment leak components, transport vehicles and containers identified in 40 CFR 63.2338.

Pursuant to 40 CFR 63.2338(f), the affected source is an existing affected source because it commenced construction before April 2, 2002.

Pursuant to 40 CFR 63.2342(b), GPC must comply with the provisions of Subpart EEEE no later than February 2, 2007.

Nonapplicable portions of the NESHAP are not included in the permit. The affected source is subject to the following portions of 40 CFR 63, Subpart EEEE:

40 CFR 63.2330
40 CFR 63.2334
40 CFR 63.2338
40 CFR 63.2342
40 CFR 63.2343
40 CFR 63.2346
40 CFR 63.2350
40 CFR 63.2354
40 CFR 63.2358
40 CFR 63.2362
40 CFR 63.2366
40 CFR 63.2370
40 CFR 63.2374
40 CFR 63.2378
40 CFR 63.2382
40 CFR 63.2386
40 CFR 63.2390
40 CFR 63.2394
40 CFR 63.2396
40 CFR 63.2398
40 CFR 63.2402
40 CFR 63.2406
Tables 1 through 12 of Appendix A

The provisions of 40 CFR Part 63, Subpart A (General Provisions), which are incorporated as 326 IAC 20-1, apply to the affected facilities, except as otherwise specified in 40 CFR Part 63, Subpart EEEE.

(t) The requirements of 326 IAC 20 and 40 CFR Part 63, Subpart FFFF (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing) are not included in this permit. Pursuant to 40 CFR 63,2435, the provisions of Subpart FFFF apply to miscellaneous organic chemical manufacturing

process units (MCPU) that are located at, or are a part of, a major source of HAPs. A MCPU includes equipment necessary to operate a miscellaneous organic chemical manufacturing process, as defined in 40 CFR 63.2550, that satisfies all of the conditions specified in 40 CFR 63.2435(b)(1) through (b)(3). GPC does not produce any of the materials listed in 40 CFR 63.2435(b)(1).

(u) The requirements of 326 IAC 20 and 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines) are not included in this permit. Pursuant to 40 CFR 63.6585, the provisions of Subpart ZZZZ apply to stationary reciprocating internal combustion engines (RICE) located at a major source of HAPs. For the purposes of this subpart, an affected source is a RICE with a site-rating of more than 500 brake horsepower (bhp), excluding those tested at a test cell/stand. The fire water pump engine is rated at 425 bhp.

(v) This source is subject to the provisions of 40 CFR Part 64, Compliance Assurance Monitoring (CAM). In order for this rule to apply, a pollutant-specific-emissions-unit at a source that requires a Part 70 or Part 71 permit must meet three criteria for a given pollutant: 1) the unit has potential emissions (before controls), of the applicable regulated air pollutant, equal or greater than 100 percent of the amount required for a source to be classified as a major source, 2) the unit is subject to an applicable emission limitation or standard for the applicable regulated air pollutant, and 3) the unit uses a control device to achieve compliance with the applicable emission limitation or standard.

A number of facilities at this source each has potential pre-control (but not post-control) emissions greater than the applicable major source threshold, is subject to 326 IAC 2-2, and requires the use of a control device to achieve compliance with the respective requirements. Therefore, each of these facilities is classified as an “other” unit with respect to CAM and is subject to the requirements of 40 CFR Part 64. However, pursuant to 40 CFR 64.5(b), the Permittee is required to submit the information required under 40 CFR 64.4 as part of the Part 70 renewal application.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

The source is in one of the twenty-eight (28) listed PSD source categories with a PSD major threshold of 100 tons per year.

The source was initially constructed in 1998 and 1999 following issuance of PSD CP 027-7239-00046, issued on June 10, 1997. That approval contained various requirements pursuant to 326 IAC 2-2. Those requirements are identified in the *State Rule Applicability – Individual Facilities* section of this document. The source is a PSD major source.

326 IAC 2-4.1 (Hazardous Air Pollutants)

This source is a major source of HAPs. However, the source was permitted prior to July 27, 1997. Therefore, the requirements of 326 IAC 2-4.1-1 do not apply.

326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). The source is located in Daviess County. In accordance with the compliance schedule in 326 IAC 2-6-3(b), an emission statement must be submitted triennially by July 1 beginning in 2006 and every 3 years after. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

326 IAC 6-4 (Fugitive Dust)

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 6-5 (Fugitive Particulate Matter Emission Limitations)

The source is subject to the requirements of 326 IAC 6-5 because the source is located in an area listed in 326 IAC 6-5-1(a), and it has the potential to emit fugitive PM greater than 25 tons per year. Pursuant to 326 IAC 6-5-3, the Permittee shall control fugitive PM emissions according to the following plan. The Permittee shall:

(a) Pave all of the high traffic roads identified in the fugitive dust plan submitted on December 17, 2003 and all employee parking lots no later than January 31, 2008. The high traffic roads shall be paved first followed by the employee parking lots; and

(b) On a daily basis, survey the plant for relative dust conditions and perform as applicable, road sweeping, road wetting, and/or application of an approved dust abatement chemical.

326 IAC 9 (Carbon Monoxide Emission Limits)

Pursuant to 326 IAC 9 (Carbon Monoxide Emission Limits), the source is subject to this rule because it is a stationary source which emits CO and commenced operation after March 21, 1972. However, under this rule, there are no specific CO emission limitations because the source is not an operation listed under 326 IAC 9-1-2.

State Rule Applicability – Corn Unloading, Storage and Cleaning

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))

Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the PM/PM10 emissions (including filterable and condensable PM10) shall be limited as follows:

Process (Control)	Stack	PM/PM10 Limit (gr/dscf)	PM/PM10 Limit (lb/hr)
Truck and Railcar Corn Unloading and Corn Storage Processes (CPC01)	CP01	0.005	2.57

Compliance with these limits satisfies the requirements of 326 IAC 2-2.

Pursuant to SSM 037-22018-000046, issued May 17, 2006:

(a) Pursuant to 326 IAC 2-2-3, and in order to render the requirements of 326 IAC 2-2 not applicable to Silo F, emissions from Stack FP05 shall not exceed the limits listed in the following table:

Process (Control)	Stack	PM/PM10 Limit (gr/dscf)	PM10 Limit (lb/hr)	PM Limit (lb/hr)
Corn Cleaning Process - Silos A, B, C, D, E and F (FPC05)	FP05	0.005	0.17	5.7

(b) Throughput of the existing drag pit conveyor (unloading bins to storage silos) and receiving conveyor system (storage silos to corn cleaning process) shall not exceed 15,000 bushels/hour and 7,500 bushels/hour, respectively.

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(1), a unit or facility subject to an PM emission limit established under 326 IAC 2-2 is not subject to the requirements of 326 IAC 6-3-2. Therefore, 326 IAC 6-3-2 does not apply to the truck and railcar corn unloading process, corn storage process and corn cleaning process.

326 IAC 7 (Sulfur Dioxide Emission Limitations)
The truck and railcar corn unloading process, corn storage process and corn cleaning process are not subject to any 326 IAC 7 rule because there are no SO2 emissions from any of the processes.

326 IAC 8 (Volatile Organic Compound Emission Limitations)
The truck and railcar corn unloading process, corn storage process and corn cleaning process are not subject to any 326 IAC 8 rule because there are no VOC emissions from any of the processes.

State Rule Applicability – Corn Steeping

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the SO2 emissions shall be limited as follows:

Facility (Control)	Stack/Vent	SO2 Limit (lb/hr)
Steep Area (FPC06)	FP06	0.23

Compliance with this limit will render the requirements of 326 IAC 2-2 not applicable.

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)
The corn steeping process is not subject to any 326 IAC 6 rule because it is not a source of PM emissions.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
Pursuant to 326 IAC 7-1.1-1, the corn steeping process is subject to the requirements of 326 IAC 7-1.1 because it has an uncontrolled potential to emit greater than 25 tons of SO2 per year. However, the corn steeping process does not combust oil or coal and therefore is not subject to the emission limitations in 326 IAC 7-1.1-2.

326 IAC 8 (Volatile Organic Compound Emission Limitations)
The corn steeping process is not subject to any 326 IAC 8 rule because it is not a source of VOC emissions.

State Rule Applicability – Separation

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
Pursuant PSD CP 027-7239-00046, issued on June 10, 1997, the SO2 emissions shall be limited as follows:

Facility (Control)	Stack/ Vent	SO2 Limit (lb/hr)
Milling Area (FPC0F)	FP07	0.23

Compliance with this limit will render the requirements of 326 IAC 2-2 not applicable.

