INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr. Governor

Thomas W. Easterly Commissioner

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

TO: Interested Parties / Applicant

DATE: April 19, 2011

RE: Bunge North America (East), Inc. / 145-28055-00035

FROM: Matthew Stuckey, Branch Chief

> Permits Branch Office of Air Quality

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

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

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

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filina:

- the date the document is delivered to the Office of Environmental Adjudication (OEA); (1)
- (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:



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

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

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

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

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



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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

Bunge North America (East), Inc. 700 N Range Line Road Morristown, Indiana 46161

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

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

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

Operation Permit No.: T145-28055-00035

Issued by:

Issuance Date: April 19, 2011

Expiration Date: April 19, 2016

Donald F. Robin, P.E., Section Chief
Permits Branch
Office of Air Quality



Bunge North America (East), Inc. Morristown, Indiana Permit Reviewer: Teresa Freeman Page 2 of 99 T145-28055-00035

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Attachment A - NSPS, Subpart DD

Attachment B - NSPS, Subpart Dc

Attachment C - NSPS, Subpart Db

Attachment D - NESHAP, Subpart GGGG

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SECTION A

SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary soybean processing plant.

Source Address: 700 N Range Line Road, Morristown, Indiana 46161

General Source Phone Number: (765)763-7500

SIC Code: 2075 County Location: Shelby

Source Location Status:

Source Status:

Attainment for all criteria pollutants
Part 70 Operating Permit Program
Major Source, under PSD Rules

Major Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

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

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

- (a) Truck receiving operations, consisting of the following units, using the truck receiving/storage baghouse for control, and exhausting at stack Pt #1:
 - (1) Two (2) truck dumps (#1 & #2);
 - (2) Two (2) truck receiving conveyors (#1 & #2);
 - (3) Two (2) receiving legs (#1 & #2), using the truck receiving/storage baghouse and oil applications;
 - (4) One (1) screen;
 - (5) Two (2) receiving legs (#1 & #2) extending from the screen;
 - (6) Two (2) screening conveyors;
 - (7) One (1) screening leg;
 - (8) One (1) screening leg;
 - (9) Two (2) conveyors (#1 & #2) extending to storage silos and to bulk storage;
 - (10) Two (2) conveyors extending to bulk storage feeding and continuing to the bulk storage silos;
 - (11) Ten (10) silos;
 - (12) One (1) screening bin;
 - (13) Two (2) bulk storage bins;

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(14) One (1) screening conveyor extending from the screening silo;

- (15) One (1) screening storage conveyor;
- (16) Two (2) totally enclosed screenings transfer conveyors arranged in a series, transferring screenings from the screenings storage conveyors to the screening bucket elevator;
- One (1) screening bucket elevator, transferring screenings from the screenings transfer conveyors to the screenings surge bin;
- (18) Two (2) bulk storage return conveyors (#1 & #2) arranged in a series;
- (19) Two (2) conveyors from storage (#1 & #2);
- (20) One (1) conveyor extending to the surge bin leg;
- One (1) truck receiving/storage baghouse conveyor which transfers dust from the baghouse back to the screening leg;
- (22) Two (2) screens, identified as #4, with a total maximum throughput rate of 1,210 tons per hour;
- One (1) transfer system, identified as #9a, with a maximum throughput rate of 1,150 tons per hour, transferring soybeans from the bulk storage elevator to the bulk storage silos;
- One (1) enclosed whole bean conveyor, identified as #16a, with a maximum throughput rate of 340 tons per hour, conveying beans from the surge bin leg to the whole bean surge silo (#28a);
- (25) One (1) whole bean surge silo, identified as #28a, with a maximum storage capacity of 40,000 bushels;
- One (1) enclosed conveyor, identified as #29a, approved in 2009 for construction, with a maximum throughput of 1200 tons per hour;
- One (1) walled and tarped ground pile, identified as #29b, approved in 2009 for construction, with ten (10) aeration fans and a maximum storage capacity of 1,300,000 bushels;
- One (1) grain reclaim truck loadout operation, identified as #29c, approved in 2009 for construction, with a maximum throughput rate of 648 tons per hour;
- One (1) grain reclaim truck dump operation, identified as #29d, approved in 2009 for construction, with a maximum throughput rate of 648 tons per hour;
- (30) One (1) enclosed conveyor, identified as #17a, with a maximum throughput rate of 40 tons per hour, conveying the dust from the truck receiving/storage baghouse to the screening leg;
- One (1) new bean screening screw conveyor, identified as #1a, with a maximum throughput rate of 36 tons per hour, transferring soybeans from the screening system (#4) to the screening leg baghouse;

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- (32) Two (2) screening legs, identified as #7a;
- (33) Two (2) transfer conveyors aspirated to truck receiving/storage baghouse, identified as #13a; and

A-PLANT

- (34) Four (4) aspirators between conveyor from storage, identified as #16, and surge bin leg, identified as #27, aspirated to truck receiving/storage baghouse.
- (b) Rail receiving operations, constructed in 1996, consisting of the following units, using the truck receiving baghouse for control, and exhausting at stack Pt #1:
 - (1) One (1) rail car dump; and
 - (2) One (1) rail car receiving conveyor;
- (c) One (1) column dryer, constructed in 1996, exhausting at stack Pt #3;
- (d) Milling operations, constructed in 1996, consisting of the following units, using the RF filter baghouse for control, and exhausting at stack Pt #4:
 - (1) One (1) soy bean scale with upper and lower scale garners;
 - (2) Six (6) cracking rolls with primary dehulling aspirators, using the primary aspiration cyclone and RF filter baghouse for control;
 - (3) Three (3) conveyors extending from the primary dehulling aspirators, with a maximum combined capacity of 100 tons per hour;
 - (4) Three (3) surge bins;
 - (5) Three (3) cracked bean conditioners;
 - (6) Three (3) conveyors extending from the cracked bean conditioners;
 - (7) Three (3) impactors with secondary dehulling aspirators, using the secondary aspiration cyclones and RF filter baghouse for control;
 - (8) One (1) primary aspiration cyclone;
 - (9) One (1) secondary aspiration cyclone;
 - (10) Two (2) hull refining screeners, exhausting to the hull refining cyclone;
 - (11) Four (4) hull refining aspirators, exhausting to the hull refining cyclone;
 - (12) One (1) hull refining cyclone;
 - (13) Two (2) millfeed grinders;
 - (14) Three (3) surge bins;
 - (15) One (1) meal screen;
 - (16) Two (2) hammer mills;

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- (17) Two (2) totally enclosed sized meal conveyors, in a series; and
- (18) One (1) millfeed weight belt;
- (e) Flaking mill operations, constructed in 1996, consisting of the following units, using the flaker aspiration baghouse, and exhausting at stack Pt #6:
 - (1) Nine (9) flakers; and
 - (2) One (1) flake collecting conveyor;
- (f) One (1) flow coating material bin, using the flow coat receiving baghouse for control, and exhausting at stack Pt #11;
- (g) Truck meal loadout operations, constructed in 1996, consisting of the following units, using the truck meal loadout baghouse, and exhausting at stack Pt #12:
 - (1) One (1) mixer, extending from the hull grinders;
 - (2) One (1) millfeed elevator leg;
 - (3) One (1) totally enclosed millfeed conveyor;
 - (4) Three (3) millfeed bins;
 - (5) One (1) millfeed weigh belt;
 - (6) One (1) meal conveyor extending from the coolers;
 - (7) One (1) DTDC unground meal conveyor extending to another set of conveyors;
 - (8) One (1) unground meal conveyor;
 - (9) One (1) feeder;
 - (10) One (1) flow coating material screw;
 - (11) One (1) mixing screw conveyor;
 - (12) One (1) production meal elevator;
 - (13) One (1) product meal conveyor #2;
 - (14) Six (6) meal storage bins;
 - (15) One (1) truck load out conveyor;
 - (16) One (1) truck loader; and
 - (17) One (1) truck scale;
- (h) Rail meal loadout operations, constructed in 1996, consisting of the following units, using the rail meal loadout baghouse, and exhausting at stack Pt #13:
 - a rail load out conveyor;

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- (2) One (1) rail scale; and
- (3) One (1) rail loader;
- (i) Oil extraction and processing operations, constructed in 1996, consisting of the following units:
 - (1) One (1) soybean oil extractor, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (2) One (1) set of evaporators, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (3) One (1) desolventizer/toaster, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - One (1) set of condensers and water separators to separate hexane and water, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (5) Two (2) mineral oil absorbers, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (6) One (1) spent flake conveyor extending to the meal dryer;
 - (7) One (1) totally enclosed seal screw conveyor, installed in a series with the slurry loader conveyor;
 - (8) One (1) flake conveyor extending to the slurry loader conveyor;
 - (9) One (1) slurry loader conveyor;
 - (10) One (1) hexane storage tank, identified as #1 (storage);
 - (11) One (1) hexane storage tank, identified as #2 (process tank);
 - (12) One (1) hexane storage tank, identified as #3 (work/separation);
- (j) Two (2) DTDC meal dryers (#1 & #2), both constructed in 1996, using a cyclone for control and exhausting at stack Pt #7;
- (k) One (1) cyclone for the control of the meal dryers, constructed in 1996, and exhausting at stack Pt #7;
- (I) Two (2) DTDC meal coolers (#1 & #2), both constructed in 1996, using a cyclone for control, and exhausting at stack Pt #8;
- (m) One (1) cyclone for the control of the meal coolers, constructed in 1996, and exhausting at stack Pt #8;
- (n) One (1) boiler, identified as the Murray boiler, constructed in 1996, firing natural gas, vegetable oil, #2 distillate fuel oil, or blends of vegetable oil and #2 distillate fuel oil, rated at 96 million Btu per hour;
- (o) One (1) vegetable oil refinery process, constructed in 2002, consisting of crude vegetable oil receiving, storage, filtration, and degumming equipment; lecithin drying and processing

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equipment; oil refining, deodorizing, and filtration equipment; bulk oil handling, blending, storage, and loadout facilities; and including the following equipment:

- (1) One (1) storage silo, identified as R-101, equipped with a baghouse for particulate matter control, exhausting to Stack R-101;
- One (1) surge tank, identified as R-102, equipped with a baghouse for particulate matter control, exhausting to Stack R-102;
- One (1) storage silo, identified as R-103, equipped with a baghouse for particulate matter control, exhausting to Stack R-103;
- (4) One (1) surge tank, identified as R-104, equipped with a baghouse for particulate matter control, exhausting to Stack R-104;
- (5) One (1) storage silo, identified as R-105, equipped with a baghouse for particulate matter control, exhausting to Stack R-105;
- (6) One (1) surge tank, identified as R-106, equipped with a baghouse for particulate matter control, exhausting to Stack R-106; and
- (7) One (1) natural gas-fired boiler, identified as R-107, exhausting to Stack R-107.
- (p) One (1) pelletizing mill, labeled as part of EU# 26, with a maximum rate of 36,000 lbs raw material per hour (18 tph), where air stream from mill does not vent to atmosphere but instead passes on to pellet cooler;
- (q) One (1) pellet cooler, labeled as part of EU# 26, with a maximum rate of 36,000 lbs raw material per hour (18 tph), using a high efficiency cyclone control device with a rating of 0.01 grains/dscf and 7,500 acfm at stack Pt#26:
- (r) One (1) totally enclosed drag conveyor, with a maximum rate of 18 tons per hour;
- (s) One (1) totally enclosed "L" path conveyor, with a maximum rate of 18 tons per hour; and
- (t) One (1) bucket leg, with a maximum rate of 18 tons per hour.

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- (u) One (1) screening bin, identified as #10a.
- (v) Three (3) totally enclosed conveyors to hull refining screener, identified as #25a.
- (w) One (1) totally enclosed dryer feed conveyor to the dryer feed elevator, identified as #29a.
- (x) Two (2) hull refining screeners, identified as #48a.
- (y) Four (4) hull refining aspirators, identified as #49a, exhausting to hull refining cyclone.
- (z) One (1) totally enclosed millfeed conveyor to storage, identified as #53a.
- (aa) One (1) millfeed elevator, identified as #54a, controlled by truck load out baghouse, and exhausting at stack Pt #12.
- (ab) One (1) seal screw conveyor, identified as #61a.

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(ac) The following emission units used in the one (1) totally enclosed sized meal conveyor, identified as #79a, aspirated to meal sizing system baghouse for control, and exhausting through stack Pt #24:

- (1) One (1) enclosed meal screener feeder conveyor, identified as #74a, with a maximum throughput rate of 80 tons per hour, conveying the meal produced to the meal screen system.
- One (1) enclosed meal grinder feed conveyor, identified as #75a, with a maximum throughput rate of 80 tons per hour, conveying the meal from the meal screen system to meal feeders.
- One (1) meal grinding system, identified as #76, consisting of three (3) hammer mills, with a total maximum process rate of 80 tons per hour. This process rate is limited by the maximum throughput rate of the conveyors.
- (4) Two (2) enclosed sized meal conveyors, identified as #78a, with a total maximum throughput rate of 80 tons per hour, conveying the ground meal from the meal grinding system (#76) to the meal handling system.
- (ad) Grain screening operations, consisting of the following units, using the screenings baghouse, and exhausting at stack Pt #5:
 - (1) One (1) screening surge bin;
 - (2) One (1) conveyor extending to the de-stoner;
 - (3) One (1) de-stoner, using a cyclone and the screening baghouse for control;
 - (4) One (1) screening grinder;
 - (5) Four (4) totally enclosed conveyors in a series, extending to the hull refining screener:
 - (6) One (1) cyclone exhausting to the screening baghouse;
 - (7) One (1) surge bin elevator;
 - (8) One (1) whole bean surge bin;
 - (9) One (1) dryer feed elevator;
 - (10) One (1) totally enclosed dryer feed conveyor, transferring beans to the dryer feed elevator:
 - (11) Two (2) whole bean aspirators, in parallel;
 - (12) One (1) dryer discharge conveyor;
 - (13) One (1) day bin elevator;
 - (14) Two (2) day bins;
 - (15) Two (2) totally enclosed conveyors, arranged in a series;
 - (16) Two (2) conveyors extending from the dryer to the dryer discharge conveyor;

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- (17) One (1) milling elevator;
- (18) One (1) product meal conveyor, identified as #1
- (19) One (1) meal surge conveyor, identified as #2;
- (20) Three (3) meal storage silos;
- (21) One (1) load out leg conveyor;
- (22) One (1) load out meal elevator;
- (23) One (1) meal transfer conveyor; and
- (24) One (1) screening transfer conveyor to screenings bucket elevator.

B-PLANT

- (ae) One (1) totally enclosed millfeed conveyor to storage, identified as #2b.
- (af) One (1) millfeed elevator, identified as #3b, exhausting at stack Pt #12.
- (ag) One (1) aspirator between milling leg and bean scale, identified as #4b, aspirated to milling baghouse, and exhausting at stack Pt #4.
- (ah) One (1) totally enclosed hull collecting conveyor, identified as #5b, feeding the "B" plant hull refining screener.
- (ai) One (1) "B" plant whole bean surge bin #2, identified as #6b.
- (aj) One (1) "B" plant hull grinder, identified as #7b, discharging to the screening baghouse, and exhausting at stack Pt #5.
- (ak) One (1) "B" plant whole soybean feed bucket elevator, identified as #8b, controlled by the screening baghouse, and exhausting at stack Pt #5.
- (al) One (1) "B" plant totally enclosed bean heater discharge conveyor, identified as #9b.
- (am) One (1) "B" plant whole bean aspiration, identified as #10b, controlled by the screening baghouse, and exhausting at stack Pt #4.
- (an) One (1) "B" plant bean weighing system, identified as #11b, controlled by the screening baghouse, and exhausting at stack Pt #4.
- (ao) One (1)"B" plant totally enclosed millfeed grinding conveyor, identified as #12b, controlled by the screening baghouse, and exhausting at stack Pt #5.
- (ap) Two (2) "B" plant hull refining screeners, identified as #13b, controlled by the screening baghouse, and exhausting at stack Pt #5.
- (aq) Two (2) "B" plant aspirator, identified as #14b, controlled by a hull refining cyclone, exhausting at stack Pt #18.
- (ar) One (1) "B" plant totally enclosed feed conveyor, identified as #15b.

- (as) One (1) "B" plant bean heater, identified as #16b, controlled by a bean heater cyclone, and exhausting at stack Pt # 25.
 - (at) One (1) totally enclosed "B" plant soybean conveyor (feeding the jet dryers), identified as #17b, controlled by a cyclone, and exhausting at stack Pt # 18.
 - (au) One (1) set of "B" plant jet dryers, identified as #18b, controlled by a dryer cyclone, and exhausting at stack Pt # 18.
 - (av) One (1) "B" plant bean heaters cyclone, identified as #19b, exhausting at stack Pt # 18A.
 - (aw) One (1) "B" plant bean dryers cyclone, identified as #20b, exhausting at stack Pt # 18A.
 - (ax) Two (2) "B" plant hulloosenators, identified as #21b.
 - (ay) One (1) set of "B" plant cascade dryers controlled by CCD cyclone and exhausted at stack Pt #18, identified as #22b.
 - (az) One (1) set of "B" plant cracking rolls, identified as #23b.
 - (ba) One (1) set of "B" plant cascade coolers, identified as #24b, controlled by a cyclone, and exhausting at stack Pt # 18.
 - (bb) Two (2) "B" plant totally enclosed after cascade coolers conveyors (feeding the flakers), identified as #25b, controlled by a soybean flaking baghouse, and exhausting at stack Pt #19.
 - (bc) One (1) "B" plant cyclone, identified as #26b, exhausting at stack Pt # 18A.
 - (bd) One (1) set of "B" plant flakers, identified as #27b, controlled by a flakers baghouse, and exhausting at stack Pt # 19.
 - (be) One (1) "B" plant flakers baghouse, identified as #28b, exhausting at stack Pt # 19.
 - (bf) Two (2) "B" plant totally enclosed flake conveyors (feeding the seal conveyor), identified as #29b.
 - (bg) One (1) "B" plant totally enclosed seal screw conveyor (feeding the slurry loader conveyor), identified as #30b.
 - (bh) One (1) "B" plant totally enclosed slurry loader conveyor (feeding the extractor), identified as #31b.
 - (bi) One (1) "B" plant soybean oil extractor, identified as #32b, controlled by one (1) mineral oil absorption system, and exhausted at stack Pt # 23.
 - (bj) A set of "B" plant evaporators, identified as #33b, controlled by two (2) mineral oil absorption systems, and exhausted at stack Pt # 23.
 - (bk) A set of "B" plant condensers, hexane handling system and water separator to separate hexane and water, identified as #34b, controlled by one (1) mineral oil absorption system, and exhausted at stack Pt # 23.
 - (bl) One (1) "B" plant mineral oil absorption system with a mineral oil to control hexane emissions, identified as #35b, and exhausted at stack Pt # 23.

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- (bm) One (1) totally enclosed "B" plant spent flake conveyor, identified as #36b.
- (bn) Two (2) "B" plant meal dryers (#1 & #2), identified as #37b, controlled by one (1) dryer cyclone, and exhausting at stack Pt # 21.
- (bo) One (1) "B" plant meal cooler (#3), identified as #38b, controlled by one (1) cooler cyclone, and exhausting at stack Pt # 22.
- (bp) Four (4) "B" plant totally enclosed unground meal conveyors in series (meal screening system), identified as #39b.
- (bq) One (1) meal sizing baghouse, identified as #40b, exhausting at stack Pt #24.
- (br) One (1) boiler, identified as Boiler No. 2, firing natural gas, vegetable oil, #2 distillate fuel oil, or blends of vegetable oil and #2 distillate fuel oil, rated at 240 million Btu per hour, controlled by low NOx burners and flue gas recirculation, and exhausting at stack Pt. # 20.
- (bs) One (1) screening leg, identified as #41b, transferring screenings from the screenings transfer conveyors to the screening surge bin.
- (bt) One (1) totally enclosed dryer feed conveyor, identified as #43b, transferring beans to the dryer feed elevator, controlled by screening baghouse, and exhausting at stack Pt #5.
- (bu) One (1) whole bean surge silos discharge conveyors feeding "B" Milling bucket elevator, identified as #49b, controlled by screenings baghouse and exhausting at stack Pt #5.
- (bv) One (1) "B" milling bucket elevator, identified as #50b, controlled by the Milling aspiration baghouse and exhausting at stack Pt #4.
- (bw) One (1) bean heater feed bucket elevator, identified as #51b, controlled by the screenings baghouse and exhausting at stack Pt #5.
- (bx) One (1) bean heater discharge bucket elevator, identified as #52b, controlled by the screenings baghouse and exhausting at stack Pt #5.
- (by) One (1) screenings transfer conveyors to the cracking rolls, identified as #53b, controlled by East jet dryer cyclone and exhausting at stack Pt #18.
- (bz) One (1) hull grinder controlled screenings baghouse and exhausting at stack Pt #5.
- (ca) One (1) "B" unground meal bucket elevator, identified as #55b, controlled by meal grinding baghouse at stack Pt #24.
- (cb) One (1) "B" DT feed conveyor, identified as #56b.
- (cc) One (1) "B" desolventizer toaster, identified as #57b, controlled by the mineral oil absorption system and exhausting at stack Pt #23.
- (cd) One (1) "B" above ground hexane storage tank controlled by the mineral oil absorption system and exhausting at stack Pt #23.
- 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):

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- (a) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower [326 IAC 6-3-2];
- (b) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment [326 IAC 6-3-2];
- (c) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:
 - (1) One (1) #2 fuel oil storage tank, identified as #4, with a capacity of 3,958 cubic feet [326 IAC 12];
 - One (1) soybean oil storage tank, identified as #6, with a capacity of 38,000 cubic feet [326 IAC 12];
 - One (1) soybean oil storage tank, identified as #7, with a capacity of 38,000 cubic feet [326 IAC 12];
 - One (1) #2 fuel oil storage tank, identified as #10, with a capacity of 3,958 cubic feet [326 IAC 12]; and
- (d) Paved and unpaved roads and parking lots with public access [326 IAC 6-5].

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, T145-28055-00035, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

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

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

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

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

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

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

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

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
 - (i) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and
 - (ii) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(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) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

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

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered:

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or

Telephone Number: 317-233-0178 (ask for Office of Air Quality,

Compliance and Enforcement Branch) Facsimile Number: 317-233-6865

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

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

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

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

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

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

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

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

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- (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 T145-28055-00035 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

- B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]
 - (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
 - (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

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

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

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]
 - (a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
 - (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

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

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

 The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

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

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B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

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

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

C.6 Stack Height [326 IAC 1-7]

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

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C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(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).

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

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

C.8 Performance Testing [326 IAC 3-6]

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

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

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

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

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

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

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - initial inspection and evaluation;

- (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
- (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

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

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

 Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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Bunge North America (East), Inc. Morristown, Indiana

Permit Reviewer: Teresa Freeman

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

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
- (c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

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

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

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (II)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and
- (2) The emissions differ from the preconstruction projection as documented and maintained under Section C General Record Keeping Requirements (c)(1)(C)(ii).
- (f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:
 - (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

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

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

FACILITY OPERATION CONDITIONS

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

A-PLANT

- (a) Truck receiving operations, consisting of the following units, using the truck receiving/storage baghouse for control, and exhausting at stack Pt #1:
 - (1) Two (2) truck dumps (#1 & #2);
 - (2) Two (2) truck receiving conveyors (#1 & #2);
 - (3) Two (2) receiving legs (#1 & #2), using the truck receiving/storage baghouse and oil applications;
 - (4) One (1) screen;
 - (5) Two (2) receiving legs (#1 & #2) extending from the screen;
 - (6) Two (2) screening conveyors;
 - (7) One (1) screening leg;
 - (8) One (1) screening leg;
 - (9) Two (2) conveyors (#1 & #2) extending to storage silos and to bulk storage;
 - (10) Two (2) conveyors extending to bulk storage feeding and continuing to the bulk storage silos;
 - (11) Ten (10) silos;
 - (12) One (1) screening bin;
 - (13) Two (2) bulk storage bins;
 - (14) One (1) screening conveyor extending from the screening silo;
 - (15) One (1) screening storage conveyor;
 - (16) Two (2) totally enclosed screenings transfer conveyors arranged in a series, transferring screenings from the screenings storage conveyors to the screening bucket elevator;
 - One (1) screening bucket elevator, transferring screenings from the screenings transfer conveyors to the screenings surge bin;
 - (18) Two (2) bulk storage return conveyors (#1 & #2) arranged in a series;
 - (19) Two (2) conveyors from storage (#1 & #2);

FACILITY OPERATION CONDITIONS - Continued

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

- (20) One (1) conveyor extending to the surge bin leg;
- One (1) truck receiving/storage baghouse conveyor which transfers dust from the baghouse back to the screening leg;
- (22) Two (2) screens, identified as #4, with a total maximum throughput rate of 1,210 tons per hour;
- (23) One (1) transfer system, identified as #9a, with a maximum throughput rate of 1,150 tons per hour, transferring soybeans from the bulk storage elevator to the bulk storage silos;
- One (1) enclosed whole bean conveyor, identified as #16a, with a maximum throughput rate of 340 tons per hour, conveying beans from the surge bin leg to the whole bean surge silo (#28a);
- One (1) whole bean surge silo, identified as #28a, with a maximum storage capacity of 40,000 bushels;
- (26) One (1) enclosed conveyor, identified as #29a, approved in 2009 for construction, with a maximum throughput of 1200 tons per hour;
- One (1) walled and tarped ground pile, identified as #29b, approved in 2009 for construction, with ten (10) aeration fans and a maximum storage capacity of 1,300,000 bushels;
- One (1) grain reclaim truck loadout operation, identified as #29c, approved in 2009 for construction, with a maximum throughput rate of 648 tons per hour;
- One (1) grain reclaim truck dump operation, identified as #29d, approved in 2009 for construction, with a maximum throughput rate of 648 tons per hour;
- (30) One (1) enclosed conveyor, identified as #17a, with a maximum throughput rate of 40 tons per hour, conveying the dust from the truck receiving/storage baghouse to the screening leg;
- (31) One (1) new bean screening screw conveyor, identified as #1a, with a maximum throughput rate of 36 tons per hour, transferring soybeans from the screening system (#4) to the screening leg baghouse;
- (32) Two (2) screening legs, identified as #7a;
- (33) Two (2) transfer conveyors aspirated to truck receiving/storage baghouse, identified as #13a; and

FACILITY OPERATION CONDITIONS - Continued

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

A-PLANT

- (34) Four (4) aspirators between conveyor from storage, identified as #16, and surge bin leg, identified as #27, aspirated to truck receiving/storage baghouse.
- (b) Rail receiving operations, constructed in 1996, consisting of the following units, using the truck receiving baghouse for control, and exhausting at stack Pt #1:
- (c) One (1) column dryer, constructed in 1996, exhausting at stack Pt #3;
 - (1) One (1) rail car dump; and
 - (2) One (1) rail car receiving conveyor;

(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 PSD Minor Limit [326 IAC 2-2]

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable:

(a) the Permittee shall comply with the following PM emissions:

Process	Baghouse/	PM Limit	PM10 Limit
	Cyclone	(lb/hr)	(lb/hr)
Grain receiving system, whole bean transfer, receiving and screening system	Pt #1	5.59	3.31

Compliance with these limits shall limit the PM and PM10 emissions to less than twenty-five (25) and fifteen (15) tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 not applicable.

- (b) In order to make the requirements of 326 IAC 2-2 (PSD) not applicable:
 - (1) the soybeans processed by the Soybean Ground Pile System, including #29a, 29b, 29c and 29d, shall be limited to less than 39,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (2) the Permittee shall comply with the following PM and PM0 emissions:

Emission Unit	PM Emission Limit (lb/ton)	PM10 Emission Limit (lb/ton)
Grain Handling (29a)	0.061	0.034
Ground Pile (29b)	0.025	0.0063
Truck Loadout (29c)	0.086	0.029
Truck Dump (29d)	0.180	0.059

Compliance with these limits in combination with the limits in D.1.1(a), D.1.1 (b), and D.2.1 shall limit the PM and PM10 emissions to less than twenty-five (25) and fifteen (15) tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 not applicable.

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

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
Truck receiving Operations (Pt#1)	648	72.1
Rail Receiving & Conveying (Pt #1)	400	66.3
column dryer (Pt #3)	126	53.6

These limitations were calculated using the following:

Interpolation and extrapolation of the data for process weight rates 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

Compliance Determination Requirements

D.1.3 Particulate Control [326 IAC 2-7-6(6)]

In order to demonstrate the compliance with Condition D.1.1, the following requirements apply:

- (a) The baghouses for truck receiving/storage and rail car receiving/storage shall be in operation at all times those 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.
- (c) Dust control oil shall be applied at the starting end of the truck and rail car receiving conveyors at all times these conveyors are in operation, at a rate determined at the time of PM compliance tests performed as required by CP-145-4300-00035.
- (d) Fugitive emissions shall be controlled by keeping paved roads free of particulate matter with a vacuum or wet sweeper.

D.1.4 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 3]

In order to demonstrate compliance with Condition D.2.1, the Permittee shall perform Opacity, PM and PM-10 testing on receiving baghouses (PT # 1) utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's

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

obligation with regard to the performance testing required by this condition.

D.1.5 Visible Emissions Notations

- (a) Once per day visible emission notations of Pt #1 and Pt #3 stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.6 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 that the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicted by a significant drop in the baghouses 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 Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.7 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.1(c), the Permittee shall maintain records of the quantity of soybeans processed each month by the Soybean Ground Pile System.

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- (b) To document the compliance status with Condition D.1.5, the Permittee shall maintain records of once per day visible emission notations of the stack exhaust from Pt #1, Pt #2 and Pt #3. 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 truck receiving, rail receiving and/or the rail screening did not operate that day).
- (c) To document the compliance status Condition D.1.6, the Permittee shall maintain records of the pressure drop across the baghouses. 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 truck receiving, rail receiving and/or the rail screening did not operate that day).
- (d) Section C General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.

FACILITY OPERATION CONDITIONS

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

- (d) Milling operations, constructed in 1996, consisting of the following units, using the RF filter baghouse for control, and exhausting at stack Pt #4:
 - (1) One (1) soy bean scale with upper and lower scale garners;
 - (2) Six (6) cracking rolls with primary dehulling aspirators, using the primary aspiration cyclone and RF filter baghouse for control;
 - (3) Three (3) conveyors extending from the primary dehulling aspirators, with a maximum combined capacity of 100 tons per hour;
 - (4) Three (3) surge bins;
 - (5) Three (3) cracked bean conditioners;
 - (6) Three (3) conveyors extending from the cracked bean conditioners;
 - (7) Three (3) impactors with secondary dehulling aspirators, using the secondary aspiration cyclones and RF filter baghouse for control;
 - (8) One (1) primary aspiration cyclone;
 - (9) One (1) secondary aspiration cyclone;
 - (10) Two (2) hull refining screeners, exhausting to the hull refining cyclone;
 - (11) Four (4) hull refining aspirators, exhausting to the hull refining cyclone;
 - (12) One (1) hull refining cyclone;
 - (13) Two (2) millfeed grinders;
 - (14) Three (3) surge bins;
 - (15) One (1) meal screen;
 - (16) Two (2) hammer mills;
 - (17) Two (2) totally enclosed sized meal conveyors, in a series; and
 - (18) One (1) millfeed weight belt;
- (e) Flaking mill operations, constructed in 1996, consisting of the following units, using the flaker aspiration baghouse, and exhausting at stack Pt #6:
 - (1) Nine (9) flakers; and
 - (2) One (1) flake collecting conveyor;

FACILITY OPERATION CONDITIONS (Continued)

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

- (f) One (1) flow coating material bin, using the flow coat receiving baghouse for control, and exhausting at stack Pt #11;
- (g) Truck meal loadout operations, constructed in 1996, consisting of the following units, using the truck meal loadout baghouse, and exhausting at stack Pt #12:
 - (1) One (1) mixer, extending from the hull grinders;
 - (2) One (1) millfeed elevator leg;
 - (3) One (1) totally enclosed millfeed conveyor;
 - (4) Three (3) millfeed bins;
 - (5) One (1) millfeed weigh belt;
 - (6) One (1) meal conveyor extending from the coolers;
 - (7) One (1) DTDC unground meal conveyor extending to another set of conveyors;
 - (8) One (1) unground meal conveyor;
 - (9) One (1) feeder;
 - (10) One (1) flow coating material screw;
 - (11) One (1) mixing screw conveyor;
 - (12) One (1) production meal elevator;
 - (13) One (1) product meal conveyor #2;
 - (14) Six (6) meal storage bins;
 - (15) One (1) truck load out conveyor;
 - (16) One (1) truck loader; and
 - (17) One (1) truck scale;
- (h) Rail meal loadout operations, constructed in 1996, consisting of the following units, using the rail meal loadout baghouse, and exhausting at stack Pt #13:
 - a rail load out conveyor;
 - (2) One (1) rail scale; and
 - (3) One (1) rail loader;

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

D.2.1 PSD Minor Limit [326 IAC 2-2]

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following PM emissions:

Process	Baghouse/	PM Limit	PM10 Limit
	Cyclone	(lb/hr)	(lb/hr)
Milling operations	Pt #4	1.3	1.3
Flaking mill operations	Pt #6	0.41	0.41
Flow coating bin	Pt #11	0.026	0.026
Truck meal loadout	Pt #12	1.65	1.65
operations			
Rail meal loadout operations	Pt #13	0.10	0.10

Compliance with these limits in combination with the limits in D.1.1(a), D.1.1 (b), and D.2.1 shall limit the PM and PM10 emissions to less than twenty-five (25) and fifteen (15) tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 not applicable.

D.2.2 Opacity

Pursuant to CP-A145-9458-00035, issued on June 9, 1998, visible emissions from the flow coat receiving baghouse and rail meal loadout baghouse shall not exceed 5% opacity.

D.2.3 Particulate Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
Milling Operations (Pt #4)	99	51.2
A Flaking & Conveying (Pt #6)	99	51.2
Flow coating material bin (Pt #11)	30	40
Truck meal loadout operations (Pt #12)	300	63
Rail meal loadout operations (Pt #13)	300	63

These limitations were calculated using the following:

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

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

and

Interpolation and extrapolation of the data for process weight rates 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

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Compliance Determination Requirements

D.2.4 Particulate Control [326 IAC 2-7-6(6)]

In order to demonstrate compliance with Conditions D.2.1, D.2.2, and D.2.3, the following conditions apply:

- (a) The truck and rail receiving operations, flaking mill, flow coating material bin operations, truck meal loadout, and rail meal loadout baghouses shall be in operation at all times that their respective facilities are in operation.
- (b) The primary aspiration, secondary aspiration, and hull refining cyclones shall be in operation at all times that their respective facilities are in operation.
- (c) Fugitive emissions shall be controlled by keeping paved roads free of particulate matter with a vacuum or wet sweeper.
- (d) 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.

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

D.2.5 Visible Emissions Notations [40 CFR Part 64]

- (a) Once per day visible emission notations of milling operations (Pt #4), flow coating material bin operations (Pt #11) and truck meal loadout operations (Pt #12) stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.6 Visible Emissions Notations

(a) Once per day visible emission notations of flaking mill operations (Pt #6) and rail meal loadout operations (Pt #13) stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.7 Parametric Monitoring [40 CFR Part 64]

- (a) Alarms shall be operational on all cyclone high level indicators. If an alarm sounds, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.
- (b) The Permittee shall record the pressure drop across the baghouses used in conjunction with the milling operations (Pt #4), flow coating material bin operations (Pt #11) and truck meal loadout operations (Pt #12) at least once per day when the listed processes are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 0.5 to 8.0 inches of water or a range established during the latest stack test the Permittee shall take reasonable response steps. Section C Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.2.8 Parametric Monitoring

- (a) Alarms shall be operational on all cyclone high level indicators. If an alarm sounds, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.
- (b) The Permittee shall record the pressure drop across the baghouses used in conjunction with the flaking mill operations (Pt #6) and rail meal loadout operations (Pt #13) at least once per day when the listed processes are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 0.5 to 8.0 inches of water or a range established during the latest stack test the Permittee shall take reasonable response steps. Section C Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.2.9 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 that the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.2.10 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps shall be considered a deviation from this permit.

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

D.2.11 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.1 (a), the Permittee shall maintain records of the quantity of soybeans processed by the "A" plant, on an "as received" basis.
- (b) To document the compliance status with Condition D.2.5 and D.2.6, the Permittee shall maintain records of once per day visible emission notations of the stack exhaust from milling operations (Pt #4), flaking mill operations (Pt #6), flow coating material bin operations (Pt #11), truck meal loadout operations (Pt #12), and rail meal loadout operations (Pt #13) stack exhausts. 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 milling operations, flaking meal operations, flow coating material bin operations, truck meal loadout operations and/or the rail meal loadout operations did not operate that day).
- (c) To document the compliance status with Condition D.2.7 and D.2.8, the Permittee shall maintain records of the pressure drops across the baghouses. The Permittee shall also maintain records of any alarms that sound and the response steps taken. 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 milling operations, flaking meal operations, flow coating material bin operations, truck meal loadout operations and/or the rail meal loadout operations did not operate that day).

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

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SECTION D.3 FACILITY OPERATION CONDITIONS

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

- (i) Oil extraction and processing operations, constructed in 1996, consisting of the following units:
 - (1) One (1) soybean oil extractor, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (2) One (1) set of evaporators, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - One (1) desolventizer/toaster, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - One (1) set of condensers and water separators to separate hexane and water, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (5) Two (2) mineral oil absorbers, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (6) One (1) spent flake conveyor extending to the meal dryer;
 - (7) One (1) totally enclosed seal screw conveyor, installed in a series with the slurry loader conveyor;
 - (8) One (1) flake conveyor extending to the slurry loader conveyor;
 - (9) One (1) slurry loader conveyor;
 - (10) One (1) hexane storage tank, identified as #1 (storage);
 - (11) One (1) hexane storage tank, identified as #2 (process tank);
 - (12) One (1) hexane storage tank, identified as #3 (work/separation);
- (j) Two (2) DTDC meal dryers (#1 & #2), both constructed in 1996, using a cyclone for control and exhausting at stack Pt #7;
- (k) One (1) cyclone for the control of the meal dryers, constructed in 1996, and exhausting at stack Pt #7;
- (I) Two (2) DTDC meal coolers (#1 & #2), both constructed in 1996, using a cyclone for control, and exhausting at stack Pt #8;
- (m) One (1) cyclone for the control of the meal coolers, constructed in 1996, and exhausting at stack Pt #8;

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

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

- (a) The soybeans processed by the "A" plant, on an "as received" basis, shall be limited to less than 828,837 tons per twelve (12) consecutive month period (equivalent to an oil extraction process throughput of 803,000 tons per twelve (12) consecutive month period) with compliance determined at the end of each month.
- (b) 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) applies to the soy bean extractor processes, meal dryers, and coolers. Pursuant to CP145-4300-00035, issued July 17, 1995, and 326 IAC 8-1-6, the following is BACT and these limitations apply:

Facility	Control	VOC (Hexane) Emission Limit (including upset emissions)
Oil Extractor, Meal Desolventizer, Oil Desolventizer, Solvent Separator, Vent System	Mineral oil absorber	0.12 lb/ton of processed grain
Meal Dryers	None	0.16 lb/ton of processed grain
Meal Coolers	None	0.16 lb/ton of processed grain
Maximum soybean extraction process throughpu	it = 803,000 tons per twe	elve (12) consecutive month period

The total amount of hexane used by the source shall not exceed 1.2 pounds of hexane per ton of beans processed. This limit is based on information from the Technical Support Document for CP 145-4300-00035, issued on July 17, 1995 and is equivalent to 481.8 tons of hexane per twelve (12) consecutive month period. Compliance with this limit is equivalent to VOC emissions of less than 176.7 tons per year. Compliance with this hexane usage limit, in addition to the limits listed in the table above, will satisfy the requirements of 326 IAC 8-1-6 (BACT).

D.3.2 PSD Minor Limit [326 IAC 2-2]

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following PM emissions:

Process	Baghouse/ Cyclone	PM Limit (lb/hr)	PM10 Limit (lb/hr)
DTDC meal dryers, #1 and #2	Pt #7	3.8	3.8
DTDC meal coolers, #1 and #2	Pt #8	5.7	5.7

Compliance with these limits shall limit the PM and PM10 emissions to less than twenty-five (25) and fifteen (15) tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 not applicable.

D.3.3 Particulate Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
A Extractor & Processing (Pt #9)	46	43.8
DTDC meal dryers, #1 and #2 (Pt #7)	99	51.2
DTDC meal coolers, #1 and #2 (Pt #8)	99	51.2

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These limitations were calculated using the following:

Interpolation and extrapolation of the data for process weight rates 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

Compliance Determination Requirements

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

Not later than five (5) years from the date of the most recent valid compliance demonstration, Permittee shall perform VOC testing on the oil extraction system (Pt #7 and #8) utilizing Methods 25 (40 CFR 60, Appendix A) for VOC or other methods as approved by the Commissioner at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures-Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.3.5 Particulate Control [326 IAC 2-7-6(6)]

In order to demonstrate compliance with Conditions D.3.2 and D.3.3, the cyclones for the meal dryers and coolers shall operate at all times that those facilities are in operation.

D.3.6 Volatile Organic Compounds (VOC)

In order to demonstrate compliance with Condition D.3.1, the mineral oil absorber shall operate at all times that the oil extractor process is in operation. The average mineral oil flow rate shall be determined at the time of the VOC (hexane) test.

D.3.7 VOC Compliance

The compliance with Condition D.3.1 shall be demonstrated per twelve (12) consecutive month period with compliance determined at the end of each month:

- (a) The amount of VOC (hexane) used per calendar month; and
- (b) The amount of soybean processed by the extraction process.

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

D.3.8 Visible Emissions Notations

- (a) Once per day visible emission notations of meal dryers (Pt #7) and meal coolers (Pt #8) stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

D.3.9 VOC Monitoring [40 CFR Part 64]

In order to demonstrate the compliance status with Condition D.3.1, the following monitoring requirements apply:

- (a) The Permittee shall monitor and record the mineral oil flow rate at least once per day. The Preventive Maintenance Plan for the absorber shall contain troubleshooting contingency and corrective actions for when the flow rate readings are outside of the normal range for any one reading.
- (b) The instruments used for determining the flow rate shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every eighteen (18) months.
- (c) The gauge employed to take the mineral oil flow across the scrubber shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within + 10% of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
- (d) In the event that the absorber's failure has been observed, an inspection will be conducted. Based upon the findings of the inspection, any corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.
- (e) The mineral oil to the mineral-oil-stripping column shall be kept at a minimum temperature of 160 °F or a temperature for adequate stripping of the absorbed hexane from the oil. When the process is in operation, an electronic data management system (EDMS) shall record the instantaneous temperature on a frequency of not less than every two hours. As an alternative to installing an EDMS, manual readings shall be taken every two hours.