During the Part 70 development process, the OAQ determined that the SO2 emissions from the starch and gluten separation area should have been reviewed with respect to the requirements of 326 IAC 2-2. As a result, the following condition has been added to the permit:

> The IDEM, OAQ has information that indicates that the SO2 emissions from the starch and gluten separation area have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

The corn germ, fiber, gluten and starch separation process is not subject to any 326 IAC 6 rule because it is not a source of PM emissions.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-1, the corn germ, fiber, gluten and starch separation process is subject to the requirements of 326 IAC 7-1.1 because it has an uncontrolled potential to emit greater than 25 tons of SO2 per year. However, the corn germ, fiber, gluten and starch separation process does not combust oil or coal and therefore is not subject to the emission limitations in 326 IAC 7-1.1-2.

326 IAC 8 (Volatile Organic Compound Emission Limitations)

The corn germ, fiber, gluten and starch separation process is not subject to any 326 IAC 8 rule because it is not a source of VOC emissions.

State Rule Applicability –
Germ, Corn and Gluten Production and Anaerobic Wastewater Treatment

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))

See the *Existing Approvals* and *Description of Modification* sections of this document for more information.

Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the VOC emissions from the entire source are subject to 326 IAC 2-2. During the Part 70 review process, the OAQ determined that the VOC emissions from the corn steep and alcohol stillage evaporation system were not addressed in the 1997 construction permit. As a result, the following condition has been included in the Part 70 permit:

> The IDEM, OAQ has information that indicates that the VOC emissions from the corn steep and alcohol stillage evaporation system have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to that emission unit with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the PM, PM10 (including filterable and condensable PM10), and NOx emissions from the units of the germ production, corn gluten feed production, gluten production, and anaerobic wastewater treatment processes shall be limited as follows:

Facility (Control)	Stack	PM Limit	PM10 Limit	NOx limit
germ dryer and discharge conveyor (FPC12)	FP13	0.01 gr/dscf 1.37 lb/hr	-	0.06 lb/MMBtu
rotary germ cooling system (FPC09, FPC12)	FP13	0.03 gr/dscf 0.77 lb/hr	0.03 gr/dscf 0.77 lb/hr	-
corn gluten feed dryer and gluten dryer (FPC17, FPC23, FPC13)	FP13	0.01 gr/dscf 3.65 lb/hr (total)	0.05 gr/dscf 1.82 lb/hr (total)	0.06 lb/MMBtu (gluten dryer) 0.047 lb/MMBtu (corn gluten feed dryer)
germ transport system (FPC10)	FP10	0.005 gr/dscf 0.105 lb/hr	0.005 gr/dscf 0.105 lb/hr	-
germ storage bin (FPC11)	FP11	0.005 gr/dscf 0.005 lb/hr	0.005 gr/dscf 0.005 lb/hr	-
corn storage process supplemental gluten feed system (FPC20)	FP20	0.005 gr/dscf 0.045 lb/hr	0.005 gr/dscf 0.045 lb/hr	-
corn gluten feed transport system (FPC18)	FP18	0.005 gr/dscf 2.15 lb/hr	0.005 gr/dscf 2.15 lb/hr	-
corn gluten feed storage system (FPC22)	FP22	0.005 gr/dscf 0.005 lb/hr	0.005 gr/dscf 0.005 lb/hr	-
corn gluten feed final mill system (FPC19)	FP19	0.005 gr/dscf 0.17 lb/hr	0.005 gr/dscf 0.17 lb/hr	-
gluten transport system (FPC14)	FP14	0.005 gr/dscf 0.085 lb/hr	0.005 gr/dscf 0.085 lb/hr	-
gluten storage system (FPC15)	FP15	0.005 gr/dscf 0.005 lb/hr	0.005 gr/dscf 0.005 lb/hr	-
lime storage bin (MPC60)	MP60	0.005 gr/dscf 0.03 lb/hr	0.005 gr/dscf 0.03 lb/hr	-

Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the SO2 emissions shall be limited as follows:

Facility (Control)	Stack	SO2 Limit (lb/hr)
Gluten Dryer (FPC13)	FP13	6.67
Thermal Oxidizer FPC23	FP13	2.83

Compliance with these limits will render the requirements of 326 IAC 2-2 not applicable.

Note that the OAQ has determined that several units are out of compliance with established emission limits. See the *Existing Approvals* section of this document for more information.

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(c)(1), a unit or facility subject to an PM emission limit established under 326 IAC 2-2 is not subject to the requirements of 326 IAC 6-3-2. Therefore, 326 IAC 6-3-2 does not apply to the truck and railcar corn unloading process, corn storage process, corn cleaning process and the lime storage bin.

The corn steep and alcohol stillage evaporations systems are not subject to any 326 IAC 6 rule because they are not a source of PM emissions.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-1, the germ, corn and gluten production processes are subject to the requirements of 326 IAC 7-1.1 because each has an uncontrolled potential to emit greater than 25 tons of SO2 per year. However, those production processes do not combust oil or coal and therefore are not subject to the emission limitations in 326 IAC 7-1.1-2.

326 IAC 8 (Volatile Organic Compound Emission Limitations - BACT)

Pursuant to 326 IAC 8-1-6, any facility constructed after January 1, 1980 that has a potential to emit greater than or equal to 25 tons of VOC per year shall reduce VOC emissions using BACT.

Of the various systems that comprise the germ, corn and gluten production processes, only the corn gluten feed dryer, germ dryer, gluten dryer and corn steep and alcohol stillage evaporation systems have a potential to emit VOC.

The corn gluten feed dryer, germ dryer, and gluten dryer each were constructed after January 1, 1980 and have the potential to emit greater than 25 tons of VOC per year. Therefore, they are subject to the requirements of 326 IAC 8-1-6. The VOC emissions from those dryers are limited pursuant to 326 IAC 2-2 which satisfies the requirements of 326 IAC 8-1-6. See the *Description of Modification* section of this document for more information.

The corn steep and alcohol stillage evaporation system has a potential to emit less than 25 tons of VOC per year. Therefore, it is not subject to the requirements of 326 IAC 8-1-6.

State Rule Applicability – Corn Gluten Feed Pellet Production

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))

Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the PM and PM10 emissions (including filterable and condensable PM10) from the units of the corn gluten feed pellet production process shall be limited as follows:

Facility (Control)	Stack	PM Limit	PM10 Limit
pellet cooler (FPC24)	FP18	0.06 gr/dscf 18.00 lb/hr	0.03 gr/dscf 9.00 lb/hr
pellet storage bin (FPC25)	FP25	0.005 gr/dscf 0.13 lb/hr	0.005 gr/dscf 0.13 lb/hr

Compliance with these limits satisfies the requirements of 326 IAC 2-2.

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(c)(1), a unit or facility subject to an PM emission limit established under 326 IAC 2-2 is not subject to the requirements of 326 IAC 6-3-2. Therefore, 326 IAC 6-3-2 does not apply to the corn gluten feed pellet production process.

326 IAC 7 (Sulfur Dioxide Emission Limitations)

The corn gluten feed pellet production process is not subject to any 326 IAC 7 rule because the process is not a source of SO2 emissions.

326 IAC 8 (Volatile Organic Compound Emission Limitations)

The corn gluten feed pellet production process is not subject to any 326 IAC 8 rule because the process is not a source of VOC emissions.

State Rule Applicability – Loadout Process

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))

Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the PM and PM10 emissions (including filterable and condensable PM10) from the germ, gluten, gluten feed, and gluten feed pellet loadout process shall be limited as follows:

Facility (Control)	Stack	PM/PM10 Limit
Germ, gluten, gluten feed, and gluten feed pellet loadout system (FPC26)	FP26	0.005 gr/dscf

Compliance with these limits satisfies the requirements of 326 IAC 2-2.

The IDEM, OAQ has information that indicates that the PM/PM10 emissions from the loadout process (exhausting to stacks FP26 and FP28) have contributed to a violation of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided in Section B of this permit does not apply to that emission unit with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed.

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(c)(1), a unit or facility subject to an PM emission limit established under 326 IAC 2-2 is not subject to the requirements of 326 IAC 6-3-2. Therefore, 326 IAC 6-3-2 does not apply to the germ, gluten, gluten feed, and gluten feed pellet loadout system or the transfer conveyor system.