D.3.10 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance 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.3.11 Record Keeping Requirements

- (a) To document the compliance status with Conditions D.3.1 and D.3.2(a), the Permittee shall maintain records of the quantity of soybeans processed and the amount of VOC (hexane) used per calendar month.
- (b) To document the compliance status with Condition D.3.8, the Permittee shall maintain records of visible emission notations of the stack exhaust once per day. 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 meal dryers did not operate that day).
- (c) To document the compliance status with Condition D.3.9, the Permittee shall maintain records of the following:

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- (1) The mineral oil flow rate;
- (2) The operating temperature of the mineral oil absorber; and
- (3) The temperature of the stripping column.
- (d) Section C General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.3.12 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.3.1 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, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

FACILITY OPERATION CONDITIONS

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

(n) One (1) boiler, identified as the Murray boiler, constructed in 1996, firing natural gas, vegetable oil, #2 distillate fuel oil, or blends of vegetable oil and #2 distillate fuel oil, rated at 96 million Btu 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.4.1 Particulate [326 IAC 6-2-4]

326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating) applies to the Murray boiler because it was constructed in 1996 which is after the applicability date of September 21, 1983. Pursuant to this rule, the particulate emissions from the boiler shall be limited to 0.32 pounds per million Btu heat input.

D.4.2 Sulfur Dioxide (SO₂) and Opacity [326 IAC 7-1.1-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations):

(a) The SO₂ emissions from the Murray boiler shall not exceed five tenths (0.5) pounds per million Btu heat input, when firing fuel oil.

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

D.4.3 Visible Emissions Notations

- (a) Visible emission notations of the boiler stack exhaust shall be performed once per day during normal daylight operations when combusting fuel oil and/or vegetable oil and exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.4.4 Record Keeping Requirements

- (a) To document the compliance status with Condition D.4.2, the Permittee shall maintain records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period;

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- (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
- (3) To certify compliance when burning natural gas only, the Permittee shall maintain records of fuel used.

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document the compliance status with Condition D.4.4, the Permittee shall maintain records of visible emission notations of the boiler stack exhaust once per day. 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., boiler did not operate that day).
- (c) Section C General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.4.5 Reporting Requirements

- (a) A certification, signed by a responsible official, which certifies all of the fuels combusted during the period. The natural gas-fired boiler certification does require the certification by a "responsible official" as defined by 326 IAC 2-7-1(34);
- (b) The natural gas boiler certification 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 six (6) month period being reported.
- (c) A semi-annual summary of the information to document compliance with Condition D.4.2 in any compliance period when No. 2 fuel oil was combusted, and the natural gas fired boiler certification, shall be submitted to the address listed in Section C General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the six (6) month period being reported. Section C General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

FACILITY OPERATION CONDITIONS

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

- (o) One (1) vegetable oil refinery process, constructed in 2002, consisting of crude vegetable oil receiving, storage, filtration, and degumming equipment; lecithin drying and processing equipment; oil refining, deodorizing, and filtration equipment; bulk oil handling, blending, storage, and loadout facilities; and including the following equipment:
 - (1) One (1) storage silo, identified as R-101, equipped with a baghouse for particulate matter control, exhausting to Stack R-101;
 - (2) One (1) surge tank, identified as R-102, equipped with a baghouse for particulate matter control, exhausting to Stack R-102;
 - (3) One (1) storage silo, identified as R-103, equipped with a baghouse for particulate matter control, exhausting to Stack R-103;
 - (4) One (1) surge tank, identified as R-104, equipped with a baghouse for particulate matter control, exhausting to Stack R-104;
 - (5) One (1) storage silo, identified as R-105, equipped with a baghouse for particulate matter control, exhausting to Stack R-105;
 - (6) One (1) surge tank, identified as R-106, equipped with a baghouse for particulate matter control, exhausting to Stack R-106; and
 - (7) One (1) natural gas-fired boiler, identified as R-107, exhausting to Stack R-107.

(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 PSD Minor Limit [326 IAC 2-2]

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall be limited by the following PM emissions:

Process	Baghouse/ Cyclone	PM Limit (lb/hr)
R-101 through R-106	R-101 - R-106	1.029 (combined)

D.5.2 Particulate Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
vegetable oil refinery process (R-101 through R-106)	60	46.3

These limitations were calculated using the following:

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

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

D.5.3 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating), the particulate emissions from R-107 shall be limited to less than 0.316 pounds per million British thermal units per hour.

D.5.4 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1]

In order to make the requirements of 326 IAC 2-4.1 not applicable, the Permittee shall comply with the following:

- (a) the total amount of off-site soybean oil processed by the vegetable oil refinery shall be limited to less than 347,220,000 pounds per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) the Single HAP (n-hexane) shall be limited as follows:

Process	Baghouse/ Cyclone	Single HAP Limit (lb/ton)
R-101 through R-106	none	0.114 (combined)

Compliance with these limitations shall limit the single HAP to less than 10 ton per year and renders the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) not applicable.

D.5.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

In order to make the requirements of 326 IAC 8-1-6 not applicable, the Permittee shall comply with the following:

- (a) the total amount of off-site soybean oil processed by the vegetable oil refinery shall be limited to less than 347,220,000 pounds per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) the VOC shall be limited shall be limited as follows:

Process	Baghouse/ Cyclone	Single HAP Limit (lb/ton)
R-101 through R-106	none	0.288 (combined)

Compliance with these limitations shall limit the VOC to less than 25 ton per year and renders the requirements of 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) not applicable.

Compliance Determination Requirements

D.5.6 Particulate Control [326 IAC 2-7-6(6)]

In order to demonstrate compliance with Condition D.5.1 and D.5.2, the baghouses for PM control shall be in operation and control emissions from the storage silos and surge tanks, identified as R-101 through R-106, at all times when the storage silos and surge tanks are in operation.

D.5.7 HAP Emissions

(a) The compliance with Condition D.5.4 shall be demonstrated within 30 days of the end of each month based on the total single HAP emissions for the twelve (12) month period.

(b) In order to comply with Condition D.5.4, the mineral oil absorption system for VOC control shall be in operation at all times when the vegetable oil refinery is in operation.

D.5.8 VOC Emissions

- (a) The compliance with Condition D.5.5 shall be demonstrated within 30 days of the end of each month based on the total VOC emissions for the twelve (12) month period.
- (b) In order to comply with Condition D.5.5, all condensers for VOC control shall be in operation at all times when the vegetable oil refinery is in operation.

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

D.5.9 Visible Emissions Notations [40 CFR Part 64]

- (a) Once per day visible emission notations of storage silos and surge tanks, identified as R-101 through R-106 stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.5.10 Parametric Monitoring [40 CFR Part 64]

The Permittee shall record the pressure drop across the baghouses used in conjunction with the storage silos and surge tanks, identified as R-101 through R-106 at least once per day when the listed processes are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 0.5 to 8.0 inches of water or a range established during the latest stack test the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

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

D.5.11 Record Keeping Requirements

(a) To document the compliance status with Conditions D.5.4 and D.5.5, the Permittee shall maintain monthly records of the amount of off-site soybean oil processed by the vegetable oil refinery.

- (b) To document the compliance status with Condition D.5.9 the Permittee shall maintain records of once per day visible emission notations of the stack exhaust from the storage silos and surge tanks, identified as R-101 through R-106. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the storage silos and surge tanks did not operate that day).
- (c) To document the compliance status Condition D.5.10 the Permittee shall maintain records of the pressure drop across the baghouses. 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 truck receiving, rail receiving and/or the rail screening did not operate that day).
- (d) Section C General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.5.12 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.5.4 and D.5.5 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

FACILITY CONDITIONS

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

- (p) One (1) pelletizing mill, labeled as part of EU# 26, with a maximum rate of 36,000 lbs raw material per hour (18 tph), where air stream from mill does not vent to atmosphere but instead passes on to pellet cooler;
- (q) One (1) pellet cooler, labeled as part of EU# 26, with a maximum rate of 36,000 lbs raw material per hour (18 tph), using a high efficiency cyclone control device with a rating of 0.01 grains/dscf and 7,500 acfm at stack Pt#26;
- (r) One (1) totally enclosed drag conveyor, with a maximum rate of 18 tons per hour;
- (s) One (1) totally enclosed "L" path conveyor, with a maximum rate of 18 tons per hour; and
- (t) One (1) bucket leg, with a maximum rate of 18 tons per hour.

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

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

D.6.1 PSD Minor Limit for PM and PM10 [326 IAC 2-2]

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the PM and PM10 emissions from the Pellet Mill and Cooler emission unit (Pt #26) shall not exceed the emissions limits listed in the table below:

Emission Unit	PM Emission Limit (lbs/hr)	PM10 Emission Limit (lbs/hr)
Pellet Mill and Cooler emission unit (Pt #26)	5.59	3.31

Compliance with this condition is necessary in order to limit emissions to less than 25 tons/year PM and less than 15 tons/year PM₁₀ and will render the requirements of 326 IAC 2-2 not applicable to the Pellet Mill and Cooler emission unit (EU#26).

D.6.2 Particulate Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
Pellet Mill Operations (Pt #26)	18	28.4

These limitations were calculated using the following:

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

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

Compliance Determination Requirements

D.6.3 Particulate Control [326 IAC 2-7-6(6)]

In order to demonstrate compliance with D.6.1 and D.6.2, the cyclone for particulate control shall be in operation and control emissions from the Pellet Mill and Cooler (Pt #26) at all times that the Pellet Mill and Cooler emission unit is in operation.

D.6.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within five (5) years from the date of the most recent valid compliance demonstration, the Permittee shall perform PM and PM $_{10}$ testing on Pellet Mill and Cooler (Pt #26) in order to determine compliance with D.6.1 and D.6.2 utilizing methods as approved by the Commissioner, and furnish the Commissioner a written report of the results of such performance tests. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM $_{10}$ includes filterable and condensable PM $_{10}$. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.6.5 Visible Emissions Notations

- (a) Once per day visible emission notations of the Pellet Mill and Cooler (Pt #26) shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.6.6 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps shall be considered a deviation from this permit.

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

D.6.7 Record Keeping Requirements

- (a) To document the compliance status with Condition D.6.5, the Permittee shall maintain records of visible emission notations of the Pellet Mill and Cooler (Pt #26) once per day. 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 pellet mill did not operate that day).
- (b) Section C General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

FACILITY CONDITIONS

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

A-PLANT

- (v) One (1) screening bin, identified as #10a.
- (v) Three (3) totally enclosed conveyors to hull refining screener, identified as #25a.
- (w) One (1) totally enclosed dryer feed conveyor to the dryer feed elevator, identified as #29a.
- (x) Two (2) hull refining screeners, identified as #48a.
- (y) Four (4) hull refining aspirators, identified as #49a, exhausting to hull refining cyclone.
- (z) One (1) totally enclosed millfeed conveyor to storage, identified as #53a.
- (aa) One (1) millfeed elevator, identified as #54a, controlled by truck load out baghouse, and exhausting at stack Pt #12.
- (ab) One (1) seal screw conveyor, identified as #61a.
- (ac) The following emission units used in the one (1) totally enclosed sized meal conveyor, identified as #79a, aspirated to meal sizing system baghouse for control, and exhausting through stack Pt #24:
 - (1) One (1) enclosed meal screener feeder conveyor, identified as #74a, with a maximum throughput rate of 80 tons per hour, conveying the meal produced to the meal screen system.
 - (2) One (1) enclosed meal grinder feed conveyor, identified as #75a, with a maximum throughput rate of 80 tons per hour, conveying the meal from the meal screen system to meal feeders.
 - (3) One (1) meal grinding system, identified as #76, consisting of three (3) hammer mills, with a total maximum process rate of 80 tons per hour. This process rate is limited by the maximum throughput rate of the conveyors.
 - (4) Two (2) enclosed sized meal conveyors, identified as #78a, with a total maximum throughput rate of 80 tons per hour, conveying the ground meal from the meal grinding system (#76) to the meal handling system.
- (ad) Grain screening operations, consisting of the following units, using the screenings baghouse, and exhausting at stack Pt #5:
 - (1) One (1) screening surge bin;
 - (2) One (1) conveyor extending to the de-stoner;
 - (3) One (1) de-stoner, using a cyclone and the screening baghouse for control;
 - (4) One (1) screening grinder;

FACILITY CONDITIONS (Continued)

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

- (5) Four (4) totally enclosed conveyors in a series, extending to the hull refining screener;
- (6) One (1) cyclone exhausting to the screening baghouse;
- (7) One (1) surge bin elevator;
- (8) One (1) whole bean surge bin;
- (9) One (1) dryer feed elevator;
- (10) One (1) totally enclosed dryer feed conveyor, transferring beans to the dryer feed elevator;
- (11) Two (2) whole bean aspirators, in parallel;
- (12) One (1) dryer discharge conveyor;
- (13) One (1) day bin elevator;
- (14) Two (2) day bins;
- (15) Two (2) totally enclosed conveyors, arranged in a series;
- (16) Two (2) conveyors extending from the dryer to the dryer discharge conveyor;
- (17) One (1) milling elevator;
- (18) One (1) product meal conveyor, identified as #1
- (19) One (1) meal surge conveyor, identified as #2;
- (20) Three (3) meal storage silos;
- (21) One (1) load out leg conveyor;
- (22) One (1) load out meal elevator;
- (23) One (1) meal transfer conveyor; and
- (24) One (1) screening transfer conveyor to screenings bucket elevator.

B-PLANT

- (ae) One (1) totally enclosed millfeed conveyor to storage, identified as #2b.
- (af) One (1) millfeed elevator, identified as #3b, exhausting at stack Pt #12.
- (ag) One (1) aspirator between milling leg and bean scale, identified as #4b, aspirated to milling baghouse, and exhausting at stack Pt #4.

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SECTION D.7 FACILITY CONDITIONS (Continued)

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

- (ah) One (1) totally enclosed hull collecting conveyor, identified as #5b, feeding the "B" plant hull refining screener.
- (ai) One (1) "B" plant whole bean surge bin #2, identified as #6b.
- (aj) One (1) "B" plant hull grinder, identified as #7b, discharging to the screening baghouse, and exhausting at stack Pt #5.
- (ak) One (1) "B" plant whole soybean feed bucket elevator, identified as #8b, controlled by the screening baghouse, and exhausting at stack Pt #5.
- (al) One (1) "B" plant totally enclosed bean heater discharge conveyor, identified as #9b.
- (am) One (1) "B" plant whole bean aspiration, identified as #10b, controlled by the screening baghouse, and exhausting at stack Pt #4.
- (an) One (1) "B" plant bean weighing system, identified as #11b, controlled by the screening baghouse, and exhausting at stack Pt #4.
- (ao) One (1)"B" plant totally enclosed millfeed grinding conveyor, identified as #12b, controlled by the screening baghouse, and exhausting at stack Pt #5.
- (ap) Two (2) "B" plant hull refining screeners, identified as #13b, controlled by the screening baghouse, and exhausting at stack Pt #5.
- (aq) Two (2) "B" plant aspirator, identified as #14b, controlled by a hull refining cyclone, exhausting at stack Pt #18.
- (ar) One (1) "B" plant totally enclosed feed conveyor, identified as #15b.
- (as) One (1) "B" plant bean heater, identified as #16b, controlled by a bean heater cyclone, and exhausting at stack Pt # 25.
- (at) One (1) totally enclosed "B" plant soybean conveyor (feeding the jet dryers), identified as #17b, controlled by a cyclone, and exhausting at stack Pt # 18.
- (au) One (1) set of "B" plant jet dryers, identified as #18b, controlled by a dryer cyclone, and exhausting at stack Pt # 18.
- (av) One (1) "B" plant bean heaters cyclone, identified as #19b, exhausting at stack Pt # 18A.
- (aw) One (1) "B" plant bean dryers cyclone, identified as #20b, exhausting at stack Pt # 18A.
- (ax) Two (2) "B" plant hulloosenators, identified as #21b.
- (ay) One (1) set of "B" plant cascade dryers controlled by CCD cyclone and exhausted at stack Pt #18, identified as #22b.

FACILITY CONDITIONS (Continued)

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

- (az) One (1) set of "B" plant cracking rolls, identified as #23b.
- (ba) One (1) set of "B" plant cascade coolers, identified as #24b, controlled by a-cyclone, and exhausting at stack Pt # 18.
- (bb) Two (2) "B" plant totally enclosed after cascade coolers conveyors (feeding the flakers), identified as #25b, controlled by a soybean flaking baghouse, and exhausting at stack Pt #19.
- (bc) One (1) "B" plant cyclone, identified as #26b, exhausting at stack Pt # 18A.
- (bd) One (1) set of "B" plant flakers, identified as #27b, controlled by a flakers baghouse, and exhausting at stack Pt # 19.
- (be) One (1) "B" plant flakers baghouse, identified as #28b, exhausting at stack Pt # 19.
- (bf) Two (2) "B" plant totally enclosed flake conveyors (feeding the seal conveyor), identified as #29b.
- (bg) One (1) "B" plant totally enclosed seal screw conveyor (feeding the slurry loader conveyor), identified as #30b.
- (bh) One (1) "B" plant totally enclosed slurry loader conveyor (feeding the extractor), identified as #31b.
- (bi) One (1) "B" plant soybean oil extractor, identified as #32b, controlled by one (1) mineral oil absorption system, and exhausted at stack Pt # 23.
- (bj) A set of "B" plant evaporators, identified as #33b, controlled by two (2) mineral oil absorption systems, and exhausted at stack Pt # 23.
- (bk) A set of "B" plant condensers, hexane handling system and water separator to separate hexane and water, identified as #34b, controlled by one (1) mineral oil absorption system and exhausted at stack Pt # 23.
- (bl) One (1) "B" plant mineral oil absorption system with a mineral oil to control hexane emissions, identified as #35b, and exhausted at stack Pt # 23.
- (bm) One (1) totally enclosed "B" plant spent flake conveyor, identified as #36b.
- (bn) Two (2) "B" plant meal dryers (#1 & #2), identified as #37b, controlled by one (1) dryer cyclone, and exhausting at stack Pt # 21.
- (bo) One (1) "B" plant meal cooler (#3), identified as #38b, controlled by one (1) cooler cyclone, and exhausting at stack Pt # 22.
- (bp) Four (4) "B" plant totally enclosed unground meal conveyors in series (meal screening system), identified as #39b.

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SECTION D.7 FACILITY CONDITIONS (Continued)

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

- (bq) One (1) meal sizing baghouse, identified as #40b, exhausting at stack Pt #24.
- (br) One (1) boiler, identified as Boiler No. 2, firing natural gas, vegetable oil, #2 distillate fuel or blends of vegetable oil and #2 distillate fuel oil, rated at 240 million Btu per hour, controlled by low NOx burners and flue gas recirculation, and exhausting at stack Pt. # 20.
- (bs) One (1) screening leg, identified as #41b, transferring screenings from the screenings transfer conveyors to the screening surge bin.
- (bt) One (1) totally enclosed dryer feed conveyor, identified as #43b, transferring beans to the dryer feed elevator, controlled by screening baghouse, and exhausting at stack Pt #5.
- (bu) One (1) whole bean surge silos discharge conveyors feeding "B" Milling bucket elevator, identified as #49b, controlled by screenings baghouse and exhausting at stack Pt #5.
- (bv) One (1) "B" milling bucket elevator, identified as #50b, controlled by the Milling aspiration baghouse and exhausting at stack Pt #4.
- (bw) One (1) bean heater feed bucket elevator, identified as #51b, controlled by the screenings baghouse and exhausting at stack Pt #5.
- (bx) One (1) bean heater discharge bucket elevator, identified as #52b, controlled by the screenings baghouse and exhausting at stack Pt #5.
- (by) One (1) screenings transfer conveyors to the cracking rolls, identified as #53b, controlled by East jet dryer cyclone and exhausting at stack Pt #18.
- (bz) One (1) hull grinder controlled screenings baghouse and exhausting at stack Pt #5.
- (ca) One (1) "B" unground meal bucket elevator, identified as #55b, controlled by meal grinding baghouse at stack Pt #24.
- (cb) One (1) "B" DT feed conveyor, identified as #56b.
- (cc) One (1) "B" desolventizer toaster, identified as #57b, controlled by the mineral oil absorption system and exhausting at stack Pt #23.
- (cd) One (1) "B" above ground hexane storage tank controlled by the mineral oil absorption system and exhausting at stack Pt #23.

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

D.7.1 PSD Minor Limit [326 IAC 2-2] [Morristown, Indiana CTP]

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable:

- (a) the soybeans processed by the "B" plant, on an "as received" basis, shall be limited to 1,073,159 tons per twelve (12) consecutive months (equivalent to an oil extraction process throughput of 1,065,538 tons per 12-month period), rolled on a monthly basis. This soybean limitation is required to limit the potential to emit of PM and PM10 to 225 and 218 tons per 12 consecutive months, rolled on a monthly basis, respectively.
- (b) the Permittee shall comply with the following PM and PM10 emissions:

Process	Baghouse/ Cyclone	PM Limit (lb/hr)	PM-10 Limit (lb/hr)
Screening Baghouse	Baghouse Pt #5	1.52	1.52
Truck unloading #1 and #2 fugitives	No control	7.29	2.39
Rail unloading fugitives	No control	0.64	0.156
B Bean Heater	Cyclone Pt #25	0.62	0.62
Hot cracking and dehulling system, B-plant	Four Cyclones Pt #18	25.8	25.8
Soybean Flaking, B-Plant	Baghouse Pt #19	0.69	0.69
DTDC meal dryers #1 and #2, B-Plant	Cyclone Pt #21	4.56	4.56
DTDC meal coolers #1 and #2, B-Plant	Cyclone Pt #21	12.82	12.82
Meal sizing system	Baghouse Pt. #24	1.29	1.29
Boiler No. 2 (see (c), (d) and (e) below)	Stack Pt #20	10.5 tpy	10.5 tpy

- (c) The amount of distillate oil with 0.05% sulfur maximum, combusted in the Boiler No. 2 shall be limited to 6,343.949 gallons per 12 consecutive months rolled on a monthly basis. Distillate oil shall not exceed 0.05% Sulfer by weight. These distillate oil limitations are required to limit SO₂ emissions to 249 tons per 12 month period, rolled on a monthly basis.
- (d) The amount of vegetable oil combusted in Boiler No. 2 shall not exceed 4,540,000 gallons per 12 consecutive months rolled on a monthly basis. When using blends of vegetable oil and distillate fuel oil, only the volume of fuel which is vegetable oil shall count toward the usage limit.
- (e) When burning vegetable oil, or blends of vegetable oil and distillate fuel oil, PM_{10} emissions shall not exceed 0.016 pounds per million Btu heat input. This limit in combination with the vegetable oil usage limit in D.7.1(c) is required to restrict the emissions of PM_{10} from Boiler No. 2 to less than 10.5 tons per 12 month period, rolled on a monthly basis.

Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable for PM, PM_{10} and SO_2 emissions.

D.7.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
Grain screening operations (Pt #5)	724	73.5
Bean Heater (Pt #25)	128	53.8
B Hot Dehulling (Pt #18)	128	53.8
B Flaking (Pt #19)	128	53.8
B Meal Dryer (Pt #21)	128	53.8
B Meal Cooler (Pt # 22)	128	53.8
Meal Grinding Pt #24)	80	49.1
B Extractor & Processing (Pt #23)	99	43.8

These limitations were calculated using the following:

Interpolation and extrapolation of the data for process weight rates 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.7.3 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the PM emissions from Boiler No. 2 shall not exceed 0.24 pound per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:

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

Where Pt = emission rate limit (lbs/MMBtu)
Q = total source capacity (336 MMBtu/hr)

D.7.4 Best Available Control Technology (BACT) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (BACT Requirements):

(a) the Permittee shall control volatile organic compound (VOC) emissions from the combined "A" and "B" soybean oil extraction processes as follows:

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Facility	Control	Emission Limit
Oil extractor "B" plant	Mineral oil absorber system	0.069 lb VOC/ton soybean
Meal dryers "B" plant	None	0.152 lb VOC/ton soybean
Meal coolers "B" plant	None	0.152 lb VOC/ton soybean
Combined "A" and "B" plants	First Year	0.20 gal VOC/ton soybean processed
	After first year	0.19 gal VOC/ton soybean processed
Maximum annual soybean processed by combined "A" and "B" plants, as received		1,901,996 tons per year

(b) BACT for fugitive hexane loss will include an annual leak check in accordance with Bunge's standard operating procedures accompanied by continuous monitoring of the process area by flammable gas monitors. The leak check will be completed on the affected system after hexane is reintroduced into the system.

For emergency repairs and/or maintenance completed between annual maintenance shutdowns, a leak check will be completed on the affected.

(1) The Permittee shall immediately tag all detected leaks with a weatherproof and readily visible identification tag with a distinct number. Once a leaking component is detected, first-attempt repairs must be done within five days and be completed within 15 days of detecting the leaking components. If the repair cannot be accomplished within 15 days, then the Permittee shall send a notice of inability to repair to the OAQ within 20 days of detecting the leak. The notice must be received by:

Indiana Department of Environmental Management Technical Support and Modeling, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

within 20 days after the leak was detected. At a minimum the notice shall include the following:

- (A) Equipment, operator, and instrument identification number, and date of leak detection
- (B) Measured concentration (ppm) and background (ppm)
- (C) Leak identification number associated with the corresponding tag
- (D) Reason of inability to repair within 5 to 15 days of detection

Compliance Determination Requirements

D.7.5 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 3]

(a) Within 180 days from the date of issuance of this permit renewal, the Permittee shall perform testing on the following sources, in order to determine compliance with D.7.1 (a) and D.7.4 (a) utilizing methods as approved by the Commissioner, and furnish the

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Commissioner a written report of the results of such performance tests. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM_{10} includes filterable and condensable PM_{10} . Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Hot cracking and dehulling system, B-plant (Pt# 18, 25) PM, PM-10 Soybean flaking, B-plant (PT# 19) PM, PM-10

Mineral oil absorption system (PT# 23) VOC, Mineral oil flow rate

Meal sizing system (PT# 24) PM, PM-10
Millfeed and meal storage and truck loadout (PT# 12) PM, PM-10

D.7.6 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to demonstrate compliance with Condition D.7.1 (a) and (b), the baghouses and cyclones shall be in operation at all times that the processes 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.7.7 Volatile Organic Compounds (VOC)

In order to demonstrate compliance with Condition D.7.4, the absorber shall be operated at all times the oil extractor process is in operation at an average mineral oil flow rate established during the latest VOC (hexane) test.

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

D.7.8 Visible Emissions Notations [40 CFR Part 64]

- (a) Visible emission notations of the screening baghouse (Pt #5), B-Plant hot cracking and dehulling system (Pt #18), B-Plant Soybean flaking (Pt #19), B-Plant meal dryers (Pt #21) and meal sizing system (Pt #24) shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.7.9 Visible Emissions Notations

(a) Visible emission notations of the Boiler No.2 (Pt #20), B-Plant meal coolers (Pt #22), and

B-Plant (Pt #25) shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.7.10 Parametric Monitoring [40 CFR Part 64]

- (a) Alarms shall be operational on all cyclone high level indicators. If an alarm sounds, the Permittee shall take reasonable response steps. 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 record the pressure drop across the bag houses used in conjunction with the associated processes, at least once per day when the screening baghouse (Pt #5), B-Plant hot cracking and dehulling system (Pt #18), B-Plant Soybean flaking (Pt #19), B-Plant meal dryers (Pt #21), and meal sizing system (Pt #24) are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 to 8.0 inches of water or a range established during the latest stack test the Permittee shall take reasonable response steps. Section C Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.7.11 Parametric Monitoring

- (a) Alarms shall be operational on all cyclone high level indicators. If an alarm sounds, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.
- (b) The Permittee shall record the pressure drop across the bag houses used in conjunction with the associated processes, at least once per day when the Boiler No.2 (Pt #20), B-Plant meal coolers (Pt #22), and B-Plant (Pt #25) are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 to 8.0 inches of water or a range established during the latest stack test the Permittee shall take reasonable response steps. Section C Response to Excursions or Exceedances contains the Permittee's obligation with regard to the

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reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.7.12 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 that the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.7.13 Cyclone Failure Detection

In the event that cyclone failure has been observed: Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps shall be considered a deviation from this permit.

D.7.14 VOC Monitoring [40 CFR Part 64]

In order to demonstrate compliance with Condition D.7.4, the following monitoring requirements apply:

- (a) The Permittee shall monitor and record the mineral oil flow rate at least once per day. The Preventive Maintenance Plan for the absorber shall contain troubleshooting contingency and corrective actions for when the flow rate readings are outside of the normal range for any one reading.
- (b) The instruments used for determining the flow rate shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every eighteen (18) months.
- (c) The gauge employed to take the mineral oil flow across the scrubber shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within + 10% of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
- (d) In the event that the absorber's failure has been observed, an inspection will be conducted. Based upon the findings of the inspection, any corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.
- (e) The mineral oil to the mineral-oil-stripping column shall be kept at a minimum temperature of 180 °F for adequate stripping of the absorbed hexane from the oil. When the process is

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in operation, an electronic data management system (EDMS) shall record the instantaneous temperature on a frequency of not less than every two hours. As an alternative to installing an EDMS, manual readings shall be taken every two hours.

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

D.7.15 Record Keeping Requirements

Pursuant to 326 IAC 2-1-3(i) and 326 IAC 2-2:

- (a) To document the compliance status with Condition D.7.1 (a), the Permittee shall maintain records of the soybean processed by B-Plant and fuel oil #2 burned in Boiler No. 2.
- (b) To document the compliance status with Condition D.7.1 (d), the Permittee shall maintain records of the sulfur content in fuel oil #2 burned in Boiler No. 2.
- (c) To document the compliance status with Condition D.7.4, the Permittee shall maintain records from combined plants "A" and "B" of the following:
 - (1) The amount of VOC (hexane) used per calendar month by the combined plants "A" and "B";
 - (2) The amounts of soybean processed by the combined plants "A" and "B"; and
 - (3) The gallons of hexane used per ton of soybean processed by the combined plants "A" and "B"
- (d) To document the compliance status with Condition D.7.4, the Permittee shall maintain records of the following:
 - (1) Equipment inspected;
 - (2) Date of inspection; and
 - (3) Determination of whether a leak was detected.

If a leak is detected, the Permittee shall record the following information.

- (A) The equipment, operator, and instrument identification number;
- (B) Measured concentration;
- (C) Leak identification number associated with the corresponding tag;
- (D) Date of repair;
- (E) Reason for non-repair if unable to repair within 5 to 15 days of detection;
- (F) Maintenance recheck if repaired-date, concentration, background, and
- (G) Any appropriate comments.
- (e) To document the compliance status with Conditions D.7.8 and 7.9, the Permittee shall maintain records of visible emission notations of the milling operations (Pt #4), screening baghouse (Pt #5), truck meal loadout operations (Pt #12), B-Plant hot cracking and dehulling system (Pt #18), B-Plant Soybean flaking (Pt #19), Boiler No.2 (Pt #20), B-Plant meal dryers (Pt #21), B-Plant meal coolers (Pt #22), meal sizing system (Pt #24), and B-

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Plant Bean heater (Pt #25) once per day. 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 mill operations, screening, truck meal loadout, hot cracking and dehulling system, soybean flaking, boiler, meal dryer, meal cooler, meal sizing system or bean heater did not operate that day).

- (f) To document the compliance status with Conditions D.7.10 and D.7.11, the Permittee shall maintain records of the pressure drops across the baghouses. The Permittee shall also maintain records of any alarms that sound and response steps taken.
- (g) To document the compliance status with Condition D.7.13, the Permittee shall maintain records of the events of the cyclone failure detection and the dates the failed units were repaired or replaced.
- (h) To document the compliance status with Condition D.7.14, the Permittee shall maintain records of the followings:
 - (1) The daily record of the mineral oil flow rate of the B-plant absorber
 - (2) The events of the B-plant absorber's failure, findings of the inspections subsequent to B-plant absorber's failure, the corrective actions taken, and the time table for completion
 - (3) The operating temperatures of the B-plant mineral oil absorber
 - (4) The temperature of the B-plant mineral oil stripping column
- (i) Section C General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.7.16 Reporting Requirements

- (a) A quarterly summary of the information to document the compliance status with Conditions D.7.1 (a) and (c) shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) Pursuant to 326 IAC 7-2-1(c), the applicant shall submit reports of calendar month for annual average sulfur content or sulfur dioxide rate in pounds per million Btu, heat content, fuel consumption upon request to the Office of Air Quality.

SECTION D.8

FACILITY CONDITIONS

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

- (a) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower;
- (b) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
- (c) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:
 - (1) One (1) #2 fuel oil storage tank, identified as #4, with a capacity of 3,958 cubic feet;
 - (2) One (1) soybean oil storage tank, identified as #6, with a capacity of 38,000 cubic feet;
 - (3) One (1) soybean oil storage tank, identified as #7, with a capacity of 38,000 cubic feet; and
 - (4) One (1) #2 fuel oil storage tank, identified as #10, with a capacity of 3,958 cubic feet.

(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 Particulate Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate 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 shall not exceed 0.551 pounds per hour. The following insignificant activities are subject to this rule: blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower; and replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

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SECTION E.1

FACILITY OPERATING CONDITIONS

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

The following solvent extraction processes are subject to consent decree entered on January 16, 2007, in Civil Action No. 2:06-CV-02209, United States District Court for the Central District of Illinois, in which the Permittee and IDEM were parties:

The vegetable oil production processes as defined in 40 CFR 63.2872.

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

Consent Decree

E.1.1 Consent Decree Limits, Compliance, and Record Keeping Requirements

- (a) As used in this section, "Consent Decree" shall mean the consent decree entered on January 16, 2007, in Civil Action No. 2:06-CV-02209, United States District Court for the Central District of Illinois, in which the Permittee and IDEM were parties.
- (b) The provisions of this subsection are designed to ensure compliance with the final volatile organic compound solvent loss ratio requirements of the Consent Decree entered into between the Permittee and IDEM on October 26, 2006. Nothing in this subsection is intended to expand, restrict or otherwise alter the obligations imposed on the Permittee by the Consent Decree.
- (c) The VOC solvent loss ratio (SLR) for this facility shall not exceed 0.16 gallons of solvent lost per ton of oilseed processed for conventional soybean processing at this existing source. To determine compliance with the VOC SLR limit, the Permittee shall maintain a Compliance Ratio of less than or equal to 1.0, which shall be calculated as follows:

Compliance Ratio = Actual Solvent Loss (gal) / Allowable Solvent Loss (gal)

Where:

Actual Solvent Loss (gal) = Gallons of solvent loss during previous 12 operating months

Allowable Solvent Loss (gal) = Oilseed (tons) * VOC Solvent Loss Ratio Limit (gal/ton)

Oilseed (tons) = Tons of each oilseed processed during the previous 12 operating months

VOC Solvent Loss Ratio (SLR) Limit = 0.16 gallons per ton of oilseed

- (d) Solvent losses and quantities of oilseed processed during startup and shutdown periods shall not be excluded in determining solvent losses.
- (e) For purposes of calculating SLR, the Permittee may apply the provisions of 40 CFR Part 63, Subpart GGGG, pertaining to malfunction periods when both of the following conditions are met:
 - (1) The malfunction results in a total plant shutdown, which means a shutdown of the solvent extraction system; and

(2) The total amount of solvent loss to which the provisions of 40 CFR Part 63, Subpart GGGG relating to malfunctions is applied in a rolling 12-month period does not exceed the Allowable Malfunction Volume as determined below. The Allowable Malfunction Volume in gallons is equal to the facility's 12-month Crush capacity times its final VOC SLR limit (0.16 gal/ton) times 0.024, as follows:

Allowable Malfunction Volume (gal) = 12-month Crush capacity (tons) * Final VOC SLR limit (0.16 gal/ton) * 0.024

Where:

12-month Crush capacity (tons) = the 12-month design capacity of the plant (tons)

Except as otherwise set forth herein, the Permittee shall include all solvent losses when determining compliance with the VOC SLR limit. The total solvent loss corresponding to a malfunction period shall be calculated as the difference in the solvent inventory, as defined in 40 CFR 63.2862(c)(1), for the day before the malfunction period began and the solvent inventory on the day the plant resumes normal operation. During a malfunction period, the facility shall comply with the Startup, Shutdown, Malfunction (SSM) Plan as required under Subpart GGGG.

- (f) To document compliance with the Consent Decree, the Permittee shall:
 - (1) Conduct daily monitoring and recordkeeping of solvent losses.
 - (2) Maintain a Solvent Loss Records Table including (A) through (F) below. Records maintained for (A) through (D) below shall be documented on a monthly and on a 12-month rolling basis and shall be complete and sufficient to establish compliance with the VOC SLR limit established in paragraph (c) above. Records maintained for (E) and (F) shall be determined monthly. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period and shall be maintained for a period of five (5) years from the date of generation.
 - (A) The amount of oilseed processed (tons).
 - (B) The total solvent loss (gal).
 - (C) The solvent loss during malfunction periods (gal).
 - (D) The adjusted solvent loss (gal), where:
 - Adjusted solvent loss (gal) = total solvent loss (gal) solvent loss during malfunction periods (gal).
 - (E) The actual solvent loss ratio (gal/ton), where:
 - Actual solvent loss ratio (gal/ton) = 12-month rolling adjusted solvent loss (gal) / 12-month rolling amount of oilseed processed (ton)).
 - (F) Compliance Ratio, as determined in paragraph (c) above.

SECTION F.1 SOURCE OPERATION CONDITIONS

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

- (a) Truck receiving operations, consisting of the following units, using the truck receiving/storage baghouse for control, and exhausting at stack Pt #1:
 - (1) Two (2) truck dumps (#1 & #2);
 - (2) Two (2) truck receiving conveyors (#1 & #2);
 - (3) Two (2) receiving legs (#1 & #2), using the truck receiving/storage baghouse and oil applications;
 - (4) One (1) screen;
 - (5) Two (2) receiving legs (#1 & #2) extending from the screen;
 - (6) Two (2) screening conveyors;
 - (7) One (1) screening leg;
 - (8) One (1) screening leg;
 - (9) Two (2) conveyors (#1 & #2) extending to storage silos and to bulk storage;
 - (10) Two (2) conveyors extending to bulk storage feeding and continuing to the bulk storage silos;
 - (11) Ten (10) silos;
 - (12) One (1) screening bin;
 - (13) Two (2) bulk storage bins;
 - (14) One (1) screening conveyor extending from the screening silo;
 - (15) One (1) screening storage conveyor;
 - (16) Two (2) totally enclosed screenings transfer conveyors arranged in a series, transferring screenings from the screenings storage conveyors to the screening bucket elevator;
 - (17) One (1) screening bucket elevator, transferring screenings from the screenings transfer conveyors to the screenings surge bin;
 - (18) Two (2) bulk storage return conveyors (#1 & #2) arranged in a series;
 - (19) Two (2) conveyors from storage (#1 & #2);
 - (20) One (1) conveyor extending to the surge bin leg;
 - One (1) truck receiving/storage baghouse conveyor which transfers dust from the baghouse back to the screening leg;

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

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SECTION F.1

FACILITY OPERATION CONDITIONS - Continued

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

- (22) Two (2) screens, identified as #4, with a total maximum throughput rate of 1,210 tons per hour;
- One (1) transfer system, identified as #9a, with a maximum throughput rate of 1,150 tons per hour, transferring soybeans from the bulk storage elevator to the bulk storage silos;
- One (1) enclosed whole bean conveyor, identified as #16a, with a maximum throughput rate of 340 tons per hour, conveying beans from the surge bin leg to the whole bean surge silo (#28a);
- One (1) whole bean surge silo, identified as #28a, with a maximum storage capacity of 40,000 bushels;
- (26) One (1) enclosed conveyor, identified as #29a, approved in 2009 for construction, with a maximum throughput of 1200 tons per hour;
- (27) One (1) walled and tarped ground pile, identified as #29b, approved in 2009 for construction, with ten (10) aeration fans and a maximum storage capacity of 1,300,000 bushels;
- One (1) grain reclaim truck loadout operation, identified as #29c, approved in 2009 for construction, with a maximum throughput rate of 648 tons per hour;
- One (1) grain reclaim truck dump operation, identified as #29d, approved in 2009 for construction, with a maximum throughput rate of 648 tons per hour;
- One (1) enclosed conveyor, identified as #17a, with a maximum throughput rate of 40 tons per hour, conveying the dust from the truck receiving/storage baghouse to the screening leg;
- One (1) new bean screening screw conveyor, identified as #1a, with a maximum throughput rate of 36 tons per hour, transferring soybeans from the screening system (#4) to the screening leg baghouse;
- (32) Two (2) screening legs, identified as #7a;
- (33) Two (2) transfer conveyors aspirated to truck receiving/storage baghouse, identified as #13a; and

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- (34) Four (4) aspirators between conveyor from storage, identified as #16, and surge bin leg, identified as #27, aspirated to truck receiving/storage baghouse.
- (b) Rail receiving operations, constructed in 1996, consisting of the following units, using the rail receiving baghouse for control, and exhausting at stack Pt #1:
 - (1) One (1) rail car dump; and
 - (2) One (1) rail car receiving conveyor;

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

SECTION F.1

FACILITY OPERATION CONDITIONS - Continued

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

- (c) Grain screening operations, consisting of the following units, using the screenings baghouse, and exhausting at stack Pt #5:
 - (1) One (1) screening surge bin;
 - (2) One (1) conveyor extending to the de-stoner;
 - (3) One (1) de-stoner, using a cyclone and the screening baghouse for control;
 - (4) One (1) screening grinder;
 - (5) Four (4) totally enclosed conveyors in a series, extending to the hull refining screener;
 - (6) One (1) cyclone exhausting to the screening baghouse;
 - (7) One (1) surge bin elevator;
 - (8) One (1) whole bean surge bin;
 - (9) One (1) dryer feed elevator;
 - (10) One (1) totally enclosed dryer feed conveyor, transferring beans to the dryer feed elevator;
 - (11) Two (2) whole bean aspirators, in parallel;
 - (12) One (1) dryer discharge conveyor;
 - (13) One (1) day bin elevator;
 - (14) Two (2) day bins;
 - (15) Two (2) totally enclosed conveyors, arranged in a series;
 - (16) Two (2) conveyors extending from the dryer to the dryer discharge conveyor;
 - (17) One (1) milling elevator;
 - (18) One (1) product meal conveyor, identified as #1
 - (19) One (1) meal surge conveyor, identified as #2;
 - (20) Three (3) meal storage silos;
 - (21) One (1) load out leg conveyor;
 - (22) One (1) load out meal elevator;
 - (23) One (1) meal transfer conveyor; and
 - (24) One (1) screening transfer conveyor to screenings bucket elevator.

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

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SECTION F.1

FACILITY OPERATION CONDITIONS - Continued

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

- (d) One (1) enclosed conveyor, identified as #29a, approved in 2009 for construction, with a maximum throughput of 1200 tons per hour;
- (e) One (1) walled and tarped ground pile, identified as #29b, approved in 2009 for construction, with ten (10) aeration fans and a maximum storage capacity of 1,300,000 bushels;
- (f) One (1) grain reclaim truck loadout operation, identified as #29c, approved in 2009 for construction, with a maximum throughput rate of 648 tons per hour;
- (g) One (1) grain reclaim truck dump operation, identified as #29d, approved in 2009 for construction, with a maximum throughput rate of 648 tons per hour;

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

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

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, as specified in Table 1 of 40 CFR Part 60, Subpart DD in accordance with schedule in 40 CFR 60, Subpart DD.