326 IAC 7 (Sulfur Dioxide Emission Limitations)

The loadout process is not subject to any 326 IAC 7 rule because the process is not a source of SO2 emissions.

326 IAC 8 (Volatile Organic Compound Emission Limitations)

The loadout process is not subject to any 326 IAC 8 rule because the process is not a source of VOC emissions.

State Rule Applicability – Alcohol Production

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))

See the *Existing Approvals* section of this document regarding VOC emissions from the fermentation system.

Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997:

(a) The VOC emissions from the equipment of the alcohol production process shall be limited as follows:

Facility (Control)	Stack	VOC Limit
Alcohol Distillation System (APC32)	AP32	1.14 lb/hr
Alcohol Storage System (APC95 and APC96)	AP95 and AP96	0.8 lb/hr combined total
Alcohol and Distillation Heads Loadout Area (APC35)	AP35	2.3 lb/hr
Storage Tank	AP85	0.06 lb/hr
Storage Tank	AP86	0.03 lb/hr
Storage Tank	AP87	0.02 lb/hr
Storage Tank	AP88	0.0003 lb/hr
Storage Tank	AP89	0.005 lb/hr
Storage Tank	AP90	0.005 lb/hr
Storage Tank	AP91	0.004 lb/hr
Alcohol Production Process Fugitive Emissions	None	10.40 lb/hr

(b) To ensure that the fugitive VOC emissions from the alcohol production process are minimized, the Permittee shall develop, implement, and revise as necessary, a visual inspection and maintenance program for the equipment of the alcohol production process.

Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the SO2 emissions shall be limited as follows:

Facility (Control)	Stack	SO2 Limit (lb/hr)
Flash Cooler Vent Condenser System	AP31	0.04

Compliance with this limit will render the requirements of 326 IAC 2-2 not applicable.

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

The alcohol production process is not subject to any 326 IAC 6 rule because it is not a source of PM emissions.

326 IAC 7 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-1, the alcohol production process is subject to the requirements of 326 IAC 7-1.1 because it has an uncontrolled potential to emit greater than 25 tons of SO2 per year. However, the process does not combust oil or coal and therefore is not subject to the emission limitations in 326 IAC 7-1.1-2.

326 IAC 8-1-6 (Volatile Organic Compound Emission Limitations - BACT)

The alcohol production process was constructed after January 1, 1980 and has the potential to emit greater than 25 tons of VOC per year. Therefore, it is subject to the requirements of 326 IAC 8-1-6. The VOC emissions from this process are limited pursuant to 326 IAC 2-2 which satisfies the requirements of 326 IAC 8-1-6.

State Rule Applicability – Starch Production

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))

See the *Description of Modification* section of this document and Appendix B for the BACT determination for the starch dryer.

Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997:

(a) The PM, PM10 (including filterable and condensable PM10), NOx, and VOC emissions from the units of the starch production process shall be limited as follows:

Facility (Control)	Stack	PM Limit	PM10 Limit	NOx Limit	VOC Limit
starch reactor system	SP46	-	-	-	1 lb per hour per 10 hour period
starch reactor brine feed system (SPC65)	SP65	0.02 gr/dscf 0.34 lb/hr	0.01 gr/dscf 0.17 lb/hr	-	-
soda ash storage bin (SPC64)	SP64	0.02 gr/dscf 0.34 lb/hr	0.01 gr/dscf 0.17 lb/hr	-	
starch dryer (SPC49)	SP49	0.01 gr/dscf 10.80 lb/hr	-	0.075 lb/MMBtu	-
starch storage bin (SPC50)	SP50	0.005 gr/dscf 0.09 lb/hr	0.005 gr/dscf 0.09 lb/hr	-	-
loadout system non-fugitive control (SPC44a)	SP44a	0.005 gr/dscf 0.22 lb/hr	0.005 gr/dscf 0.22 lb/hr	-	-
loadout system fugitive control (SPC44b)	SP44b	0.005 gr/dscf 0.26 lb/hr	0.005 gr/dscf 0.26 lb/hr	-	-

(b) To ensure that the fugitive VOC emissions from the starch reactor system are minimized, the Permittee shall develop, implement, and revise as necessary, a visual inspection and maintenance program.

Compliance with these requirements satisfies the requirements of 326 IAC 2-2.

Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the SO2 emissions shall be limited as follows:

Facility (Control)	Stack	SO2 Limit (lb/hr)
Starch Dryer (SPC49)	SP49	0.02

Compliance with this limit will render the requirements of 326 IAC 2-2 not applicable.

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(c)(1), a unit or facility subject to an PM emission limit established under 326 IAC 2-2 is not subject to the requirements of 326 IAC 6-3-2. Therefore, 326 IAC 6-3-2 does not apply to the starch production process.

326 IAC 7 (Sulfur Dioxide Emission Limitations)

The starch production process is not subject to any 326 IAC 7 rule because the process is not a source of SO2 emissions.

326 IAC 8-1-6 (Volatile Organic Compound Emission Limitations - BACT)

The starch production process was constructed after January 1, 1980 and has the potential to emit greater than 25 tons of VOC per year. Therefore, it is subject to the requirements of 326 IAC 8-1-6. The VOC emissions from this process are limited pursuant to 326 IAC 2-2 which satisfies the requirements of 326 IAC 8-1-6.

State Rule Applicability – Maltodextrin Production

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))

Pursuant PSD CP 027-7239-00046, issued on June 10, 1997, the maltodextrin production process is subject to a number of 326 IAC 2-2 requirements. However, the maltodextrin production process has not been in operation since 2002. As a result, the Permittee must submit a permit application that re-evaluates the appropriate 326 IAC 2-2 requirements before it can operate the maltodextrin production process. The Permittee is not allowed to operate the maltodextrin production process until this process is re-evaluated under 326 IAC 2-2.

State Rule Applicability – Boilers

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))

See the *Existing Approvals* section of this document regarding SO2 emissions.

Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the following requirements apply to Boiler 1 and Boiler 2:

(a) The PM/PM10 emissions from each boiler shall not exceed 2.44 pounds per hour;

(b) The NOx emissions shall not exceed 0.05 lb/MMBtu during periods of normal operation and 0.20 lb/MMBtu during periods of startup, shutdown, and malfunction.

(c) NOx emissions shall be controlled using a low NOx burner/flue gas recirculation system.

(d) The Permittee shall minimize the CO emissions through the use of combustion controls on each boiler. The controls will measure the oxygen content of the flue gas to determine the efficient operating conditions.

326 IAC 3-5 (Continuous Monitoring of Emissions)

Pursuant to 326 IAC 3-5-1(b), Boiler 1 and Boiler 2 are subject to the requirements of 326 IAC 3-5 because they each are fossil fuel-fired steam generators with a heat input capacity greater than 100 MMBtu/hr.

Pursuant to 326 IAC 3-5, continuous emission monitoring systems (CEMS) for Boiler 1 and Boiler 2 shall be installed, calibrated, maintained, and operated for measuring NOx and O_2 which meet all applicable performance specifications of 326 IAC 3-5-2.

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-1(d), Boiler 1 and Boiler 2 are subject to the requirements of 326 IAC 6-2-4 because they were constructed after September 21, 1983 and are indirect heating sources of particulate emissions.

However, pursuant to 326 IAC 6-2-1(h), the PM limitations established pursuant to 326 IAC 2-2 satisfy the requirements of 326 IAC 6-2.

326 IAC 7 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-1, Boiler 1 and Boiler 2 are not subject to the requirements of 326 IAC 7-1.1 because they each have an uncontrolled potential to emit less than 25 tons of SO2 per year.

326 IAC 8-1-6 (Volatile Organic Compound Emission Limitations - BACT)

Boiler 1 and Boiler 2 were constructed after January 1, 1980 and each has the potential to emit less than 25 tons of VOC per year. Therefore, Boiler 1 and Boiler 2 are not subject to the requirements of 326 IAC 8-1-6.

326 IAC 10-4 (NO_x Budget Trading Program)

Pursuant to 326 IAC 10-4-1(a)(1), Boiler 1 and Boiler 2 are not subject to 326 IAC 10-4 because each unit is not an “electricity generating unit” as defined in 326 IAC 10-4-2(16). Each boiler is not an “electricity generating unit” because it does not generate electricity.