F.1.2 New Source Performance Standard for Grain Elevators [40 CFR 60, Subpart DD]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart DD (included as Attachment A of this permit):

- (1) 40 CFR 60.300
- (2) 40 CFR 60.301
- (3) 40 CFR 60.302(b), (c)
- (4) 40 CFR 60.303
- (5) 40 CFR 60.304

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SECTION F.2 SOURCE

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

SOURCE OPERATION CONDITIONS

(a) One (1) boiler, identified as the Murray boiler, constructed in 1996, firing natural gas, vegetable oil, #2 distillate fuel oil, or blends of vegetable oil and #2 distillate fuel oil, rated at 96 million Btu per hour;

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

- F.2.1 General Provisions Relating to NSPS, Subpart Dc [326 IAC 12-1] [40 CFR 63, Subpart A]

 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, as specified in Table 1 of 40 CFR Part 60, Subpart Dc in accordance with schedule in 40 CFR 60, Subpart Dc.
- F.2.2 New Source Performance Standard for Small Industrial-Institutional Steam Generating Units [40 CFR 60.40c, Subpart Dc]
 - (a) The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Dc (included as Attachment B of this permit):
 - (1) 40 CFR 60.42c (c)
 - (2) 40 CFR 60.42c (d)
 - (3) 40 CFR 60.44c (h)
 - (b) There are no requirements in 40 CFR 60 Subpart Dc specifically related to vegetable oil combustion. Pure vegetable oil does not conform to the definition of "oil" under 326 IAC 40 CFR 60.41c because it is not petroleum based. Therefore, the fuel oil limits apply only to burning distillate fuel oil or blends of vegetable oil and distillate fuel oil.

SECTION F.3

SOURCE OPERATION CONDITIONS

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

(a) One (1) boiler, identified as Boiler No. 2, firing natural gas, vegetable oil, #2 distillate fuel oil, or blends of vegetable oil and #2 distillate fuel oil, rated at 240 million Btu per hour, controlled by low NOx burners and flue gas recirculation, and exhausting at stack Pt. # 20.

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

F.3.1 General Provisions Relating to NSPS, Subpart Db [326 IAC 12-1] [40 CFR 60, Subpart A]

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, as specified in Table 1 of 40 CFR Part 60,

Subpart Db in accordance with schedule in 40 CFR 60, Subpart Dc.

- F.3.2 New Source Performance Standard for Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60.40b, Subpart Db]
 - (a) The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Db (included as Attachment C of this permit):
 - (1) 40 CFR 60.42b (d)
 - (2) 40 CFR 60.43b (f)
 - (3) 40 CFR 60.44b (a)
 - (b) There are no requirements in 40 CFR 60 Subpart Db specifically related to vegetable oil combustion. Pure vegetable oil does not conform to the definition of "oil" under 326 IAC 40 CFR 60.41b because it is not petroleum based. Therefore, the fuel oil limits apply only to burning distillate fuel oil or blends of vegetable oil and distillate fuel oil.

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SECTION F.4 SOURCE OPERATION CONDITIONS

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

Under the Solvent Extraction for Vegetable Oil Production NESHAP (40 CFR 63, Subpart GGGG), the following emission units are considered as part of an existing affected source:

- (a) Oil extraction and processing operations, constructed in 1996, consisting of the following units:
 - (1) One (1) soybean oil extractor, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - One (1) set of evaporators, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - One (1) desolventizer/toaster, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - One (1) set of condensers and water separators to separate hexane and water, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (5) Two (2) mineral oil absorbers, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (6) One (1) spent flake conveyor extending to the meal dryer;
 - (7) One (1) totally enclosed seal screw conveyor, installed in a series with the slurry loader conveyor;
 - (8) One (1) flake conveyor extending to the slurry loader conveyor;
 - (9) One (1) slurry loader conveyor;
 - (10) One (1) hexane storage tank, identified as #1 (storage);
 - (11) One (1) hexane storage tank, identified as #2 (process tank);
 - (12) One (1) hexane storage tank, identified as #3 (work/separation);

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

F.4.1 General Provisions Relating to NESHAP GGGG [326 IAC 20-1] [40 CFR 63, Subpart A]

Pursuant to 40 CFR 63.2870, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, as specified in Table 1 of 40 CFR Part 63, Subpart GGGG in accordance with schedule in 40 CFR 63, Subpart GGGG.

F.4.2 NESHAP for Solvent Extraction for Vegetable Oil Production [40 CFR 63, Subpart GGGG]

The Permittee which engages in vegetable oil composites production shall comply with the following provisions of 40 CFR Part 63, Subpart GGGG (included as Attachment D of this permit):

- (1) 40 CFR 63.2830
- (2) 40 CFR 63.2831
- (3) 40 CFR 63.2832(a)
- (4) 40 CFR 63.2833

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- (5) 40 CFR 63.2834(a)
- (6) 40 CFR 63.2840(a)-(d), (f)
- (7) 40 CFR 63.2850(a), (b), (d), (e)
- (8) 40 CFR 63.2851
- (9) 40 CFR 63.2852
- (10) 40 CFR 63.2853
- (11) 40 CFR 63.2854
- (12) 40 CFR 63.2855
- (13) 40 CFR 63.2860
- (14) 40 CFR 63.2861
- (15) 40 CFR 63.2862
- (16) 40 CFR 63.2863
- (17) 40 CFR 63.2870
- (18) 40 CFR 63.2871
- (19) 40 CFR 63.2872

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

Source Name: Bunge North America (East), Inc.

Source Address: 700 N Range Line Road, Morristown, Indiana 46161

Part 70 Permit No.: T145-28055-00035

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:

Bunge North America (East), Inc. Morristown, Indiana Permit Reviewer: Teresa Freeman

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Phone: (317) 233-0178 Fax: (317) 233-6865

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: Bunge North America (East), Inc.

Source Address: 700 N Range Line Road, Morristown, Indiana 46161

Part 70 Permit No.: T145-28055-00035

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:

Page 2 of 2

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:

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Bunge North America (East), Inc. Morristown, Indiana Permit Reviewer: Teresa Freeman

Date:

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

PART 70 OPERATING PERMIT SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: Bunge North America (East), Inc. Source Address: 700 N Range Line Road, Morristown, Indiana 46161 Part 70 Permit No.: T145-28055-00035 MURRAY BOILER □ Natural Gas Only □ Alternate Fuel burned From: To: BOILER NO. 2 □ 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:

Permit Reviewer: Teresa Freeman

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

Part 70 Quarterly Report

Source Name. Dunde Norm America (Last), in	Source Name:	Bunge North America (E	East). In
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Source Address: 700 N Range Line Road, Morristown, Indiana 46161

Part 70 Permit No.: T145-28055-00035

Facility: Soybean Processing Facilities (A-Plant (Existing))

Parameter: Soybean throughput

OLIADTED.

Limit: Less than 828,837 tons of soybean per twelve (12) consecutive month period, on

an "as received" basis, with compliance determined at the end of each month

VEAD.

QUA	RIER:	YEAR:	
	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
□ No	o deviation occurred in t	his quarter.	
	eviation/s occurred in th		
	eviation has been repor		
Subn	nitted bv:		
l itle	/ Position:		
Signa	ature		
Date	: <u></u>		
FIIOI	IC		

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Bunge North America (East), Inc. Morristown, Indiana

Permit Reviewer: Teresa Freeman

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

Source Name: Source Address: Part 70 Permit No.: Facility: Parameter: Limit: Bunge North America (East), Inc. 700 N Range Line Road, Morristown, Indiana 46161 T145-28055-00035 Soybean Processing Facilities (B-Plant) Soybean throughput Less than 1,073,159 tons of soybean processed per twelve (12) consecutive month period, on an "as received" basis, with compliance determined at the encof each month			
QUA	RTER :	YEAR:	
Manth	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
□ De De Subn Title	/ Position: ature:	is quarter.	

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Bunge North America (East), Inc. Morristown, Indiana

Permit Reviewer: Teresa Freeman

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

Source Name: Source Address: Part 70 Permit No.: Facility: Parameter: Limit:	T145-28055-00035 Soybean Ground P Soybean throughpu Shall not exceed 39	Road, Morristown, Indiana 46 ile System it	ssed per twelve (12) consecutive
QUA	RTER :	YEAR:	
Marath	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
□ Do D Subr Title Sign	/ Position: ature: ::	nis quarter.	

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Bunge North America (East), Inc. Morristown, Indiana

Permit Reviewer: Teresa Freeman

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

Source Name: Source Address: Part 70 Permit No.: Facility: Parameter: Limit: Bunge North America (East), Inc. 700 N Range Line Road, Morristown, Indiana 46161 T145-28055-00035 Vegetable Oil Refinery Amount of off-site oil processed Less than 347,220,000 pounds of oil per twelve (12) consecutive month period with compliance determined at the end of each month QUARTER: YEAR:			
Manth	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
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□ D □ Subi	o deviation occurred in televiation/s occurred in the deviation has been repored the deviation has been repored the deviation by:	is quarter. rted on:	
Title	/ Position:		
Date	e:		
Phoi	ne:		

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Bunge North America (East), Inc. Morristown, Indiana

Permit Reviewer: Teresa Freeman

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

Source Name: Source Address: Part 70 Permit No.: Facility: Parameter: Limit: Bunge North America (East), Inc. 700 N Range Line Road, Morristown, Indiana 46161 T145-28055-00035 Soybean Processing Facilities (A Plant (Existing)) Hexane Usage Less than 481.8 tons of hexane per twelve (12) consecutive month period with compliance determined at the end of each month			
QU <i>F</i>	ARTER :	YEAR <u>:</u>	
Month	Column 1	Column 2	Column 1 + Column 2
MONTH	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
□ D	o deviation occurred in t eviation/s occurred in thi Deviation has been repor	is quarter.	
Title Sign	/ Position: nature: e:		

Permit Reviewer: Teresa Freeman

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

Source Name: Source Address: Part 70 Permit No.: Facility: Parameter: Soybean throughput SO ₂ emissions limit (249 tons per twelve (12) consecutive month period) and fuel oil usage limit. Limit: Bunge North America (East), Inc. 700 N Range Line Road, Morristown, Indiana 46161 T145-28055-00035 Boiler No. 2 Soybean throughput SO ₂ emissions limit (249 tons per twelve (12) consecutive month period) and fuel oil usage limit. 6,343,949 gallons of No. 2 fuel oil per twelve (12) consecutive month period.			
QUA	RTER :	YEAR <u>:</u>	
Manda	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
□ De D Subr Title Signa	/ Position: ature: :	is quarter.	

Bunge North America (East), Inc. Morristown, Indiana Permit Reviewer: Teresa Freeman

Source Name:

Date of Deviation:

Number of Deviations:

Response Steps Taken:

Probable Cause of Deviation:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Bunge North America (East), Inc.

Source Address: 700 N Range Line Road, Morristown, Indiana 46161 Part 70 Permit No.: T145-28055-00035 Months: _____ to ____ Year:____ Page 1 of 2 This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". □ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. ☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD **Permit Requirement** (specify permit condition #) Date of Deviation: **Duration of Deviation: Number of Deviations: Probable Cause of Deviation: Response Steps Taken: Permit Requirement** (specify permit condition #)

Duration of Deviation:

Page 2 of 2

	Page 2 01 2
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Form Completed by:	
Title / Position:	
Date:	
Dhana	

Attachment A to Part 70 Operating Permit Renewal No. T145-28055-00035

Bunge North America (East), Inc. 700 N Range Line Rd, Morristown, IN 46161

New Source Performance Standards for Grain Elevators, 40 CFR 60, Subpart DD

60.300 Applicability and designation of affected facility.

- (a) The provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under §60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.
- (b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after August 3, 1978, is subject to the requirements of this part.

[43 FR 34347, Aug. 3, 1978, as amended at 52 FR 42434, Nov. 5, 1988]

§ 60.301 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

- (a) Grain means corn, wheat, sorghum, rice, rye, oats, barley, and soybeans.
- (b) *Grain elevator* means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded.
- (c) *Grain terminal elevator* means any grain elevator which has a permanent storage capacity of more than 88,100 m³ (ca. 2.5 million U.S. bushels), except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.
- (d) Permanent storage capacity means grain storage capacity which is inside a building, bin, or silo.
- (e) Railcar means railroad hopper car or boxcar.
- (f) *Grain storage elevator* means any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant which has a permanent grain storage capacity of 35,200 m³ (ca. 1 million bushels).
- (g) Process emission means the particulate matter which is collected by a capture system.
- (h) Fugitive emission means the particulate matter which is not collected by a capture system and is released directly into the atmosphere from an affected facility at a grain elevator.
- (i) Capture system means the equipment such as sheds, hoods, ducts, fans, dampers, etc. used to collect particulate matter generated by an affected facility at a grain elevator.
- (j) *Grain unloading station* means that portion of a grain elevator where the grain is transferred from a truck, railcar, barge, or ship to a receiving hopper.

Attachment A 40 CFR 60, Subpart DD

Page 2 of 3 T145-28055-00035

- (k) *Grain loading station* means that portion of a grain elevator where the grain is transferred from the elevator to a truck, railcar, barge, or ship.
- (I) *Grain handling operations* include bucket elevators or legs (excluding legs used to unload barges or ships), scale hoppers and surge bins (garners), turn heads, scalpers, cleaners, trippers, and the headhouse and other such structures.
- (m) Column dryer means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in one or more continuous packed columns between two perforated metal sheets.
- (n) Rack dryer means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in a cascading flow around rows of baffles (racks).
- (o) *Unloading leg* means a device which includes a bucket-type elevator which is used to remove grain from a barge or ship.

[43 FR 34347, Aug. 3, 1978, as amended at 65 FR 61759, Oct. 17, 2000

§ 60.302 Standard for particulate matter.

- (a) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any gases which exhibit greater than 0 percent opacity from any:
- (1) Column dryer with column plate perforation exceeding 2.4 mm diameter (ca. 0.094 inch).
- (2) Rack dryer in which exhaust gases pass through a screen filter coarser than 50 mesh.
- (b) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:
- (1) Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).
- (2) Exhibits greater than 0 percent opacity.
- (c) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from:
- (1) Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.
- (2) Any grain handling operation which exhibits greater than 0 percent opacity.
- (3) Any truck loading station which exhibits greater than 10 percent opacity.
- (4) Any barge or ship loading station which exhibits greater than 20 percent opacity.
- (d) The owner or operator of any barge or ship unloading station shall operate as follows:

Attachment A 40 CFR 60, Subpart DD

Page 3 of 3 T145-28055-00035

- (1) The unloading leg shall be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper.
- (2) The total rate of air ventilated shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft³ /bu).
- (3) Rather than meet the requirements of paragraphs (d)(1) and (2) of this section the owner or operator may use other methods of emission control if it is demonstrated to the Administrator's satisfaction that they would reduce emissions of particulate matter to the same level or less.

60.303 Test methods and procedures.

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (c) of this section.
- (b) The owner or operator shall determine compliance with the particulate matter standards in §60.302 as follows:
- (1) Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.
- (2) Method 2 shall be used to determine the ventilation volumetric flow rate.
- (3) Method 9 and the procedures in §60.11 shall be used to determine opacity.
- (c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
- (1) For Method 5, Method 17 may be used.

[54 FR 6674, Feb. 14, 1989]

Attachment B to Part 70 Operating Permit Renewal No. T145-28055-00035

Bunge North America (East), Inc. 700 N Range Line Rd, Morristown, IN 46161

Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Source: 72 FR 32759, June 13, 2007, unless otherwise noted.

§ 60.40c Applicability and delegation of authority.

- (a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).
- (b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.
- (c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO₂) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.
- (d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.
- (e) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart GG or KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part).
- (f) Any facility covered by subpart AAAA of this part is not covered by this subpart.
- (g) Any facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not covered by this subpart.

§ 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input

Page 2 of 20 T145-28055-00035

capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (*i.e.* , the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO₂control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO₂ control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has

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received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means: (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO₂emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel

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and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO₂.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

§ 60.42c Standard for sulfur dioxide (SO₂).

- (a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.
- (b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that:
- (1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:
- (i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO_2 emission rate (80 percent reduction); nor
- (ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂in excess of SO₂in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat

input SO₂ emissions limit or the 90 percent SO₂ reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

- (2) Combusts only coal and that uses an emerging technology for the control of SO₂emissions shall neither:
- (i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 50 percent (0.50) of the potential SO₂ emission rate (50 percent reduction); nor
- (ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO₂reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.
- (c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).
- (1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/hr) or less.
- (2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.
- (3) Affected facilities located in a noncontinental area.
- (4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.
- (d) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂in excess of 215 ng/J (0.50 lb/MMBtu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.
- (e) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂in excess of the following:
- (1) The percent of potential SO_2 emission rate or numerical SO_2 emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that
- (i) Combusts coal in combination with any other fuel;

- (ii) Has a heat input capacity greater than 22 MW (75 MMBtu/hr); and
- (iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and
- (2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_{s} = \frac{\left(K_{a}H_{a} + K_{b}H_{b} + K_{c}H_{c}\right)}{\left(H_{a} + H_{b} + H_{c}\right)}$$

Where:

E_s= SO₂emission limit, expressed in ng/J or lb/MMBtu heat input;

 $K_a = 520 \text{ ng/J } (1.2 \text{ lb/MMBtu});$

 $K_b = 260 \text{ ng/J } (0.60 \text{ lb/MMBtu});$

 $K_c = 215 \text{ ng/J } (0.50 \text{ lb/MMBtu});$

 H_a = Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

 H_b = Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

 $H_cK_aH_b$ = Heat input from the combustion of oil, in J (MMBtu).

- (f) Reduction in the potential SO₂emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:
- (1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO_2 emission rate; and
- (2) Emissions from the pretreated fuel (without either combustion or post-combustion SO₂control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.
- (g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.
- (h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable.
- (1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).
- (2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

- (3) Coal-fired facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).
- (i) The SO₂emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.
- (j) Only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

§ 60.43c Standard for particulate matter (PM).

- (a) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:
- (1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.
- (2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.
- (b) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:
- (1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or
- (2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.
- (c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
- (d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

- (e)(1) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.
- (2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:
- (i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and
- (ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.
- (3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.
- (4) 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, an owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO₂ emissions is not subject to the PM limit in this section.

§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

- (a) Except as provided in paragraphs (g) and (h) of this section and §60.8(b), performance tests required under §60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.
- (b) The initial performance test required under §60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO₂emission limits under §60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

- (c) After the initial performance test required under paragraph (b) of this section and §60.8, compliance with the percent reduction requirements and SO_2 emission limits under §60.42c is based on the average percent reduction and the average SO_2 emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO_2 emission rate are calculated to show compliance with the standard.
- (d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO_2 emission rate (E_{ho}) and the 30-day average SO_2 emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate E_{ao} when using daily fuel sampling or Method 6B of appendix A of this part.
- (e) If coal, oil, or coal and oil are combusted with other fuels:
- (1) An adjusted $E_{ho}(E_{ho}o)$ is used in Equation 19–19 of Method 19 of appendix A of this part to compute the adjusted $E_{ao}(E_{ao}o)$. The $E_{ho}o$ is computed using the following formula:

$$E_{bo} \circ = \frac{E_{bo} - E_{w}(1 - X_{b})}{X_{b}}$$

Where:

 $E_{ho}o = Adjusted E_{ho}, ng/J (lb/MMBtu);$

E_{ho}= Hourly SO₂emission rate, ng/J (lb/MMBtu);

 E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume E_w = 0.

 X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

- (2) The owner or operator of an affected facility that qualifies under the provisions of $\S60.42c(c)$ or (d) (where percent reduction is not required) does not have to measure the parameters E_w or X_k if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.
- (f) Affected facilities subject to the percent reduction requirements under §60.42c(a) or (b) shall determine compliance with the SO₂emission limits under §60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:
- (1) If only coal is combusted, the percent of potential SO₂emission rate is computed using the following formula:

$$%P_{s} = 100 \left(1 - \frac{%R_{g}}{100}\right) \left(1 - \frac{%R_{f}}{100}\right)$$

Where:

%P_s= Potential SO₂emission rate, in percent;

%R_g= SO₂removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

%R_f= SO₂removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

- (2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:
- (i) To compute the $%P_s$, an adjusted $%R_g(%R_go)$ is computed from $E_{ao}o$ from paragraph (e)(1) of this section and an adjusted average SO_2 inlet rate ($E_{ai}o$) using the following formula:

$$\%R_{g0} = 100 \left(1 - \frac{E_{w}^{\circ}}{E_{si}^{\circ}} \right)$$

Where:

 R_q o = Adjusted R_q , in percent;

 $E_{ao}o = Adjusted E_{ao}$, ng/J (lb/MMBtu); and

E_{ai}o = Adjusted average SO₂inlet rate, ng/J (lb/MMBtu).

(ii) To compute E_{ai} o, an adjusted hourly SO_2 inlet rate (E_{hi} o) is used. The E_{hi} o is computed using the following formula:

$$E_{\underline{\mathbf{m}}} \circ = \frac{E_{\underline{\mathbf{m}}} - E_{\underline{\mathbf{w}}} (1 - X_{\underline{\mathbf{h}}})}{X_{\underline{\mathbf{h}}}}$$

Where:

 $E_{hi}o = Adjusted E_{hi}, ng/J (lb/MMBtu);$

E_{hi}= Hourly SO₂inlet rate, ng/J (lb/MMBtu);

 E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume E_w = 0; and

 X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

- (g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under §60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under §60.46c(d)(2).
- (h) For affected facilities subject to §60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO₂standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under §60.48c(f), as applicable.
- (i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO₂standards under §60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.
- (j) The owner or operator of an affected facility shall use all valid SO_2 emissions data in calculating $%P_s$ and E_{ho} under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under $\S60.46c(f)$ are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating $%P_s$ or E_{ho} pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

§ 60.45c Compliance and performance test methods and procedures for particulate matter.

- (a) The owner or operator of an affected facility subject to the PM and/or opacity standards under §60.43c shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.
- (1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points.
- (2) Method 3 of appendix A of this part shall be used for gas analysis when applying Method 5, 5B, or 17 of appendix A of this part.
- (3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:
- (i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

- (ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.
- (iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.
- (4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.
- (5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160 ±14 °C (320±25 °F).
- (6) For determination of PM emissions, an oxygen (O_2) or carbon dioxide (CO_2) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.
- (7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:
- (i) The O₂or CO₂measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and
- (iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.
- (8) Method 9 of appendix A of this part (6-minute average of 24 observations) shall be used for determining the opacity of stack emissions.
- (b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under §60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.
- (c) In place of PM testing with EPA Reference Method 5, 5B, or 17 of appendix A of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using EPA Method 5, 5B, or 17 of appendix A of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(13) of this section.
- (1) Notify the Administrator 1 month before starting use of the system.

- (2) Notify the Administrator 1 month before stopping use of the system.
- (3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.
- (4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.
- (5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.
- (6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.
- (7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (d)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.
- (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
- (ii) [Reserved]
- (8) The 1-hour arithmetic averages required under paragraph (d)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.
- (9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (d)(7) of this section are not met.
- (10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.
- (11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O_2 (or CO_2) data shall be collected concurrently (or within a 30-to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraph (d)(7)(i) of this section.
- (i) For PM, EPA Reference Method 5, 5B, or 17 of appendix A of this part shall be used.
- (ii) For O₂(or CO₂), EPA reference Method 3, 3A, or 3B of appendix A of this part, as applicable shall be used.
- (12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

- (13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.
- (d) The owner or operator of an affected facility seeking to demonstrate compliance under §60.43c(e)(4) shall follow the applicable procedures under §60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/hr).

§ 60.46c Emission monitoring for sulfur dioxide.

- (a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO_2 emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO_2 concentrations and either O_2 or CO_2 concentrations at the outlet of the SO_2 control device (or the outlet of the steam generating unit if no SO_2 control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under §60.42c shall measure SO_2 concentrations and either O_2 or CO_2 concentrations at both the inlet and outlet of the SO_2 control device.
- (b) The 1-hour average SO₂emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.42c. Each 1-hour average SO₂emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under §60.13(h)(2). Hourly SO₂emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.
- (c) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.
- (1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.
- (2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.
- (3) For affected facilities subject to the percent reduction requirements under $\S60.42c$, the span value of the SO_2CEMS at the inlet to the $SO_2control$ device shall be 125 percent of the maximum estimated hourly potential $SO_2control$ device of the fuel combusted, and the span value of the SO_2CEMS at the outlet from the $SO_2control$ device shall be 50 percent of the maximum estimated hourly potential $SO_2control$ device of the fuel combusted.
- (4) For affected facilities that are not subject to the percent reduction requirements of §60.42c, the span value of the SO₂CEMS at the outlet from the SO₂control device (or outlet of the steam generating unit if no SO₂control device is used) shall be 125 percent of the maximum estimated hourly potential SO₂emission rate of the fuel combusted.
- (d) As an alternative to operating a CEMS at the inlet to the SO₂control device (or outlet of the steam generating unit if no SO₂control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO₂control device (or outlet of the steam generating unit if no SO₂control device is used) as

required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

- (1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO₂input rate.
- (2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.
- (3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO₂at the inlet or outlet of the SO₂control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO₂and CO₂measurement train operated at the candidate location and a second similar train operated according to the procedures in §3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).
- (e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to $\S60.42c(h)$ (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, as described under $\S60.48c(f)$, as applicable.
- (f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

§ 60.47c Emission monitoring for particulate matter.

(a) Except as provided in paragraphs (c), (d), (e), and (f) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under

§60.43c shall install, calibrate, maintain, and operate a COMS for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system.

- (b) All COMS for measuring opacity shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.
- (c) Affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.06 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO₂or PM emissions are not required to operate a CEMS for measuring opacity if they follow the applicable procedures under §60.48c(f).
- (d) Owners or operators complying with the PM emission limit by using a PM CEMS monitor instead of monitoring opacity must calibrate, maintain, and operate a CEMS, and record the output of the system, for PM emissions discharged to the atmosphere as specified in §60.45c(d). The CEMS specified in paragraph §60.45c(d) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
- (e) An affected facility that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO₂, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS for measuring opacity. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section.
- (1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.
- (i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.
- (ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).
- (iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. At least two data points per hour must be used to calculate each 1-hour average.
- (iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.
- (2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

- (3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.
- (4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.
- (f) An affected facility that burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the appropriate delegated permitting authority is not required to operate a COMS for measuring opacity. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

§ 60.48c Reporting and recordkeeping requirements.

- (a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include:
- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
- (2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.
- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
- (4) Notification if an emerging technology will be used for controlling SO₂emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.
- (b) The owner or operator of each affected facility subject to the SO₂emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.
- (c) The owner or operator of each coal-fired, oil-fired, or wood-fired affected facility subject to the opacity limits under §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period.

- (d) The owner or operator of each affected facility subject to the SO₂emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall submit reports to the Administrator.
- (e) The owner or operator of each affected facility subject to the SO₂emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.
- (1) Calendar dates covered in the reporting period.
- (2) Each 30-day average SO₂ emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
- (3) Each 30-day average percent of potential SO₂ emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.
- (4) Identification of any steam generating unit operating days for which SO₂or diluent (O₂or CO₂) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.
- (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.
- (6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.
- (7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.
- (8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.
- (9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.
- (10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.
- (11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.
- (f) Fuel supplier certification shall include the following information:
- (1) For distillate oil:

- (i) The name of the oil supplier;
- (ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and
- (iii) The sulfur content of the oil.
- (2) For residual oil:
- (i) The name of the oil supplier;
- (ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location:
- (iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and
- (iv) The method used to determine the sulfur content of the oil.
- (3) For coal:
- (i) The name of the coal supplier;
- (ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);
- (iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and
- (iv) The methods used to determine the properties of the coal.
- (4) For other fuels:
- (i) The name of the supplier of the fuel;
- (ii) The potential sulfur emissions rate of the fuel in ng/J heat input; and
- (iii) The method used to determine the potential sulfur emissions rate of the fuel.
- (g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.
- (2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO₂standard, fuels not subject to an emissions

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standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

- (3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO₂standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.
- (h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under §60.42c or §60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.
- (i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.
- (j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

Attachment C to Part 70 Operating Permit Renewal No. T145-28055-00035

Bunge North America (East), Inc. 700 N Range Line Rd, Morristown, IN 46161

Subpart Db—Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

Source: 72 FR 32742, June 13, 2007, unless otherwise noted.

§ 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 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).
- (b) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1984, but on or before June 19, 1986, is subject to the following standards:
- (1) Coal-fired affected facilities having a heat input capacity between 29 and 73 MW (100 and 250 MMBtu/hr), inclusive, are subject to the particulate matter (PM) and nitrogen oxides (NO_X) standards under this subpart.
- (2) Coal-fired affected facilities having a heat input capacity greater than 73 MW (250 MMBtu/hr) and meeting the applicability requirements under subpart D (Standards of performance for fossil-fuel-fired steam generators; §60.40) are subject to the PM and NO_Xstandards under this subpart and to the sulfur dioxide (SO₂) standards under subpart D (§60.43).
- (3) Oil-fired affected facilities having a heat input capacity between 29 and 73 MW (100 and 250 MMBtu/hr), inclusive, are subject to the NO_xstandards under this subpart.
- (4) Oil-fired affected facilities having a heat input capacity greater than 73 MW (250 MMBtu/hr) and meeting the applicability requirements under subpart D (Standards of performance for fossil-fuel-fired steam generators; §60.40) are also subject to the NO_xstandards under this subpart and the PM and SO₂standards under subpart D (§60.42 and §60.43).
- (c) Affected facilities that also meet the applicability requirements under subpart J (Standards of performance for petroleum refineries; §60.104) are subject to the PM and NO_xstandards under this subpart and the SO₂standards under subpart J (§60.104).
- (d) Affected facilities that also meet the applicability requirements under subpart E (Standards of performance for incinerators; §60.50) are subject to the NO_X and PM standards under this subpart.
- (e) Steam generating units meeting the applicability requirements under subpart Da (Standards of performance for electric utility steam generating units; §60.40Da) are not subject to this subpart.
- (f) Any change to an existing steam generating unit for the sole purpose of combusting gases containing total reduced sulfur (TRS) as defined under §60.281 is not considered a modification under §60.14 and the steam generating unit is not subject to this subpart.
- (g) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air 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).
- (h) Any affected facility that meets the applicability requirements and is subject to subpart Ea, subpart Eb, or subpart AAAA of this part is not covered by this subpart.
- (i) Heat recovery steam generators that are associated with combined cycle gas turbines and that meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part.)
- (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).
- (k) Any affected facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart Cb or subpart BBBB of this part is not covered by this subpart.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009]

§ 60.41b Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from 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 (CO₂) 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 mean industrial plants that 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 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, coke oven gas, 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.

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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.

Coke oven gas means the volatile constituents generated in the gaseous exhaust during the carbonization of bituminous coal to form coke.

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 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 (incorporated by reference, see §60.17) or diesel fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO₂control 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 reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline 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 steam generating unit.

Emerging technology means any SO₂ 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 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.

Gaseous fuel means any fuel that is a gas at ISO conditions. This includes, but is not limited to, natural gas and gasified coal (including coke oven gas).

Gross output means the gross useful work performed by the steam generated. For units generating only electricity, the gross useful work performed is the gross electrical output from the turbine/generator set. For cogeneration units, the gross useful work performed is the gross electrical or mechanical output plus 75 percent of the useful thermal output measured relative to ISO conditions that is not used to generate

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additional electrical or mechanical output or to enhance the performance of the unit (i.e. , steam delivered to an industrial process).

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

Heat release rate means the steam generating unit design heat input capacity (in MW or Btu/hr) 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-m³ (70,000 Btu/hr-ft³). ISO Conditions means a temperature of 288 Kelvin, a relative humidity of 60 percent, and a pressure of 101.3 kilopascals.

Lignite means a type of coal classified as lignite A or lignite B by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17).

Low heat release rate means a heat release rate of 730,000 J/sec-m³ (70,000 Btu/hr-ft³) 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) Liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17); or
- (3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate 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 SO₂emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using

emission control systems. For gasified coal or oil that is desulfurized prior to combustion, the *Potential* sulfur dioxide emission rate is the theoretical SO₂emissions (ng/J or lb/MMBtu heat input) that would result from combusting fuel in a cleaned state without using any post combustion 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 that 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 (incorporated by reference, 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 and produces steam or heats water or heats any 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 means for units constructed, reconstructed, or modified on or before February 28, 2005, oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO_2 emission control, has a SO_2 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 and not located in a noncontinental area, very low sulfur oil means oil that contains no more than 0.30 weight percent sulfur or that, when combusted without SO_2 emission control, has a SO_2 emission rate equal to or less than 140 ng/J (0.32 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28, 2005 and located in a noncontinental area, very low sulfur oil means oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO_2 emission control, has a SO_2 emission rate equal to or less than 215 ng/J (0.50 lb/MMBtu) heat input.

Wet flue gas desulfurization technology means a SO₂control 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 PM or SO₂.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including, but not limited to, sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

§ 60.42b Standard for sulfur dioxide (SO₂).

(a) Except as provided in paragraphs (b), (c), (d), or (j) of this section, on and after the date on which the performance test is completed or required to be completed under $\S60.8$, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or oil shall cause to be discharged into the atmosphere any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction) and the emission limit determined according to the following formula:

$$E_{e} = \frac{\left(K_{a}H_{a} + K_{b}H_{b}\right)}{\left(H_{a} + H_{b}\right)}$$

Where

E_s= SO₂emission limit, in ng/J or lb/MMBtu heat input;

 $K_a = 520 \text{ ng/J (or 1.2 lb/MMBtu)};$

 $K_b = 340 \text{ ng/J (or 0.80 lb/MMBtu)};$

H_a= Heat input from the combustion of coal, in J (MMBtu); and

H_b= Heat input from the combustion of oil, in J (MMBtu).

For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

- (b) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal refuse alone in a fluidized bed combustion steam generating unit shall cause to be discharged into the atmosphere any gases that contain SO₂in excess of 87 ng/J (0.20 lb/MMBtu) or 20 percent (0.20) of the potential SO₂emission rate (80 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input. If coal or oil is fired with coal refuse, the affected facility is subject to paragraph (a) or (d) of this section, as applicable. For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.
- (c) On and after the date on which the performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that combusts coal or oil, either alone or in combination with any other fuel, and that uses an emerging technology for the control of SO₂emissions, shall cause to be discharged into the atmosphere any gases that contain SO₂in excess of 50 percent of the potential SO₂emission rate (50 percent reduction) and that contain SO₂in excess of the emission limit determined according to the following formula:

$$E_{e} = \frac{\left(K_{e}H_{e} + K_{a}H_{a}\right)}{\left(H_{e} + H_{a}\right)}$$

Where:

E_s= SO2 emission limit, in ng/J or lb/MM Btu heat input;

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 $K_c = 260 \text{ ng/J (or 0.60 lb/MMBtu)};$

 $K_d = 170 \text{ ng/J (or 0.40 lb/MMBtu)};$

H_c= Heat input from the combustion of coal, in J (MMBtu); and

H_d= Heat input from the combustion of oil, in J (MMBtu).

For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels, or from the heat input derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

- (d) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 and listed in paragraphs (d)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere any gases that contain SO₂in excess of 520 ng/J (1.2 lb/MMBtu) heat input if the affected facility combusts coal, or 215 ng/J (0.5 lb/MMBtu) heat input if the affected facility combusts oil other than very low sulfur oil. Percent reduction requirements are not applicable to affected facilities under paragraphs (d)(1), (2), (3) or (4) of this section. For facilities complying with paragraphs (d)(1), (2), or (3) of this section, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.
- (1) Affected facilities that have an annual capacity factor for coal and oil of 30 percent (0.30) or less and are subject to a federally enforceable permit limiting the operation of the affected facility to an annual capacity factor for coal and oil of 30 percent (0.30) or less;
- (2) Affected facilities located in a noncontinental area; or
- (3) Affected facilities combusting coal or oil, alone or in combination with any fuel, in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal and oil in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from the exhaust gases entering the duct burner; or
- (4) The affected facility burns coke oven gas alone or in combination with natural gas or very low sulfur distillate oil.
- (e) Except as provided in paragraph (f) of this section, compliance with the emission limits, fuel oil sulfur limits, and/or percent reduction requirements under this section are determined on a 30-day rolling average basis.
- (f) Except as provided in paragraph (j)(2) of this section, compliance with the emission limits or fuel oil sulfur limits under this section is determined on a 24-hour average basis for affected facilities that (1) have a federally enforceable permit limiting the annual capacity factor for oil to 10 percent or less, (2) combust only very low sulfur oil, and (3) do not combust any other fuel.
- (g) Except as provided in paragraph (i) of this section and 60.45b(a), the SO_2 emission limits and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.
- (h) Reductions in the potential SO₂ emission rate through fuel pretreatment are not credited toward the percent reduction requirement under paragraph (c) of this section unless:

- (1) Fuel pretreatment results in a 50 percent or greater reduction in potential SO₂ emissions and
- (2) Emissions from the pretreated fuel (without combustion or post-combustion SO₂control) are equal to or less than the emission limits specified in paragraph (c) of this section.
- (i) An affected facility subject to paragraph (a), (b), or (c) of this section may combust very low sulfur oil or natural gas when the SO₂control system is not being operated because of malfunction or maintenance of the SO₂control system.
- (j) Percent reduction requirements are not applicable to affected facilities combusting only very low sulfur oil. The owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by: (1) Following the performance testing procedures as described in §60.45b(c) or §60.45b(d), and following the monitoring procedures as described in §60.47b(a) or §60.47b(b) to determine SO₂emission rate or fuel oil sulfur content; or (2) maintaining fuel records as described in §60.49b(r).
- (k)(1) Except as provided in paragraphs (k)(2), (k)(3), and (k)(4) 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, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that contain SO₂in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 8 percent (0.08) of the potential SO₂emission rate (92 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input. For facilities complying with the percent reduction standard and paragraph (k)(3) of this section, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in paragraph (k) of this section. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.
- (2) Units firing only very low sulfur oil, gaseous fuel, a mixture of these fuels, or a mixture of these fuels with any other fuels with a potential SO₂emission rate of 140 ng/J (0.32 lb/MMBtu) heat input or less are exempt from the SO₂emissions limit in paragraph (k)(1) of this section.
- (3) Units that are located in a noncontinental area and that combust coal, oil, or natural gas shall not discharge any gases that contain SO₂in excess of 520 ng/J (1.2 lb/MMBtu) heat input if the affected facility combusts coal, or 215 ng/J (0.50 lb/MMBtu) heat input if the affected facility combusts oil or natural gas.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009]

§ 60.43b Standard for particulate matter (PM).

- (a) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 that combusts coal or combusts mixtures of coal with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:
- (1) 22 ng/J (0.051 lb/MMBtu) heat input, (i) If the affected facility combusts only coal, or
- (ii) If the affected facility combusts coal and other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.
- (2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal and other fuels and has an annual capacity factor for the other fuels greater than 10 percent (0.10) and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

- (3) 86 ng/J (0.20 lb/MMBtu) heat input if the affected facility combusts coal or coal and other fuels and
- (i) Has an annual capacity factor for coal or coal and other fuels of 30 percent (0.30) or less,
- (ii) Has a maximum heat input capacity of 73 MW (250 MMBtu/hr) or less,
- (iii) Has a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for coal or coal and other solid fuels, and
- (iv) Construction of the affected facility commenced after June 19, 1984, and before November 25, 1986.
- (4) An affected facility burning coke oven gas alone or in combination with other fuels not subject to a PM standard under §60.43b and not using a post-combustion technology (except a wet scrubber) for reducing PM or SO₂ emissions is not subject to the PM limits under §60.43b(a).
- (b) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, and that combusts oil (or mixtures of oil with other fuels) and uses a conventional or emerging technology to reduce SO₂emissions shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.
- (c) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, and that combusts wood, or wood with other fuels, except coal, shall cause to be discharged from that affected facility any gases that contain PM in excess of the following emission limits:
- (1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor greater than 30 percent (0.30) for wood.
- (2) 86 ng/J (0.20 lb/MMBtu) heat input if (i) The affected facility has an annual capacity factor of 30 percent (0.30) or less for wood;
- (ii) Is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for wood; and
- (iii) Has a maximum heat input capacity of 73 MW (250 MMBtu/hr) or less.
- (d) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts municipal-type solid waste or mixtures of municipal-type solid waste with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:
- (1) 43 ng/J (0.10 lb/MMBtu) heat input;
- (i) If the affected facility combusts only municipal-type solid waste; or
- (ii) If the affected facility combusts municipal-type solid waste and other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.
- (2) 86 ng/J (0.20 lb/MMBtu) heat input if the affected facility combusts municipal-type solid waste or municipal-type solid waste and other fuels; and

- (i) Has an annual capacity factor for municipal-type solid waste and other fuels of 30 percent (0.30) or less;
- (ii) Has a maximum heat input capacity of 73 MW (250 MMBtu/hr) or less;
- (iii) Has a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for municipal-type solid waste, or municipal-type solid waste and other fuels; and
- (iv) Construction of the affected facility commenced after June 19, 1984, but on or before November 25, 1986.
- (e) For the purposes of this section, the annual capacity factor is determined by dividing the actual heat input to the steam generating unit during the calendar year from the combustion of coal, wood, or municipal-type solid waste, and other fuels, as applicable, by the potential heat input to the steam generating unit if the steam generating unit had been operated for 8,760 hours at the maximum heat input capacity.
- (f) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that can combust coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph.
- (g) The PM and opacity standards apply at all times, except during periods of startup, shutdown, or malfunction.
- (h)(1) Except as provided in paragraphs (h)(2), (h)(3), (h)(4), (h)(5), and (h)(6) 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, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input,
- (2) As an alternative to meeting the requirements of paragraph (h)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:
- (i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and
- (ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.
- (3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a maximum heat input capacity of 73 MW (250 MMBtu/h) or less shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

- (4) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a maximum heat input capacity greater than 73 MW (250 MMBtu/h) shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 37 ng/J (0.085 lb/MMBtu) heat input.
- (5) 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, an owner or operator of an affected facility not located in a noncontinental area that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.30 weight percent sulfur, coke oven gas, a mixture of these fuels, or either fuel (or a mixture of these fuels) in combination with other fuels not subject to a PM standard in §60.43b and not using a post-combustion technology (except a wet scrubber) to reduce SO₂or PM emissions is not subject to the PM limits in (h)(1) of this section.
- (6) 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, an owner or operator of an affected facility located in a noncontinental area that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.5 weight percent sulfur, coke oven gas, a mixture of these fuels, or either fuel (or a mixture of these fuels) in combination with other fuels not subject to a PM standard in §60.43b and not using a post-combustion technology (except a wet scrubber) to reduce SO₂or PM emissions is not subject to the PM limits in (h)(1) of this section.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009]

§ 60.44b Standard for nitrogen oxides (NOX).