State Rule Applicability – Cooling Tower

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))

Pursuant to 326 IAC 2-2 and PSD CP 027-7239-00046, issued on June 10, 1997, the PM/PM10 emissions from the process water cooling tower:

(a) Shall not exceed 4.5 pounds per hour.

(b) Shall be controlled by mist elimination system APC38;

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(c)(1), a unit or facility subject to an PM emission limit established under 326 IAC 2-2 is not subject to the requirements of 326 IAC 6-3-2. Therefore, 326 IAC 6-3-2 does not apply to the process water cooling tower.

326 IAC 7 (Sulfur Dioxide Emission Limitations)

The process water cooling tower is not subject to any 326 IAC 7 rule because it is not a source of SO2 emissions.

326 IAC 8 (Volatile Organic Compound Emission Limitations)

The process water cooling tower is not subject to any 326 IAC 8 rule because it is not a source of VOC emissions.

State Rule Applicability – Insignificant Activities

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))

Pursuant to PSD CP 027-7239-00046, issued on June 10, 1997, the amount of diesel fuel burned in the insignificant emergency fire pump engine shall be limited to 1,128 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit will render the requirements of 326 IAC 2-2 not applicable.

Testing Requirements

The testing requirements applicable to this source are included in the respective D sections of the permit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result,

compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the approporiate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are included in the respective D sections of the permit.

Conclusion

The operation of the stationary corn wet milling plant shall be subject to the conditions of this Part 70 permit T027-14200-00046.

Appendix A: Emission Calculations
Regenerative Thermal Oxidation and Product Dryers

Company Name: Grain Processing Corporation
Address City IN Zip: 1443 South 300 West, Washington, IN 47501
Permit #: T027-14200-00046
Reviewer: ERG/BS
Date: 1-Jun-07

Emissions Calculations

Source: FP34
Description: ***Parallel RTO system***
(includes emissions from Germ, Gluten, and CGF Dryers and scrubbers)

Normal Operating Basis:
RTOs accept emissions from previously permitted Germ Dryer Scrubber (FP12), Gluten Dryer Scrubber (FP13), and CGF Dryer Condensing Tower (FP17).
These units will no longer be individual emissions points.

24	hours/day
7	days/week
52	weeks/year
8760	hours/year

Air flow:
Design air flow for each RTO 86,000 cfm

Estimated exhaust conditions at capacity
62,927 cfm
261 F
29% moisture

Particulate Emissions

Stack Flow rate: **62,927 scfm**
PM: **0.01 grain/dscf**
PM10: **0.01 grain/dscf**
Control Efficiency: **95%**

$$\frac{62{,}927\ \text{cuft}}{\text{min}} \times \frac{60\ \text{min}}{\text{hr}} \times \frac{0.01\ \text{gr}}{\text{cuft}} \times \frac{1\ \text{lb}}{7000\ \text{gr}} =$$

Controlled Emissions
PM = **5.39 lb/hr PM**
PM10= **5.39 lb/hr PM10**

Uncontrolled Emissions
PM = **107.87 lb/hr PM**
PM10= **107.87 lb/hr PM10**

SO2 Emissions from Product drying:

RTOs:
Process SO2 emissions from RTO will include emissions from each individual dryer and control device.
SO2 emissions controlled by caustic addition to scrubbers/condensing tower

Germ Dryer

1 Approximately 280 lb/hr SO2 added at steeps at full production.
2 Approximately 6% is emitted.
3 Scrubber removal efficiency is 95%.

$$\frac{280\ \text{lb SO2 in}}{\text{hr}} \times \frac{6\ \text{lb}}{100\ \text{lb SO2 in}} = \mathbf{16.80\ lb/hr\ SO2\ Uncontrolled}$$

x (1-0.95) **0.84 lb/hr SO2 Controlled**

Gluten Dryer
1 Approximately 280 lb/hr SO2 added at steeps at full production.
2 Approximately 18% is emitted.
3 Scrubber removal efficiency is 95%.

$$\frac{280\ \text{lb SO2 in}}{\text{hr}} \times \frac{18\ \text{lb}}{100\ \text{lb SO2 in}} = \mathbf{50.40\ lb/hr\ SO2\ Uncontrolled}$$

x (1-0.95) **2.52 lb/hr SO2 Controlled**

CGF Dryer

1 280 lb/hr SO2 added to steeping process.
2 Approximately 16% is released through the CGF drying process
3 Assume 90% removal of SO2 in Condensing Tower

$$\frac{280 \ \text{lb SO2 in}}{\text{hr}} \times \frac{16 \ \text{lb}}{100 \ \text{lb SO2 in}} = 44.80 \ \text{lb/hr SO2 Uncontrolled}$$

$$\times (1-0.90) \quad 4.48 \ \text{lb/hr SO2 Controlled}$$

Total Process SO2 Emissions: = **112.00 lb/hr SO2 Uncontrolled**
7.84 lb/hr SO2 Controlled

VOC Emissions

VOC emissions are based on stack tests and, therefore, include emissions from both drying and combustion

Germ Dryer

1 Stack testing displayed approx. 14.23 lb/hr VOC venting from the Germ Dryer.
2 98% VOC removal in RTO

14.23 lb/hr VOC Uncontrolled
0.28 lb/hr VOC Controlled

Gluten Dryer

1 Stack testing displayed approx. 48 lb/hr VOC venting from the Gluten Dryer.
2 98% VOC removal in RTO

48.00 lb/hr VOC Uncontrolled
0.96 lb/hr VOC Controlled

CGF Dryer

1 Stack testing displayed approx. 40.61 lb/hr VOC venting from the CGF Dryer.
2 98% VOC removal in RTO

40.61 lb/hr VOC Uncontrolled
0.81 lb/hr VOC Controlled

Total Process VOC Emissions: = **102.84 lb/hr VOC Uncontrolled**
2.06 lb/hr VOC Controlled

Appendix A: Emission Calculations
Regenerative Thermal Oxidation and Product Dryers

Company Name: **Grain Processing Corporation**
Address City IN Zip: **1443 South 300 West, Washington, IN 47501**
Permit #: **T027-14200-00046**
Reviewer: **ERG/BS**
Date: **1-Jun-07**

Combustion Emissions Calculations

Source: **FP34**
Description: ***Parallel RTO system***
(includes emissions from Germ, Gluten, and CGF Dryers and scrubbers)

Burner Capacities

Germ Dryer:	24	MMBtu/hr
Gluten Dryer:	30	MMBtu/hr
CGF Dryer:	30	MMBtu/hr
RTOs:	21.772	MMBtu/hr
Total Combustion	105.772	MMBtu/hr

Emission Factors

Total PM/PM10 emissions are calculated from a manufacturer grain loading based on air flow
Total VOC emissions are based on stack test information

Natural Gas Combustion Factors

AP42 (SCC 10200602)

SO2:	0.6	lb/MMCF
NOx:	100	lb/MMCF
CO:	84	lb/MMCF
VOC	5.5	lb/MMCF

Manufacturer's NOx emission factors

Germ Dryer:	0.06	lb/MMBtu
Gluten Dryer	0.06	lb/MMBtu
CGF Dryer	0.047	lb/MMBtu
RTO	0.46	lb/MMBtu

From RTO manufacturer:
10,832.15 lbmol/hr @ 156F
10,832.15 * 10/10^6 = 0.11 lbmol/hr NOx added
MW=46
NOx = 5.06 lb/hr
5.06/10.886 = 0.46 lb/MMBtu

Biogas Combustion Factors

SO2:	0.6	lb/MCF	(based on 5000 ppm H2S in stream)

AP42 (SCC 30190099)

NOx:	0.068	lb/MMBtu	=	40.8	lb/mmcf
CO:	0.37	lb/MMBtu	=	222	lb/mmcf
VOC:	0.14	lb/MMBtu	=	84	lb/mmcf

Germ and Gluten Dryer

Assume all biogas produced goes to either the germ or gluten dryer (CGF dryer does not burn biogas) in order to calculate maximum emissions for dryers.
Assume remainder of heat in dryers is made up with natural gas.