(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 $\S60.8$, 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 NO_X (expressed as NO_2) in excess of the following emission limits:

	Nitrogen oxide emission limits (expressed as NO ₂) heat input	
Fuel/steam generating unit type	ng/J	lb/MMBTu
(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	340	0.80

	Nitrogen oxide emission limits (expressed as NO ₂) heat input	
Fuel/steam generating unit type	ng/J	lb/MMBTu
Montana and combusted in a slag tap furnace		
(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

(b) 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, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts mixtures of coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_xin excess of a limit determined by the use of the following formula:

$$E_{\infty} = \frac{\left(EL_{\infty}H_{\infty}\right) + \left(EL_{\infty}H_{\infty}\right) + \left(EL_{c}H_{c}\right)}{\left(H_{\infty} + H_{\infty} + H_{c}\right)}$$

Where:

E_n= NO_xemission limit (expressed as NO₂), ng/J (lb/MMBtu);

 EL_{go} = Appropriate emission limit from paragraph (a)(1) for combustion of natural gas or distillate oil, ng/J (lb/MMBtu);

H_{oo}= Heat input from combustion of natural gas or distillate oil, J (MMBtu);

EL₁₀= Appropriate emission limit from paragraph (a)(2) for combustion of residual oil, ng/J (lb/MMBtu);

H_{ro}= Heat input from combustion of residual oil, J (MMBtu);

 EL_c = Appropriate emission limit from paragraph (a)(3) for combustion of coal, ng/J (lb/MMBtu); and H_c = Heat input from combustion of coal, J (MMBtu).

- (c) Except as provided under paragraph (I) of this section, on and after the date on which the initial performance test is completed or is required to be completed under $\S60.8$, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts coal or oil, or a mixture of these fuels with natural gas, and wood, municipal-type solid waste, or any other fuel shall cause to be discharged into the atmosphere any gases that contain NO $_{\rm X}$ in excess of the emission limit for the coal or oil, or mixtures of these fuels with natural gas combusted in the affected facility, as determined pursuant to paragraph (a) or
- (b) of this section, unless the affected facility has an annual capacity factor for coal or oil, or mixture of these fuels with natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, or a mixture of these fuels with natural gas.
- (d) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts natural gas with wood, municipal-type solid waste, or other solid fuel, except coal, shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_xin excess of 130 ng/J (0.30 lb/MMBtu) heat input unless the affected facility has an annual capacity factor for natural gas of

10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less for natural gas.

(e) Except as provided under paragraph (I) 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, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts coal, oil, or natural gas with byproduct/waste shall cause to be discharged into the atmosphere any gases that contain NO_xin excess of the emission limit determined by the following formula 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 affected facility to an annual capacity factor of 10 percent (0.10) or less:

$$E_{n} = \frac{\left(EL_{sp}H_{sp}\right) + \left(EL_{sp}H_{sp}\right) + \left(EL_{c}H_{c}\right)}{\left(H_{sp} + H_{sp} + H_{c}\right)}$$

Where:

E_n= NO_xemission limit (expressed as NO₂), ng/J (lb/MMBtu);

EL_{go}= Appropriate emission limit from paragraph (a)(1) for combustion of natural gas or distillate oil, ng/J (lb/MMBtu);

H_{oo}= Heat input from combustion of natural gas, distillate oil and gaseous byproduct/waste, J (MMBtu);

 EL_{ro} = Appropriate emission limit from paragraph (a)(2) for combustion of residual oil and/or byproduct/waste, ng/J (lb/MMBtu);

H_{ro}= Heat input from combustion of residual oil, J (MMBtu);

EL_c= Appropriate emission limit from paragraph (a)(3) for combustion of coal, ng/J (lb/MMBtu); and

H_c= Heat input from combustion of coal, J (MMBtu).

- (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 NO_X emission limit that 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 NO_X 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 NO_xemission 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) or (l)(1) 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) or (l)(1) 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 NO_X emission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) 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 NO_X emission limit will be established at the NO_X 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 NO_X emissions. In lieu of amending this subpart, a letter will be sent to the facility describing the facility-specific NO_X limit. The facility shall use the compliance procedures detailed in the letter and make the letter available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.
- (g) Any owner or operator of an affected facility that combusts hazardous waste (as defined by 40 CFR part 261 or 40 CFR part 761) with natural gas or oil may petition the Administrator within 180 days of the initial startup of the affected facility for a waiver from compliance with the NOxemission limit that applies specifically to that affected facility. The petition must include sufficient and appropriate data, as determined by the Administrator, on NO_xemissions from the affected facility, waste destruction efficiencies, waste composition (including nitrogen content), the quantity of specific wastes to be combusted and combustion conditions to allow the Administrator to determine if the affected facility is able to comply with the NO_xemission limits required by this section. The owner or operator of the affected facility shall demonstrate that when hazardous waste is combusted in the affected facility, thermal destruction efficiency requirements for hazardous waste specified in an applicable federally enforceable requirement preclude compliance with the NO_xemission limits of this section. The NO_xemission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (I)(1) of this section, as appropriate, are applicable to the affected facility until and unless the petition is approved by the Administrator. (See 40 CFR 761.70 for regulations applicable to the incineration of materials containing polychlorinated biphenyls (PCB's).) In lieu of amending this subpart, a letter will be sent to the facility describing the facility-specific NOxlimit. The facility shall use the compliance procedures detailed in the letter and make the letter available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.
- (h) For purposes of paragraph (i) of this section, the NO_X 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.
- (j) Compliance with the emission limits under this section is determined on a 24-hour average basis for the initial performance test and on a 3-hour average basis for subsequent performance tests for any affected facilities that:
- (1) Combust, alone or in combination, only natural gas, distillate oil, or residual oil with a nitrogen content of 0.30 weight percent or less;
- (2) Have a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil with a nitrogen content of 0.30 weight percent or less; and
- (3) Are subject to a federally enforceable requirement limiting operation of the affected facility to the firing of natural gas, distillate oil, and/or residual oil with a nitrogen content of 0.30 weight percent or less and limiting operation of the affected facility to a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil with a nitrogen content of 0.30 weight percent or less.
- (k) Affected facilities that meet the criteria described in paragraphs (j)(1), (2), and (3) of this section, and that have a heat input capacity of 73 MW (250 MMBtu/hr) or less, are not subject to the NO_Xemission limits under this section.
- (I) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced

construction or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_X (expressed as NO_2) in excess of the following limits:

- (1) If the affected facility combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels: A limit of 86 ng/J (0.20 lb/MMBtu) 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 on a 30-day rolling average from the combustion of all fuels, a limit determined by use of the following formula:

$$E_{n} = \frac{(0.10 \times H_{gp}) + (0.20 \times H_{r})}{(H_{gp} + H_{r})}$$

Where:

E_n= NO_xemission limit, (lb/MMBtu);

H_{go}= 30-day heat input from combustion of natural gas or distillate oil; and

 H_r = 30-day heat input from combustion of any other fuel.

(3) After February 27, 2006, units where more than 10 percent of total annual output is electrical or mechanical 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 §60.48Da(i) of subpart Da of this part, and must monitor emissions according to §60.49Da(c), (k), through (n) of subpart Da of this part.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009]

§ 60.45b Compliance and performance test methods and procedures for sulfur dioxide.

- (a) The SO₂ emission standards in §60.42b apply at all times. Facilities burning coke oven gas alone or in combination with any other gaseous fuels or distillate oil are allowed to exceed the limit 30 operating days per calendar year for SO₂ control system maintenance.
- (b) In conducting the performance tests required under §60.8, the owner or operator shall use the methods and procedures in appendix A (including fuel certification and sampling) of this part or the methods and procedures as specified in this section, except as provided in §60.8(b). Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.
- (c) The owner or operator of an affected facility shall conduct performance tests to determine compliance with the percent of potential SO_2 emission rate (% P_s) and the SO_2 emission rate (E_s) pursuant to §60.42b following the procedures listed below, except as provided under paragraph (d) and (k) of this section.
- (1) The initial performance test shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the SO_2 standards shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.
- (2) If only coal, only oil, or a mixture of coal and oil is combusted, the following procedures are used:

- (i) The procedures in Method 19 of appendix A–7 of this part are used to determine the hourly SO_2 emission rate (E_{ho}) and the 30-day average emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS of §60.47b(a) or (b).
- (ii) The percent of potential SO_2 emission rate (%P_s) emitted to the atmosphere is computed using the following formula:

$$%P_{\epsilon} = 100 \left(1 - \frac{%R_{\epsilon}}{100} \right) \left(1 - \frac{%R_{f}}{100} \right)$$

Where:

%P_s= Potential SO₂ emission rate, percent;

%R_g= SO₂removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

 $%R_f = SO_2$ removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

- (3) If coal or oil is combusted with other fuels, the same procedures required in paragraph (c)(2) of this section are used, except as provided in the following:
- (i) An adjusted hourly SO_2 emission rate (E_{ho}°) is used in Equation 19–19 of Method 19 of appendix A of this part to compute an adjusted 30-day average emission rate (E_{ao}°). The Eho° is computed using the following formula:

$$E_{bo}^{o} = \frac{E_{bo} - E_{w}(1 - X_{b})}{X_{b}}$$

Where:

E_{ho}° = Adjusted hourly SO₂emission rate, ng/J (lb/MMBtu);

E_{bo}= Hourly SO₂ emission rate, ng/J (lb/MMBtu);

 E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by the fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted; and

 X_k = Fraction of total heat input from fuel combustion derived from coal, oil, or coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(ii) To compute the percent of potential SO_2 emission rate (%P_s), an adjusted %R_g(%R_g°) is computed from the adjusted E_{ao} ° from paragraph (b)(3)(i) of this section and an adjusted average SO_2 inlet rate (E_{ai} °) using the following formula:

$$\%R_g^{\circ} = 100 \left(1.0 - \frac{E_{so}^{\circ}}{E_{si}^{\circ}} \right)$$

To compute $E_{ai}^{\ o}$, an adjusted hourly SO_2 inlet rate $(E_{hi}^{\ o})$ is used. The $E_{hi}^{\ o}$ is computed using the following formula:

$$\mathbf{E}_{\mathbf{h}}^{\circ} = \frac{\mathbf{E}_{\mathbf{h}} - \mathbf{E}_{\mathbf{w}} (1 - \mathbf{X}_{\mathbf{h}})}{\mathbf{X}_{\mathbf{h}}}$$

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Where:

E_{hi}° = Adjusted hourly SO₂ inlet rate, ng/J (lb/MMBtu); and

E_{hi}= Hourly SO₂inlet rate, ng/J (lb/MMBtu).

- (4) The owner or operator of an affected facility subject to paragraph (c)(3) of this section does not have to measure parameters E_w or X_k if the owner or operator elects to assume that X_k = 1.0. Owners or operators of affected facilities who assume X_k = 1.0 shall:
- (i) Determine %P_sfollowing the procedures in paragraph (c)(2) of this section; and
- (ii) Sulfur dioxide emissions (E_s) are considered to be in compliance with SO₂emission limits under §60.42b.
- (5) The owner or operator of an affected facility that qualifies under the provisions of $\S60.42b(d)$ does not have to measure parameters E_w or X_k in paragraph (c)(3) of this section if the owner or operator of the affected facility elects to measure SO_2 emission rates of the coal or oil following the fuel sampling and analysis procedures in Method 19 of appendix A–7 of this part.
- (d) Except as provided in paragraph (j) of this section, the owner or operator of an affected facility that combusts only very low sulfur oil, natural gas, or a mixture of these fuels, has an annual capacity factor for oil of 10 percent (0.10) or less, and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for oil of 10 percent (0.10) or less shall:
- (1) Conduct the initial performance test over 24 consecutive steam generating unit operating hours at full load;
- (2) Determine compliance with the standards after the initial performance test based on the arithmetic average of the hourly emissions data during each steam generating unit operating day if a CEMS is used, or based on a daily average if Method 6B of appendix A of this part or fuel sampling and analysis procedures under Method 19 of appendix A of this part are used.
- (e) The owner or operator of an affected facility subject to §60.42b(d)(1) shall demonstrate the maximum design capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. This demonstration will be made during the initial performance test and a subsequent demonstration may be requested at any other time. If the 24-hour average firing rate for the affected facility is less than the maximum design capacity provided by the manufacturer of the affected facility, the 24-hour average firing rate shall be used to determine the capacity utilization rate for the affected facility, otherwise the maximum design capacity provided by the manufacturer is used.
- (f) For the initial performance test required under §60.8, compliance with the SO₂ emission limits and percent reduction requirements under §60.42b is based on the average emission rates and the average percent reduction for SO₂ for the first 30 consecutive steam generating unit operating days, except as provided under paragraph (d) of this section. The initial performance test is the only test for which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first steam generating unit operating day of the 30 successive steam generating unit operating days is completed within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility. The boiler load during the 30-day period does not have to be the maximum design load, but must be representative of future operating conditions and include at least one 24-hour period at full load.
- (g) After the initial performance test required under §60.8, compliance with the SO₂ emission limits and percent reduction requirements under §60.42b is based on the average emission rates and the average percent reduction for SO₂ for 30 successive steam generating unit operating days, except as provided under paragraph (d). A separate performance test is completed at the end of each steam generating unit

operating day after the initial performance test, and a new 30-day average emission rate and percent reduction for SO₂ are calculated to show compliance with the standard.

- (h) Except as provided under paragraph (i) of this section, the owner or operator of an affected facility shall use all valid SO_2 emissions data in calculating $%P_s$ and E_{ho} under paragraph (c), of this section whether or not the minimum emissions data requirements under §60.46b are achieved. All valid emissions data, including valid SO_2 emission data collected during periods of startup, shutdown and malfunction, shall be used in calculating $%P_s$ and E_{ho} pursuant to paragraph (c) of this section.
- (i) During periods of malfunction or maintenance of the SO₂control systems when oil is combusted as provided under §60.42b(i), emission data are not used to calculate %P_sor E_sunder §60.42b(a), (b) or (c), however, the emissions data are used to determine compliance with the emission limit under §60.42b(i).
- (j) The owner or operator of an affected facility that only combusts very low sulfur oil, natural gas, or a mixture of these fuels with any other fuels not subject to an SO₂standard is not subject to the compliance and performance testing requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).
- (k) The owner or operator of an affected facility seeking to demonstrate compliance in §§60.42b(d)(4), 60.42b(j), 60.42b(k)(2), and 60.42b(k)(3) (when not burning coal) shall follow the applicable procedures in §60.49b(r).

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009]

§ 60.46b Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.

- (a) The PM emission standards and opacity limits under $\S60.43b$ apply at all times except during periods of startup, shutdown, or malfunction. The NO_xemission standards under $\S60.44b$ apply at all times.
- (b) Compliance with the PM emission standards under §60.43b shall be determined through performance testing as described in paragraph (d) of this section, except as provided in paragraph (i) of this section.
- (c) Compliance with the NO_X 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.
- (d) To determine compliance with the PM emission limits and opacity limits under §60.43b, the owner or operator of an affected facility shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, using the following procedures and reference methods:
- (1) Method 3A or 3B of appendix A–2 of this part is used for gas analysis when applying Method 5 of appendix A–3 of this part or Method 17 of appendix A–6 of this part.
- (2) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:
- (i) Method 5 of appendix A of this part shall be used at affected facilities without wet flue gas desulfurization (FGD) systems; and
- (ii) Method 17 of appendix A–6 of this part may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of sections 8.1 and 11.1 of Method 5B of appendix A–3 of this part may be used in Method 17 of appendix A–6 of this part only if it is used after a wet FGD system. Do not use Method 17 of appendix A–6 of this part after wet FGD systems if the effluent is saturated or laden with water droplets.
- (iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.

- (3) Method 1 of appendix A of this part is used to select the sampling site and the number of traverse sampling points. The sampling time for each run is at least 120 minutes and the minimum sampling volume is 1.7 dscm (60 dscf) except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.
- (4) For Method 5 of appendix A of this part, the temperature of the sample gas in the probe and filter holder is monitored and is maintained at 160±14 °C (320±25 °F).
- (5) For determination of PM emissions, the oxygen (O_2) or CO_2 sample is obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.
- (6) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rate expressed in ng/J heat input is determined using:
- (i) The O₂or CO₂measurements and PM measurements obtained under this section;
- (ii) The dry basis F factor; and
- (iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.
- (7) Method 9 of appendix A of this part is used for determining the opacity of stack emissions.
- (e) To determine compliance with the emission limits for NO_xrequired 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 NO_xunder §60.48(b).
- (1) For the initial compliance test, NO_x 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 NO_x 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.
- (2) Following the date on which the initial performance test is completed or is required to be completed in $\S60.8$, whichever date comes first, the owner or operator of an affected facility which combusts coal (except as specified under $\S60.46b(e)(4)$) or which combusts residual oil having a nitrogen content greater than 0.30 weight percent shall determine compliance with the NO_xemission standards in $\S60.44b$ on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated for each steam generating unit operating day as the average of all of the hourly NO_xemission data for the preceding 30 steam generating unit operating days.
- (3) Following the date on which the initial performance test is completed or is required to be completed under $\S60.8$, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity greater than 73 MW (250 MMBtu/hr) and that combusts natural gas, distillate oil, or residual oil having a nitrogen content of 0.30 weight percent or less shall determine compliance with the NO_xstandards under $\S60.44b$ on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_xemission data for the preceding 30 steam generating unit operating days.
- (4) Following the date on which the initial performance test is completed or required to be completed under $\S60.8$, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less and that combusts natural gas, distillate oil, gasified coal, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the NO $_{\rm X}$ standards in $\S60.44b$ through the use of a 30-day performance test. During periods when performance tests are not requested, NO $_{\rm X}$ emissions data collected pursuant to $\S60.48b(g)(1)$

or $\S60.48b(g)(2)$ 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 NO_xemission 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 NO_xemission data for the preceding 30 steam generating unit operating days.

- (5) If the owner or operator of an affected facility that combusts residual oil does not sample and analyze the residual oil for nitrogen content, as specified in §60.49b(e), the requirements of §60.48b(g)(1) apply and the provisions of §60.48b(g)(2) are inapplicable.
- (f) To determine compliance with the emissions limits for NO_X required by $\S60.44b(a)(4)$ or $\S60.44b(l)$ for duct burners used in combined cycle systems, either of the procedures described in paragraph (f)(1) or (2) of this section may be used:
- (1) The owner or operator of an affected facility shall conduct the performance test required under §60.8 as follows:
- (i) The emissions rate (E) of NO_Xshall be computed using Equation 1 in this section:

$$E = E_{eg} + \left(\frac{H_g}{H_b}\right) \left(E_{eg} - E_g\right) \qquad (E \neq 1)$$

Where:

E = Emissions rate of NO_x from the duct burner, ng/J (lb/MMBtu) heat input;

E_{sg}= Combined effluent emissions rate, in ng/J (lb/MMBtu) heat input using appropriate F factor as described in Method 19 of appendix A of this part;

 H_0 = Heat input rate to the combustion turbine, in J/hr (MMBtu/hr);

H_b= Heat input rate to the duct burner, in J/hr (MMBtu/hr); and

E_σ= Emissions rate from the combustion turbine, in ng/J (lb/MMBtu) heat input calculated using appropriate

F factor as described in Method 19 of appendix A of this part.

- (ii) Method 7E of appendix A of this part shall be used to determine the NO_X concentrations. Method 3A or 3B of appendix A of this part shall be used to determine O_2 concentration.
- (iii) The owner or operator shall identify and demonstrate to the Administrator's satisfaction suitable methods to determine the average hourly heat input rate to the combustion turbine and the average hourly heat input rate to the affected duct burner.
- (iv) Compliance with the emissions limits under §60.44b(a)(4) or §60.44b(l) is determined by the three-run average (nominal 1-hour runs) for the initial and subsequent performance tests; or
- (2) The owner or operator of an affected facility may elect to determine compliance on a 30-day rolling average basis by using the CEMS specified under $\S60.48b$ for measuring NO $_{\chi}$ and O $_{\chi}$ and meet the requirements of $\S60.48b$. The sampling site shall be located at the outlet from the steam generating unit. The NO $_{\chi}$ emissions rate at the outlet from the steam generating unit shall constitute the NO $_{\chi}$ emissions rate from the duct burner of the combined cycle system.
- (g) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) shall demonstrate the maximum heat input capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. The owner or operator of an affected facility shall determine the maximum heat input capacity using the heat loss method or the heat input method described in sections 5 and 7.3 of the ASME *Power*

Test Codes 4.1 (incorporated by reference, see §60.17). This demonstration of maximum heat input capacity shall be made during the initial performance test for affected facilities that meet the criteria of §60.44b(j). It shall be made within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of each facility, for affected facilities meeting the criteria of §60.44b(k). Subsequent demonstrations may be required by the Administrator at any other time. If this demonstration indicates that the maximum heat input capacity of the affected facility is less than that stated by the manufacturer of the affected facility, the maximum heat input capacity determined during this demonstration shall be used to determine the capacity utilization rate for the affected facility. Otherwise, the maximum heat input capacity provided by the manufacturer is used.