Germ and Gluten Dryer Burner Capacity: 54 MMBtu/hr

Maximum biogas combustion for system: 30000 cuft/hr
Biogas heat of combustion: 600 Btu/cuft
Heat based on Max biogas: 18 MMBtu

Remainder of heat input: 36 MMBtu/hr
Makeup Natural Gas: 36000 cuft/hr

SO2 Emissions from Biogas:

						Uncontrolled (lb/hr)	Controlled (lb/hr)
Gluten and Germ Dryer (95% control in scrubbers)							
30,000	cuft	0.6	lb	=		**18.000**	**0.900**
	hr	1.00E+03	cuft				
SO2 Emissions from Natural Gas:							
Gluten and Germ Dryer (95% control in scrubbers)							
36,000	cuft	0.6	lb	=		**0.022**	**0.001**
	hr	1.00E+06	cuft				
					Total	**18.022**	**0.90**
					TPY	**78.93**	**3.95**

NOx Emissions (based on manufacturer specification):

						Uncontrolled (lb/hr)	Controlled (lb/hr)
Germ and Gluten Dryers							
54	MMBtu	0.06	lb	=		**3.240**	**3.240**
	hr	1	MMBtu				
					TPY	**14.19**	**14.19**

CO Emissions:

CO is converted to CO2 in the RTO. Manufacturer indicated >=96% conversion of CO.

						Uncontrolled (lb/hr)	Controlled (lb/hr)
CO Emissions from Biogas:							
30,000	cuft	222	lb	=		**6.660**	**0.266**
	hr	1.00E+06	cuft				
CO Emissions from Natural Gas:							
36,000	cuft	84	lb	=		**3.024**	**0.121**
	hr	1.00E+06	cuft				
					Total	**9.684**	**0.387**
					TPY	**42.42**	**1.70**

CGF Dryer (Natural Gas Combustion Only)

CGF Dryer Natural Gas Usage: 30,000 cuft/hr

SO2 Emissions:

						Uncontrolled (lb/hr)	Controlled (lb/hr)
CGF Dryer (90% Control in condensing tower)							
30,000	cuft	0.6	lb	=		**0.018**	**0.002**
	hr	1.00E+06	cuft				
					TPY	**0.08**	**0.01**

NOx Emissions (low NOx burners):

						Uncontrolled (lb/hr)	Controlled (lb/hr)
CGF Dryer							
30	MMBtu	0.047	lb	=		**1.410**	**1.410**
	hr	1	cuft				
					TPY	**6.18**	**6.18**

CO Emissions:
CO is converted to CO2 in the RTO. Manufacturer indicated >=96% conversion of CO.

						Uncontrolled (lb/hr)	Controlled (lb/hr)
30,000	cuft	84	lb	=		**2.520**	**0.101**
	hr	1.00E+06	cuft				
					TPY	**11.04**	**0.44**

RTOs

RTOs can combust biogas and natural gas
Worst case scenario is based on maximum biogas production burned in RTOs with makeup natural gas to reach burner capacity
VOC from combustion based on Natural Gas Emission Factors.

RTO burner capacity:	21.772	MMBtu/hr	(10.886 MM Btu/hr each)	
Maximum biogas combustion for system:	30000	cuft/hr		
Limited biogas combustion for system:	14,383.6	cuft/hr		
Biogas heat of combustion:	600	Btu/cuft		
Heat based on Max biogas:	18	MMBtu		
Heat based on limited biogas:	8.63	MMBtu		
Remainder of heat input (maximum):	3.772	MMBtu/hr		
Makeup Natural Gas (maximum):	3772	cuft/hr	33	MMCF/yr
Remainder of heat input (for limit):	13.14	MMBtu/hr		
Makeup Natural Gas (for limit):	13,141.9	cuft/hr	115	MMCF/yr

SO2 Emissions from Biogas:
RTOs (No control)

					Uncontrolled (lb/hr)	Limited (lb/hr)
30,000	cuft	0.6	lb	=	**18.000**	**8.630**
	hr	1.00E+03	cuft			

SO2 Emissions from Natural Gas:
RTOs (No control)

3,772	cuft	0.6	lb	=	**0.002**	**0.002**
	hr	1.00E+06	cuft			
				Total	**18.002**	**8.63**
				TPY	**78.85**	**37.81**

NOx Emissions from Biogas:
RTOs

					Uncontrolled (lb/hr)	Limited (lb/hr)
21.772	MMBtu	0.46	lb	=	**10.015**	**3.970**
	hr	1	MMBtu			
				TPY	**43.87**	**17.39**

NOx Emissions from makeup natural gas:

3.772	MMBtu	0.5	lb	=	NA	**1.886**
	hr	1	MMBtu			
				TPY	NA	**8.26**

Total limited NOx emissions from RTOs **25.65**

CO Emissions:

CO is converted to CO2 in the RTO. Manufacturer indicated >=96% conversion of CO.

						Uncontrolled (lb/hr)	Controlled (lb/hr)
CO Emissions from Biogas:							
	30,000	cuft	222	lb	=	**6.660**	**0.266**
		hr	1.00E+06	cuft			
CO Emissions from Natural Gas:							
	3,772	cuft	84	lb	=	**0.317**	**0.013**
		hr	1.00E+06	cuft			
					Total	**6.977**	**0.279**
					TPY	**30.56**	**1.22**

VOC Emissions:

98% control in RTO

						Uncontrolled (lb/hr)	Controlled (lb/hr)
VOC Emissions from Biogas:							
	30,000	cuft	84	lb	=	**2.520**	**0.050**
		hr	1.00E+06	cuft			
VOC Emissions from Natural Gas:							
	3,772	cuft	5.5	lb	=	**0.021**	**0.000**
		hr	1.00E+06	cuft			
					Total	**2.541**	**0.051**
					TPY	**11.13**	**0.22**

FP34 Emissions Summary

	Uncontrolled PTE		Controlled PTE	
	(lb/hr)	(TPY)	(lb/hr)	(TPY)
PM	107.87	472.49	5.39	23.62
PM10	107.87	472.49	5.39	23.62
SO2				
NOx	14.67	64.23	8.62	37.76
CO	19.18	84.01	0.77	3.36
VOC	105.38	461.57	2.11	9.23

Appendix A: Emission Calculations
Regenerative Thermal Oxidation

Company Name: Grain Processing Corporation
Address City IN Zip: 1443 South 300 West, Washington, IN 47501
Permit #: T027-14200-00046
Reviewer: ERG/BS
Date: 1-Jun-07

RTO System SO2 Emissions Summary

Unit Description	Current Stack ID	Current Limited Emission Rate	Actual Emissions (2)	New Stack ID	Proposed Limit	Proposed Limited Emission Rate		Change in Emissions
		lb/hr	TPY			lb/hr	TPY	TPY
Existing RTO (FPC23)	FP23	2.83	1.58	NA (1)	NA (1)	NA (1)	NA (1)	-1.58
NEW RTOs (FPC34a and FPC34b)	NA	NA	NA	FP34	126 MMCF per 365 days	8.63	37.81	37.81
							Net Change in SO2 Emissions from Modification	**36.23**

Notes:
NA = Not applicable
(1) Upon start-up of the new RTO system, the old RTO, FPC23, will be removed and no longer in operation.
(2) The actual emission figure presented is the average of the actual annual emissions for FPC23 from 2005 and 2006.

Appendix A: Emission Calculations
Regenerative Thermal Oxidation

Company Name: Grain Processing Corporation
Address City IN Zip: 1443 South 300 West, Washington, IN 47501
Permit #: T027-14200-00046
Reviewer: ERG/BS
Date: 1-Jun-07

RTO System NOx Emissions Summary

Unit Description	Current Stack ID	Current Limited Emission Rate	Actual Emissions (3)	New Stack ID	Proposed Limit	Proposed Limited Emission Rate		Change in Emissions
		lb/hr	TPY			lb/hr	TPY	TPY
Existing RTO (FPC23)	FP23	NA (2)	3.71	NA (1)	NA (1)	NA (1)	NA (1)	-3.71
NEW RTOs (FPC34a and FPC34b)	NA	NA	NA	FP34	(4)	5.86	less than 40	less than 40

Net Change in NOx Emissions from Modification	36.29

Notes:
NA = Not applicable
(1) Upon start-up of the new RTO system, the old RTO, FPC23, will be removed and no longer in operation.
(2) RTO (FPC23) NOx emissions were not limited in the 1997 PSD CP.
(3) The actual emission figure presented is the average of the actual annual emissions for FPC23 from 2005 and 2006.
(4) The source has accepted a fuel consumption limit based on the emission rates of biogas and natural gas. See Page 9 of 9.

Appendix A: Emission Calculations
RTO Fuel Limit Evaluation

Company Name: **Grain Processing Corporation**
Address City IN Zip: **1443 South 300 West, Washington, IN 47501**
Permit #: **T027-14200-00046**
Reviewer: **ERG/BS**
Date: **1-Jun-07**

Biogas limit =	126	MMCF/yr
conversion factor	1.812	MMCF NG/MMCF BG (NOx basis)
Natural Gas makeup	90	MMCF/yr

	Use (MMCF/yr)	SO2 EF (lb/MMCF)	NOx EF (lb/MMCF)	SO2 emissions (tpy)	NOx emissions (tpy)
Biogas (BG)	126.00	600	276	37.80	17.39
Natural Gas (NG) - extra	0	0.6	500	0.00	0
Natural Gas (NG) - makeup	90	0.6	500	0.03	22.50
			total	37.83	39.89

APPENDIX B -
BEST AVAILABLE CONTROL TECHNOLOGY (BACT) DETERMINATION

Source Information and Description of Modification

Source Name:	Grain Processing Corporation
Source Location:	1443 South 300 West, Washington, Indiana 47501
County:	Daviess
SIC Code:	2046, 2048, 2085, 2099
Part 70 Permit No.:	T027-14200-00046
Permit Reviewer:	ERG/BS

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) has performed the following federal BACT (Best Available Control Technology) review for a major modification relating to a corn wet milling plant owned and operated by Grain Processing Corporation ("GPC") located in Washington, Indiana.

GPC has submitted an application for their Part 70 operating permit and a request to account for process VOC emissions from the dryers located at the source.

BACT Description

This source is located in Daviess County which is designated as attainment or unclassifiable for all criteria pollutants.

For the reasons mentioned in the *Description of Modification* section of the Technical Support Document, a BACT determination, pursuant to 326 IAC 2-2-3, is required.

> BACT is defined as "an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under the CAA emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of 'best available control technology' result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard established pursuant to section 111 or 112 of this Act."

According to the *"Top-Down" Best Available Control Technology Guidance Document* outlined in the 1990 draft USEPA *New Source Review Workshop Manual*, BACT analyses are conducted with a 'top-down' approach which consists of the following steps:

(1) Identify all potentially available control options;

(2) Eliminate technically infeasible control options;

(3) Rank remaining control technologies by control effectiveness;

(4) Evaluate control options; and

(5) Select BACT.

Also in accordance with the *"Top-Down" Best Available Control Technology Guidance Document* outlined in the 1990 draft USEPA *New Source Review Workshop Manual*, BACT analyses (specifically step 4) must take into account the energy, environmental, and economic impacts on the

source. These reductions may be determined through the application of available control techniques, process design, and/or operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute to air pollution, thereby protecting public health and the environment. This BACT determination is based on the following information:

(1) The EPA RACT/BACT/LAER (RBLC) Clearinghouse;

(2) EPA and State air quality permits;

(3) Communications with control device equipment manufacturers;

(4) The EPA New Source Review website;

(5) Technical books and articles; and

(6) Guidance documents from, and communications with, state agencies.

Accounting for Process VOC Emissions from Dryers

Background and Process Description

GPC currently has four (4) operational dryers at the source; a corn gluten feed dryer, germ dryer, gluten dryer, and a starch dryer. These dryers combust natural gas to dry the processed products after filtration and emissions are exhausted to stacks FP13 and SP49 (depending on the dryer).

As explained in the TSD, VOC BACT must be determined for the corn gluten feed dryer, germ dryer, gluten dryer, and starch dryer.

Note that VOC BACT for the corn gluten feed, germ and gluten dryers is also required pursuant to 326 IAC 8-1-6.

BACT for VOC

Step 1 – Identify Control Options

The following table lists the information collected from consent decrees issued for dryers similar to those at GPC.

Source	Pollutant Controlled	Control Technology	Consent Decree Emission Limits
Agri-Energy	VOC	Thermal Oxidizer	95% destruction or 10 ppm
Al-Corn	VOC	Thermal Oxidizer	95% destruction or 10 ppm
Central MN Ethanol	VOC	Unknown	95% destruction or 10 ppm
Corn Plus	VOC	Thermal Oxidizer or Boiler	95% destruction or 10 ppm
CVEC	VOC	Thermal Oxidizer	95% destruction or 10 ppm
Diversified Energy Co.	VOC	Regenerative Thermal Oxidizer	95% destruction or 10 ppm
Ethanol 2000	VOC	Regenerative Thermal Oxidizer	95% destruction or 10 ppm
Agra Resources Coop.	VOC	Thermal Oxidizer	95% destruction or 10 ppm
Pro-Corn	VOC	Regenerative Thermal Oxidizer	95% destruction or 10 ppm

The following table lists ethanol plants in Indiana required to implement BACT (via 326 IAC 8-1-6) to control VOC emissions from their dryers:

Source (Permit; Issuance Date)	State	Control Technology	BACT
Maize AgriProducts (F007-24059-00019; 3/21/07)	IN	Thermal Oxidizer	99% control efficiency or VOC outlet less than 10 ppm
Indiana Biofuels, Inc. (F145-23832-00066; 3/7/07)	IN	Thermal Oxidizer	99% control efficiency or VOC outlet less than 10 ppm
Ultimate Ethanol, LLC (F095-23482-00127; 1/29/07)	IN	Thermal Oxidizer	98% control efficiency or VOC outlet less than 10 ppm
Cardinal Ethanol, LLC (F135-23226-00033; 1/26/07)	IN	Thermal Oxidizer	98% control efficiency or VOC outlet less than 10 ppm
Abengoa Bioenergy of Indiana (F129-23484-00050; 1/25/07)	IN	Thermal Oxidizer	98% control efficiency or VOC outlet less than 10 ppm
DRS Ventures, LLC (F139-22981-00020; 11/13/06)	IN	Thermal Oxidizer	98% control efficiency or VOC outlet less than 10 ppm
Premier Ethanol, LLC (F075-22858-00032; 9/18/06)	IN	Thermal Oxidizer	99% control efficiency or VOC outlet less than 10 ppm
Central Indiana Ethanol, LLC (SPR 053-22564-00062; 7/20/06)	IN	Thermal Oxidizer	98% control efficiency or VOC outlet less than 10 ppm
Putnam (ALTRA) Ethanol, LLC (SPR 133-22480-00003; 3/23/06)	IN	Thermal Oxidizer	98% control efficiency or VOC outlet less than 10 ppm
Andersons Clymers Terminal (F017-21536-00023; 2/15/06	IN	Thermal Oxidizer	98% control efficiency or VOC outlet less than 10 ppm
ASA Linden, LLC (F107-21453-00061; 2/8/06)	IN	Thermal Oxidizer	98% control efficiency or VOC outlet less than 10 ppm
Hartford Energy, LLC (F009-21592-00024; 1/31/06)	IN	Thermal Oxidizer	98% control efficiency
Iroquois Bio-Energy (F073-20945-00037; 7/22/05)	IN	Thermal Oxidizer	98% control efficiency

In a letter dated March 13, 2006, GPC acknowledged that 98% VOC control using a regenerative thermal oxidizer was technically and economically feasible.

The OAQ reviewed 17 facilities and 26 processes listed in the EPA's RBLC (RACT-BACT-LAER Clearinghouse) under the RBLC Codes 70.210 (Grain Dryers) and 70.500 (Agricultural Products Processing) that implemented BACT to control VOC emissions. Of these facilities and processes, the following five (5) most recent records were identified that address emissions from processed corn dryers:

Source	RBLC ID	Process	Date of permit issuance	VOC BACT limit (% control) *
Tate and Lyle	**	Feed, Meal and Germ Dryers	12/22/06	95%
Cargill	NE-0037	Fiber Steam Tube Dryer	9/8/06	95%
ADM	IL-0098	Gluten Dryer	10/27/03	unknown
Advanced Organics	OH-0203	Animal Feed Dryer	2/4/03	95%
ADM	IL-0087	Wet Corn Mill Dryer	12/27/02	95%
Michigan Ethanol	MI-0359	Grain Dryer	11/4/02	95%
GPC - Proposed	*NA*	*Corn Gluten Feed, Germ and Gluten Dryers*	*NA*	*98%*

* Thermal oxidation is the control technology employed to satisfy all of these BACTs.
** Not yet listed in the RBLC. Permitted via PSD SSM 157-22808-00003.

According to information available in the EPA's *Compilation of Air Pollutant Emission Factors, AP-42 Ch. 9 (Food and Agricultural Industries)* and the EPA's *CATC Technical Bulletins and Air Pollution Control Technology Fact Sheets*, VOC emissions from the drying of processed corn products can be controlled by:

(a) Thermal Oxidation

Thermal oxidizers are refractory lined enclosures with one or more burners in which the waste gas stream is routed through a high temperature combustion zone where it is heated and the combustible materials are burned. Thermal oxidizers typically operate at 1200 to 2100 degrees Fahrenheit with residence times typically ranging from 0.5 to 2 seconds. An efficient thermal oxidizer design must provide adequate residence time for complete combustion, sufficiently high temperatures for VOC destruction, and adequate velocities to ensure proper mixing without quenching combustion. The type of burners and their arrangement affect combustion rates and residence time; the more thorough the contact between the flame and VOC, the shorter the time required for complete combustion. Natural gas is required to ignite the flue gas mixtures and maintain combustion temperatures. Typically, a heat exchanger upstream of the oxidizer uses the heat content of the oxidizer flue gas to preheat the incoming VOC-laden stream to improve the efficiency of the oxidizer.

(b) Refrigeration Condensation

Refrigeration Condensers separate materials from gaseous streams by cooling and, in some cases, pressurizing a gas stream to cause some of the constituents to condense to liquid form. Condensers separate constituents based on the difference in dew points of the compounds that are targeted for separation. The most common type of refrigeration condensers are surface and contact condensers. Most surface condensers are shell and tube type heat exchangers. Contact condensers cool the gas stream by spraying a coolant directly into the gas stream.

(c) Carbon Adsorption

Carbon adsorption is a process by which VOC is retained on a granular carbon surface, which is highly porous and has a very large surface-to-volume ratio. Organic vapors retained on the adsorbent are thereafter desorbed and both the adsorbate and absorbent are recovered. Carbon adsorption systems operated in two phases: adsorption and desorption. Adsorption is rapid and removes most of the VOC in the stream. Eventually, the adsorbent becomes saturated with the vapors and the system's efficiency drops. Regulatory considerations dictate that the adsorbent be regenerated or replaced soon after efficiency begins to decline. In regenerative systems, the adsorbent is reactivated with steam or hot air and the absorbate (solvent) is recovered for reuse or disposal. Non-regenerative systems require the removal of the adsorbent and replacement with fresh or previously regenerated carbon.

(d) Wet scrubbing

There are several types of wet scrubbers that use a variety of techniques to control PM and VOC emissions. The type of scrubber used in a particular application is dependent on the characteristics of the air stream and the pollutant of concern. Wet scrubbers come in many different designs including packed bed towers and venturi scrubbers. Venturi scrubbers are designed to remove particulate emissions from an air stream using inertia and diffusion. These units are not very efficient at removing VOCs because the air stream does not have sufficient contact with the scrubbing liquid to remove soluble compounds. Packed bed tower scrubbers use packing material in the tower to maximize the contact surface area available for the pollutant and scrubbing liquid. The scrubbing liquid enters the top of the tower while the polluted air stream enters the bottom.

(e) Catalytic Oxidation

Catalytic oxidizers are similar to thermal oxidizers - the units are enclosed structures that use heat to oxidize the combustible materials. However, in a catalytic oxidizer, a catalyst is used to lower the operating temperature needed to oxidize the VOCs by lowering the activation energy for oxidation. When a preheated gas stream is passed through a catalytic oxidizer, the catalyst bed initiates and promotes the oxidation of the VOC without being permanently altered itself. Note that steps must be taken to ensure complete combustion. The types of catalysts used include platinum, platinum alloys, copper chromate, copper oxide, chromium, manganese, and nickel. These catalysts are deposited in thin layers on an inert substrate, usually a honeycomb shaped ceramic.

The exhaust temperature, volumetric flow rate, moisture content and VOC concentration of the respective dryers varies considerably. As a result, the remaining portions of this BACT analysis review each dryer separately unless otherwise noted.

Step 2 – Eliminate Technically Infeasible Control Options

(a) Corn Gluten Feed Dryer and Gluten Dryer

Note that the corn gluten feed dryer currently exhausts through a condensing tower and a regenerative thermal oxidizer (RTO) which have a combined control efficiency of 93%. The RTO was installed during initial plant construction to control potential odors from the dryer.

Thermal Oxidation - As the RBLC review indicates, thermal oxidation (primarily in the form of regenerative thermal oxidation) is a prevalent and proven technology used to reduce dryer VOC emissions. Therefore, this control technology is determined to be technically feasible.

Wet Scrubbing – The gluten dryer is currently controlled with wet scrubbers designed for SO2 and PM control. Wet scrubbing is a proven technology used to reduce dryer VOC emissions. Therefore, this control technology is determined to be technically feasible.

Refrigeration Condensation - This technology is designed and operated based on the dew point of the condensable materials. As a result, the organic materials targeted for removal must have a relatively

low volatility. The target compounds also must be present in a relatively high concentration of the gas stream for condensers to be efficient. Two of the three most predominant VOCs in the gas stream of the gluten dryers are acetaldehyde and formaldehyde; which are highly volatile. Therefore, this control technology is determined to be technically infeasible.

Carbon Adsorption – Carbon adsorption uses intermolecular forces to accumulate organic material at the surface of an absorbent (typically activated carbon). Those intermolecular forces are proportional to molecular size. For this reason, carbon adsorption is most effective when the target compounds are large molecules. The most predominant VOCs in the gas stream of the gluten dryers are ethanol, acetaldehyde and formaldehyde with low molecular weights of 46, 44 and 30, respectively. Carbon adsorption typically requires a VOC concentration of at least 400 to 2,000 ppmv and a relatively low exhaust air flow rate. The gluten dryers have a measured VOC concentration of considerably less than 200 ppmv and a volumetric flow rate of 48,000 to 55,000 cubic feet per minute. Therefore, this control technology is determined to be technically infeasible.

Catalytic Oxidation – The effectiveness of catalytic oxidizers is partially dependent on the presence of active catalyst. Otherwise, the control efficiency of the unit at standard operating temperature decreases rapidly as the catalyst is fouled. The catalyst material has small channels for the waste gas stream to flow. Particulate emissions, like those in the gluten dryers' exhaust, would accumulate on the catalyst material and drastically reduce its effectiveness. Therefore, this control technology is determined to be technically infeasible.

Note that a baghouse could not be used to prevent fouling of the catalytic oxidizer because of the high moisture content (typically 30 to 35%) of the dryer exhaust. That level of moisture results in filter caking problems in the baghouse.

(b) Germ Dryer

Thermal Oxidation - As the RBLC review indicates, thermal oxidation (primarily in the form of regenerative thermal oxidation) is a prevalent and proven technology used to reduce dryer VOC emissions. Therefore, this control technology is determined to be technically feasible.

Wet Scrubbing – The germ dryer is currently controlled with wet scrubbers designed for SO2 and PM control. Wet scrubbing is a proven technology used to reduce dryer VOC emissions. Therefore, this control technology is determined to be technically feasible.

Refrigeration Condensation – Two of the three most predominant VOCs in the gas stream of the germ dryer are ethanol and acetaldehyde; all of which are present in low concentrations. Due to the high volatility (acetaldehyde) and low VOC concentration, condensers are determined to be technically infeasible.

Carbon Adsorption – As explained previously, carbon adsorption is most effective when the target compounds are large molecules, and in high concentration of a relatively low flow gas stream. The most predominant VOCs in the gas stream of the germ dryer are ethanol, acetaldehyde and formaldehyde with low molecular weights of 46, 44 and 30, respectively. Carbon adsorption typically requires a VOC concentration of at least 400 to 2,000 ppmv and a relatively low exhaust air flow rate. The germ dryer has a measured VOC concentration of 400 ppmv and a volumetric flow rate of 26,000 cubic feet per minute. Therefore, this control technology is determined to be technically infeasible.

Catalytic Oxidation – The effectiveness of catalytic oxidizers is partially dependent on the presence of active catalyst. Otherwise, the control efficiency of the unit at standard operating temperature decreases rapidly as the catalyst is fouled. The catalyst material has small channels for the waste gas stream to flow. Particulate emissions, like those in the germ dryer exhaust, would accumulate on the catalyst material and drastically reduce its effectiveness. Therefore, this control technology is determined to be technically infeasible.

Note that a baghouse could not be used to prevent fouling of the catalytic oxidizer because of the high moisture content (typically 30 to 35%) of the dryer exhaust. That level of moisture results in filter caking problems in the baghouse.

(c) Starch Dryer

Thermal Oxidation - As the RBLC review indicates, thermal oxidation (primarily in the form of regenerative thermal oxidation) is a prevalent and proven technology used to reduce dryer VOC emissions. Therefore, this control technology is determined to be technically feasible.

Wet Scrubbing – The starch dryer is currently controlled with wet scrubbers designed for SO2 and PM control. Wet scrubbers are reasonably effective at controlling VOC emissions. However, due to the low VOC concentration of the exhaust, wet scrubbing is determined to be technically infeasible.

Refrigeration Condensation – The VOC content of the exhaust from the starch dryer is very dilute. Due to the low VOC concentration, condensers are determined to be technically infeasible.

Carbon Adsorption – The VOC content of the exhaust from the maltodextrin and starch dryers are very dilute. Due to the low VOC concentration, condensers are determined to be technically infeasible.

Catalytic Oxidation – Like the germ and gluten dryers, particulate emissions in the exhaust from the maltodextrin dryer and starch dryer would accumulate on the catalyst material and drastically reduce its effectiveness. Therefore, this control technology is determined to be technically infeasible.

Step 3 – Rank Remaining Control Options by Control Effectiveness

(a) Corn Gluten Feed Dryer, Gluten Dryer and Germ Dryer

The following table presents and ranks the technically feasible control options for the corn gluten feed, gluten and germ dryers by control effectiveness:

Control Option	Estimated post-BACT dryer Emissions (tons/yr, total)	Estimated Control Efficiency (%)
New Regenerative Thermal Oxidizer *(proposed)*	8.9	98%
Wet Scrubber	Varies	70 - 95%

These estimated efficiencies are based on information provided by GPC and what is available in the EPA's Air Pollution Control Technology Fact Sheets located at www.epa.gov/ttn/catc/products.html.

(b) Starch Dryer

The following table presents and ranks the technically feasible control options for the starch dryer by control effectiveness:

Control Option	Estimated post-BACT dryer Emissions (tons/yr)	Estimated Control Efficiency (%)
New Regenerative Thermal Oxidizer	Less than 1.0	98%

These estimated efficiencies are based on information provided by GPC and what is available in the EPA's Air Pollution Control Technology Fact Sheets located at www.epa.gov/ttn/catc/products.html.

Step 4 - Evaluate Control Options

IDEM is aware that other vendors have guaranteed control efficiencies of 99% to control similar processes. However, BACT limitations do not necessarily need to reflect the highest possible control efficiency achievable by the technology on which the emission limitation is based. The permitting

authority has discretion to base the emission limitation on a control efficiency that is somewhat lower than the optimal level.

(a) Corn Gluten Feed Dryer, Gluten Dryer and Germ Dryer

The OAQ has determined that:

(1) Ninety-eight percent (98%) is the best available overall control efficiency.

(2) The overall control efficiency of a wet scrubber will be less than the level of control that can be achieved by a thermal oxidizer because the high flow rate, low VOC concentration, elevated temperature, and presence of particulates in the exhaust stream of the respective dryers. All of those characteristics would impair the effectiveness of the wet scrubber, resulting in an overall control efficiency much lower than 98%.

(3) An economic analysis was not performed for the control options because GPC's BACT proposal selects the top technically feasible add-on control option (thermal oxidation) at the highest demonstrated overall control efficiency (98%).

(b) Starch Dryer

Ninety-eight percent (98%) is the best available overall control efficiency for the starch dryer.

GPC provided IDEM with a thorough economic analysis of the only technically feasible control option for the starch dryer, regenerative thermal oxidation - see Appendix C. The analysis estimates the total costs associated with the VOC control equipment, including the total capital investment of the various components intrinsic to the complete system, the estimated annual operating costs, and indirect annual costs. All costs, except for direct installation costs, were calculated using the methodology described in the OAQPS Control Cost Manual (Sixth Edition, EPA 452-02-001, Section 3.2). Direct installation costs are based on GPC engineering estimates. Annualized costs are based on an interest rate of 7% and an equipment life of 10 years.

The basis of cost effectiveness, used to evaluate the control option, is the ratio of the annualized cost to the amount of VOC (tons) removed per year. A summary of the cost figures determined in the analysis is provided in the table below:

Option	Total Capital Investment ($)	Total Annualized Cost ($/yr)	Potential VOC removal from add-on control (ton/yr)	Cost Effectiveness ($/ton VOC removed)
Regenerative Thermal Oxidation (98% overall reduction)	$2,172,388	$1,080,285	4.3	$251,674

The very low VOC potential to emit of the starch dryer (4.38 ton/yr) makes the application of the only technically feasible control option economically infeasible.

<u>Step 5 – Select BACT</u>

Based on the considerations mentioned above, the IDEM, OAQ has determined that VOC BACT is:

(1) Regenerative thermal oxidation that operates with at least a ninety-eight percent (98%) overall control for the corn gluten feed, gluten and germ dryers.

(2) No add-on control for the starch dryer.

GPC plans to construct and operate two (2) regenerative thermal oxidizers (in parallel) that will control the aggregate emissions of the corn gluten feed, gluten and germ dryers. Each oxidizer will be able to handle the total exhaust from the dryers. Both oxidizers will exhaust to stack FP34.

As a result, the following limitations and operating requirements are included in the Part 70 permit:

(a) Pursuant to 326 IAC 2-2-3 and 326 IAC 8-1-6, the Permittee shall comply with the following requirements no later than August 10, 2007:

(1) Regenerative thermal oxidizers, identified as FPC34a and FPC34b, shall control VOC emissions from corn gluten feed, gluten and germ dryers and achieve a minimum average overall (including capture and destruction) efficiency of ninety-eight percent (98%).

(2) The combined VOC emissions from the corn gluten feed dryer, gluten dryer and germ dryer shall not exceed 2.11 pounds per hour.

(b) Pursuant to 326 IAC 2-2-3, the VOC emissions from the starch dryer shall not exceed 1.0 pound per hour.

Compliance with these provisions satisfies the requirements of 326 IAC 2-2-3 and 326 IAC 8-1-6.

Appendix C: BACT Economic Analysis
of Regenerative Thermal Oxidization

Company Name: **Grain Processing Corporation**
Address City IN Zip: **1443 South 300 West, Washington, Indiana 47501**
Permit Number: **T027-14200-00046**
Reviewer: **ERG/BS**
Date: **1/26/2007**

PTE of starch dryer (tpy VOC) = 4.38

Purchase Costs	Factor		
basic equipment (b)	-	$	937,589
instrumentation	10%	$	93,759
taxes	3%	$	28,128
freight	5%	$	46,879
Purchased Equipment Cost		$	1,106,355
Direct Installation Costs			
foundation & supports	(a)	$	20,000
handling and erection	(a)	$	142,000
electrical	(a)	$	38,000
piping	(a)	$	14,000
ductwork	(a)	$	488,000
painting	(a)	$	11,063
site preparation	(a)	$	10,000
Total Direct Cost		$	723,063
Indirect Costs			
engineering	10%	$	110,636
construction expense	5%	$	55,318
contractor fee	10%	$	110,636
start-up fee	2%	$	22,127
performance test	1%	$	11,064
contingency	3%	$	33,191
Total Indirect Cost		$	342,970
TOTAL CAPITAL INVESTMENT		**$**	**2,172,388**

Direct Annual Costs	Factor		
operating labor	$25/hr	$	13,688
supervisory labor	(15% of operator)	$	2,053
maintenance labor	$25/hr	$	13,688
replacement material and labor	7%, 5 years	$	4,878
maintenance materials	(100% of labor)	$	13,688
utilities: electricity (312 kW)	$0.0349 per kWhr	$	95,386
utilities: natural gas (9.5 MMBtu/hr)	$6.3 per MMBtu	$	524,286
total direct annual cost		$	667,665
Indirect Annual Costs			
overhead	60% O&M	$	16,425
administration charges	2% TCI	$	43,448
insurance	1% TCI	$	21,724
property tax	1% TCI	$	21,724
capital recovery cost	7%, 10 years	$	309,299
total indirect annual cost		$	412,620
TOTAL ANNUALIZED COST		**$**	**1,080,285**
Destruction efficiency			98.0%
Tons controlled			4.3
Cost Effectiveness ($/ton removed)		**$**	**251,674**

(a) Based on GPC engineering estimates
(b) Based on an estimate provided to GPC by Met-Pro Corporation