- (h) The owner or operator of an affected facility described in §60.44b(j) that has a heat input capacity greater than 73 MW (250 MMBtu/hr) shall:
- (1) Conduct an initial performance test as required under $\S60.8$ over a minimum of 24 consecutive steam generating unit operating hours at maximum heat input capacity to demonstrate compliance with the NO_xemission standards under $\S60.44b$ using Method 7, 7A, 7E of appendix A of this part, or other approved reference methods; and
- (2) Conduct subsequent performance tests once per calendar year or every 400 hours of operation (whichever comes first) to demonstrate compliance with the NO_Xemission standards under §60.44b over a minimum of 3 consecutive steam generating unit operating hours at maximum heat input capacity using Method 7, 7A, 7E of appendix A of this part, or other approved reference methods.
- (i) The owner or operator of an affected facility seeking to demonstrate compliance with the PM limit in paragraphs §60.43b(a)(4) or §60.43b(h)(5) shall follow the applicable procedures in §60.49b(r).
- (j) In place of PM testing with Method 5 or 5B of appendix A–3 of this part, or Method 17 of appendix A–6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall comply with the requirements specified in paragraphs (j)(1) through (j)(14) of this section.
- (1) Notify the Administrator one month before starting use of the system.
- (2) Notify the Administrator one month before stopping use of the system.
- (3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.
- (4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of the CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.
- (5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (j) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.
- (6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.
- (7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraphs (j)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

- (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
- (ii) [Reserved]
- (8) The 1-hour arithmetic averages required under paragraph (j)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.
- (9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (j)(7) of this section are not met.
- (10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.
- (11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O₂(or CO₂) data shall be collected concurrently (or within a 30-to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.
- (i) For PM, Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall be used; and
- (ii) After July 1, 2010 or after Method 202 of appendix M of part 51 has been revised to minimize artifact measurement and notice of that change has been published in the Federal Register, whichever is later, for condensable PM emissions, Method 202 of appendix M of part 51 shall be used; and
- (iii) For O₂(or CO₂), Method 3A or 3B of appendix A-2 of this part, as applicable shall be used.
- (12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.
- (13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours per 30-day rolling average.
- (14) After July 1, 2011, within 90 days after completing a correlation testing run, the owner or operator of an affected facility shall either successfully enter the test data into EPA's WebFIRE data base located at http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main or mail a copy to: United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; Mail Code: D243–01; RTP, NC 27711.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009]

§ 60.47b Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (b) and (f) of this section, the owner or operator of an affected facility subject to the SO₂standards in §60.42b shall install, calibrate, maintain, and operate CEMS for measuring SO₂concentrations and either O₂or CO₂concentrations and shall record the output of the systems. For units complying with the percent reduction standard, the SO₂and either O₂or CO₂concentrations shall both be monitored at the inlet and outlet of the SO₂control device. If the owner or operator has installed and certified SO₂and O₂or CO₂CEMS according to the requirements of §75.20(c)(1) of this chapter and appendix A to part 75 of this chapter, and is continuing to meet the ongoing quality assurance requirements

of §75.21 of this chapter and appendix B to part 75 of this chapter, those CEMS may be used to meet the requirements of this section, provided that:

- (1) When relative accuracy testing is conducted, SO_2 concentration data and CO_2 (or O_2) data are collected simultaneously; and
- (2) In addition to meeting the applicable SO₂and CO₂(or O₂) relative accuracy specifications in Figure 2 of appendix B to part 75 of this chapter, the relative accuracy (RA) standard in section 13.2 of Performance Specification 2 in appendix B to this part is met when the RA is calculated on a lb/MMBtu basis; and
- (3) The reporting requirements of $\S60.49b$ are met. SO_2 and CO_2 (or O_2) data used to meet the requirements of $\S60.49b$ shall not include substitute data values derived from the missing data procedures in subpart D of part 75 of this chapter, nor shall the SO_2 data have been bias adjusted according to the procedures of part 75 of this chapter.
- (b) As an alternative to operating CEMS as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emissions and percent reduction by:
- (1) Collecting coal or oil samples in an as-fired condition at the inlet to the steam generating unit and analyzing them for sulfur and heat content according to Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO₂input rate, or
- (2) Measuring SO₂ according to Method 6B of appendix A of this part at the inlet or outlet to the SO₂ control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO₂ and CO₂ measurement train operated at the candidate location and a second similar train operated according to the procedures in section 3.2 and the applicable procedures in section 7 of Performance Specification 2. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 or 3B of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent.
- (3) A daily SO₂emission rate, E_D, shall be determined using the procedure described in Method 6A of appendix A of this part, section 7.6.2 (Equation 6A–8) and stated in ng/J (lb/MMBtu) heat input.
- (4) The mean 30-day emission rate is calculated using the daily measured values in ng/J (lb/MMBtu) for 30 successive steam generating unit operating days using equation 19–20 of Method 19 of appendix A of this part.
- (c) The owner or operator of an affected facility shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator or the reference methods and procedures as described in paragraph (b) of this section.
- (d) The 1-hour average SO_2 emission rates measured by the CEMS required by paragraph (a) of this section and required under §60.13(h) is expressed in ng/J or lb/MMBtu heat input and is used to calculate the average emission rates under §60.42(b). Each 1-hour average SO_2 emission rate must be based on 30 or more minutes of steam generating unit operation. The hourly averages shall be calculated according to §60.13(h)(2). Hourly SO_2 emission rates are not calculated if the affected facility is operated less than 30 minutes in a given clock hour and are not counted toward determination of a steam generating unit operating day.

- (e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.
- (1) Except as provided for in paragraph (e)(4) of this section, all CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.
- (2) Except as provided for in paragraph (e)(4) of this section, quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.
- (3) For affected facilities combusting coal or oil, alone or in combination with other fuels, the span value of the SO_2CEMS at the inlet to the SO_2 control device is 125 percent of the maximum estimated hourly potential SO_2 emissions of the fuel combusted, and the span value of the CEMS at the outlet to the SO_2 control device is 50 percent of the maximum estimated hourly potential SO_2 emissions of the fuel combusted. Alternatively, SO_2 span values determined according to section 2.1.1 in appendix A to part 75 of this chapter may be used.
- (4) As an alternative to meeting the requirements of requirements of paragraphs (e)(1) and (e)(2) of this section, the owner or operator may elect to implement the following alternative data accuracy assessment procedures:
- (i) For all required CO_2 and O_2 monitors and for SO_2 and NO_X monitors with span values greater than or equal to 100 ppm, the daily calibration error test and calibration adjustment procedures described in sections 2.1.1 and 2.1.3 of appendix B to part 75 of this chapter may be followed instead of the CD assessment procedures in Procedure 1, section 4.1 of appendix F to this part.
- (ii) For all required CO2 and O2 monitors and for SO2 and NOx monitors with span values greater than 30 ppm, quarterly linearity checks may be performed in accordance with section 2.2.1 of appendix B to part 75 of this chapter, instead of performing the cylinder gas audits (CGAs) described in Procedure 1, section 5.1.2 of appendix F to this part. If this option is selected: The frequency of the linearity checks shall be as specified in section 2.2.1 of appendix B to part 75 of this chapter; the applicable linearity specifications in section 3.2 of appendix A to part 75 of this chapter shall be met; the data validation and out-of-control criteria in section 2.2.3 of appendix B to part 75 of this chapter shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F to this part; and the grace period provisions in section 2.2.4 of appendix B to part 75 of this chapter shall apply. For the purposes of data validation under this subpart, the cylinder gas audits described in Procedure 1, section 5.1.2 of appendix F to this part shall be performed for SO2 and NOx span values less than or equal to 30 ppm; and
- (iii) For SO_2 , CO_2 , and O_2 monitoring systems and for NO_X emission rate monitoring systems, RATAs may be performed in accordance with section 2.3 of appendix B to part 75 of this chapter instead of following the procedures described in Procedure 1, section 5.1.1 of appendix F to this part. If this option is selected: The frequency of each RATA shall be as specified in section 2.3.1 of appendix B to part 75 of this chapter; the applicable relative accuracy specifications shown in Figure 2 in appendix B to part 75 of this chapter shall be met; the data validation and out-of-control criteria in section 2.3.2 of appendix B to part 75 of this chapter shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F to this part; and the grace period provisions in section 2.3.3 of appendix B to part 75 of this chapter shall apply. For the purposes of data validation under this subpart, the relative accuracy specification in section 13.2 of Performance Specification 2 in appendix B to this part shall be met on a lb/MMBtu basis for SO_2 (regardless of the SO_2 emission level during the RATA), and for NO_X when the average NO_X emission rate measured by the reference method during the RATA is less than 0.100 lb/MMBtu.
- (f) The owner or operator of an affected facility that combusts very low sulfur oil or is demonstrating compliance under §60.45b(k) is not subject to the emission monitoring requirements under paragraph (a) of this section if the owner or operator maintains fuel records as described in §60.49b(r).

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§ 60.48b Emission monitoring for particulate matter and nitrogen oxides.

- (a) Except as provided in paragraph (j) of this section, the owner or operator of an affected facility subject to the opacity standard under §60.43b shall install, calibrate, maintain, and operate a continuous opacity monitoring systems (COMS) for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard under §60.43b and meeting the conditions under paragraphs (j)(1), (2), (3), (4), or (5) of this section who elects not to install a COMS shall conduct a performance test using Method 9 of appendix A–4 of this part and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43b and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. If during the initial 60 minutes of observation all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent, the observation period may be reduced from 3 hours to 60 minutes.
- (1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A–4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A–4 of this part performance test results.
- (i) If no visible emissions are observed, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted;
- (ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted:
- (iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted; or
- (iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 30 calendar days from the date that the most recent performance test was conducted.
- (2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A–4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A–4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A–7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.
- (i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A–7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.* , 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.* , 90 seconds per 30 minute period) the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (*i.e.* , 90 seconds) or conduct a new Method 9 of appendix A–4 of this part performance test using the procedures in paragraph (a) of this section within 30 calendar days according to the requirements in §60.46d(d)(7).
- (ii) If no visible emissions are observed for 30 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

- (3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A–4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A–4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243–02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.
- (b) Except as provided under paragraphs (g), (h), and (i) of this section, the owner or operator of an affected facility subject to a NO_X standard under §60.44b shall comply with either paragraphs (b)(1) or (b)(2) of this section.
- (1) Install, calibrate, maintain, and operate CEMS for measuring NO_xand O₂(or CO₂) emissions discharged to the atmosphere, and shall record the output of the system; or
- (2) If the owner or operator has installed a NO_x emission rate 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 CEMS required under paragraph (b) of this section shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
- (d) The 1-hour average NO_X emission rates measured by the continuous NO_X monitor required by paragraph (b) of this section and required under $\S60.13$ (h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under $\S60.44$ b. The 1-hour averages shall be calculated using the data points required under $\S60.13$ (h)(2).
- (e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.
- (1) For affected facilities combusting coal, wood or municipal-type solid waste, the span value for a COMS shall be between 60 and 80 percent.
- (2) For affected facilities combusting coal, oil, or natural gas, the span value for NO_X is determined using one of the following procedures:
- (i) Except as provided under paragraph (e)(2)(ii) of this section, NO_X span values shall be determined as follows:

	Span values for NO_X (ppm)
Natural gas	500.
Oil	500.
Coal	1,000.
Mixtures	500 (x + y) + 1,000z.

Where:

- x = Fraction of total heat input derived from natural gas;
- y = Fraction of total heat input derived from oil; and
- z = Fraction of total heat input derived from coal.
- (ii) As an alternative to meeting the requirements of paragraph (e)(2)(i) of this section, the owner or operator of an affected facility may elect to use the NO_Xspan values determined according to section 2.1.2 in appendix A to part 75 of this chapter.
- (3) All span values computed under paragraph (e)(2)(i) of this section for combusting mixtures of regulated fuels are rounded to the nearest 500 ppm. Span values computed under paragraph (e)(2)(ii) of this section shall be rounded off according to section 2.1.2 in appendix A to part 75 of this chapter.
- (f) When NO_xemission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of appendix A of this part, Method 7A of appendix A of this part, 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.
- (g) The owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less, and that has an annual capacity factor for residual oil having a nitrogen content of 0.30 weight percent or less, natural gas, distillate oil, gasified coal, or any mixture of these fuels, greater than 10 percent (0.10) shall:
- (1) Comply with the provisions of paragraphs (b), (c), (d), (e)(2), (e)(3), and (f) of this section; or
- (2) Monitor steam generating unit operating conditions and predict NO_Xemission rates as specified in a plan submitted pursuant to §60.49b(c).
- (h) The owner or operator of a duct burner, as described in $\S60.41b$, that is subject to the NO_Xstandards in $\S60.44b(a)(4)$, $\S60.44b(e)$, or $\S60.44b(l)$ is not required to install or operate a continuous emissions monitoring system to measure NO_Xemissions.
- (i) The owner or operator of an affected facility described in $\S60.44b(j)$ or $\S60.44b(k)$ is not required to install or operate a CEMS for measuring NO_Xemissions.
- (j) The owner or operator of an affected facility that meets the conditions in either paragraph (j)(1), (2), (3),
- (4), (5), or (6) of this section is not required to install or operate a COMS if:
- (1) The affected facility uses a PM CEMS to monitor PM emissions; or
- (2) The affected facility burns only liquid (excluding residual oil) or gaseous fuels with potential SO_2 emissions rates of 26 ng/J (0.060 lb/MMBtu) or less and does not use a post-combustion technology to reduce SO_2 or PM emissions. The owner or operator must maintain fuel records of the sulfur content of the fuels burned, as described under §60.49b(r); or
- (3) The affected facility burns coke oven gas alone or in combination with fuels meeting the criteria in paragraph (j)(2) of this section and does not use a post-combustion technology to reduce SO₂or PM emissions; or
- (4) The affected facility does not use post-combustion technology (except a wet scrubber) for reducing PM, SO₂, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur, and is operated such that emissions of CO to the atmosphere from the

affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a steam generating unit operating day average basis. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (j)(4)(i) through (iv) of this section; or

- (i) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (j)(4)(i)(A) through (D) of this section.
- (A) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.
- (B) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).
- (C) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in §60.13(h)(2).
- (D) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.
- (ii) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.
- (iii) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.
- (iv) You must record the CO measurements and calculations performed according to paragraph (j)(4) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.
- (5) The affected facility uses a bag leak detection system to monitor the performance of a fabric filter (baghouse) according to the most recent requirements in section §60.48Da of this part; or
- (6) The affected facility burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.
- (k) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in §60.46b(j). The CEMS specified in paragraph §60.46b(j) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

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§ 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 SO₂. 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 SO_2 , PM, and/or NO_X 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 of this part. 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 NO_X standard in $\S60.44b$ who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions in the provisions of $\S60.48b(g)(2)$ shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored in $\S60.48b(g)(2)$ and the records to be maintained in $\S60.49b(g)$. This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. An affected facility burning coke oven gas alone or in combination with other gaseous fuels or distillate oil shall submit this plan to the Administrator for approval within 360 days of the initial startup of the affected facility or by November 30, 2009, whichever date comes later. 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. The plan shall:
- (1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NO_X emission rates (*i.e.* , ng/J or lbs/MMBtu 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 O_2 level);
- (2) Include the data and information that the owner or operator used to identify the relationship between NO_xemission rates and these operating conditions; and
- (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(g).

- (d) Except as provided in paragraph (d)(2) of this section, the owner or operator of an affected facility shall record and maintain records as specified in paragraph (d)(1) of this section.
- (1) 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.
- (2) As an alternative to meeting the requirements of paragraph (d)(1) of this section, the owner or operator of an affected facility that is subject to a federally enforceable permit restricting fuel use to a single fuel such that the facility is not required to continuously monitor any emissions (excluding opacity) or parameters indicative of emissions may elect to record and maintain records of the amount of each fuel combusted during each calendar month.
- (e) For an affected facility that combusts residual oil and meets the criteria under §§60.46b(e)(4), 60.44b(j), or (k), the owner or operator shall maintain records of the nitrogen content of the residual oil combusted in the affected facility and calculate the average fuel nitrogen content for the reporting period. The nitrogen content shall be determined using ASTM Method D4629 (incorporated by reference, see §60.17), or fuel suppliers. If residual oil blends are being combusted, fuel nitrogen specifications may be prorated based on the ratio of residual oils of different nitrogen content in the fuel blend.
- (f) For an affected facility subject to the opacity standard in §60.43b, the owner or operator shall maintain records of opacity. In addition, an owner or operator that elects to monitor emissions according to the requirements in §60.48b(a) shall maintain records according to the requirements specified in paragraphs (f)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.
- (1) For each performance test conducted using Method 9 of appendix A–4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (f)(1)(i) through (iii) of this section.
- (i) Dates and time intervals of all opacity observation periods;
- (ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
- (iii) Copies of all visible emission observer opacity field data sheets;
- (2) For each performance test conducted using Method 22 of appendix A–4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (f)(2)(i) through (iv) of this section.
- (i) Dates and time intervals of all visible emissions observation periods;
- (ii) Name and affiliation for each visible emission observer participating in the performance test;
- (iii) Copies of all visible emission observer opacity field data sheets; and
- (iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.
- (3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator.

- (g) Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the NO_xstandards under §60.44b shall maintain records of the following information for each steam generating unit operating day:
- (1) Calendar date;
- (2) The average hourly NO_xemission rates (expressed as NO₂) (ng/J or lb/MMBtu heat input) measured or predicted;
- (3) The 30-day average NO_Xemission rates (ng/J or lb/MMBtu 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 NO_X emission rates are in excess of the NO_X 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 CEMS;
- (9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
- (10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.
- (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 that occurred during the reporting period.
- (1) Any affected facility subject to the opacity standards in §60.43b(f) or to the operating parameter monitoring requirements in §60.13(i)(1).
- (2) Any affected facility that is subject to the NO_xstandard of §60.44b, and that:
- (i) Combusts natural gas, distillate oil, gasified coal, 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 MMBtu/hr) or less and is required to monitor NO_xemissions on a continuous basis under §60.48b(g)(1) or steam generating unit operating conditions under §60.48b(g)(2).
- (3) For the purpose of §60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under §60.43b(f).
- (4) For purposes of $\S60.48b(g)(1)$, excess emissions are defined as any calculated 30-day rolling average NO_X emission rate, as determined under $\S60.46b(e)$, that exceeds the applicable emission limits in $\S60.44b$.

- (i) The owner or operator of any affected facility subject to the continuous monitoring requirements for NO_X 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 SO₂standards under §60.42b shall submit reports.
- (k) For each affected facility subject to the compliance and performance testing requirements of §60.45b and the reporting requirement in paragraph (j) of this section, the following information shall be reported to the Administrator:
- (1) Calendar dates covered in the reporting period;
- (2) Each 30-day average SO₂emission rate (ng/J or lb/MMBtu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken; For an exceedance due to maintenance of the SO₂control system covered in paragraph 60.45b(a), the report shall identify the days on which the maintenance was performed and a description of the maintenance;
- (3) Each 30-day average percent reduction in SO₂ emissions calculated during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken;
- (4) Identification of the steam generating unit operating days that coal or oil was combusted and for which SO₂or diluent (O₂or CO₂) data have not been obtained by an approved method for at least 75 percent of the operating hours in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective action taken;
- (5) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit;
- (6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
- (7) Identification of times when hourly averages have been obtained based on manual sampling methods:
- (8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
- (9) Description of any modifications to the CEMS that could affect the ability of the CEMS 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 of this part; and
- (11) The annual capacity factor of each fired as provided under paragraph (d) of this section.
- (I) For each affected facility subject to the compliance and performance testing requirements of §60.45b(d) and the reporting requirements of paragraph (j) of this section, the following information shall be reported to the Administrator:
- (1) Calendar dates when the facility was in operation during the reporting period;
- (2) The 24-hour average SO₂emission rate measured for each steam generating unit operating day during the reporting period that coal or oil was combusted, ending in the last 24-hour period in the quarter; reasons for noncompliance with the emission standards; and a description of corrective actions taken;

- (3) Identification of the steam generating unit operating days that coal or oil was combusted for which S0₂or diluent (O₂or CO₂) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and description of corrective action taken;
- (4) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit:
- (5) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
- (6) Identification of times when hourly averages have been obtained based on manual sampling methods;
- (7) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
- (8) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
- (9) Results of daily CEMS drift tests and quarterly accuracy assessments as required under Procedure 1 of appendix F 1 of this part. If the owner or operator elects to implement the alternative data assessment procedures described in §§60.47b(e)(4)(i) through (e)(4)(iii), each data assessment report shall include a summary of the results of all of the RATAs, linearity checks, CGAs, and calibration error or drift assessments required by §§60.47b(e)(4)(i) through (e)(4)(iii).
- (m) For each affected facility subject to the SO₂ standards in §60.42(b) for which the minimum amount of data required in §60.47b(c) were not obtained during the reporting period, the following information is reported to the Administrator in addition to that required under paragraph (k) of this section:
- (1) The number of hourly averages available for outlet emission rates and inlet emission rates;
- (2) The standard deviation of hourly averages for outlet emission rates and inlet emission rates, as determined in Method 19 of appendix A of this part, section 7;
- (3) The lower confidence limit for the mean outlet emission rate and the upper confidence limit for the mean inlet emission rate, as calculated in Method 19 of appendix A of this part, section 7; and
- (4) The ratio of the lower confidence limit for the mean outlet emission rate and the allowable emission rate, as determined in Method 19 of appendix A of this part, section 7.
- (n) If a percent removal efficiency by fuel pretreatment (i.e., $\%R_f$) is used to determine the overall percent reduction (i.e., $\%R_o$) under §60.45b, the owner or operator of the affected facility shall submit a signed statement with the report.
- (1) Indicating what removal efficiency by fuel pretreatment (i.e., %R_f) was credited during the reporting period;
- (2) Listing the quantity, heat content, and date each pre-treated fuel shipment was received during the reporting period, the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the reporting period;
- (3) Documenting the transport of the fuel from the fuel pretreatment facility to the steam generating unit; and
- (4) Including a signed statement from the owner or operator of the fuel pretreatment facility certifying that the percent removal efficiency achieved by fuel pretreatment was determined in accordance with the provisions of Method 19 of appendix A of this part and listing the heat content and sulfur content of each fuel before and after fuel pretreatment.
- (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.
- (p) The owner or operator of an affected facility described in §60.44b(j) or (k) shall maintain records of the following information for each steam generating unit operating day:
- (1) Calendar date;
- (2) The number of hours of operation; and
- (3) A record of the hourly steam load.
- (q) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) shall submit to the Administrator a report containing:
- (1) The annual capacity factor over the previous 12 months;
- (2) The average fuel nitrogen content during the reporting period, if residual oil was fired; and

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- (3) If the affected facility meets the criteria described in $\S60.44b(j)$, the results of any NO_xemission tests required during the reporting period, the hours of operation during the reporting period, and the hours of operation since the last NO_xemission test.
- (r) The owner or operator of an affected facility who elects to use the fuel based compliance alternatives in §60.42b or §60.43b shall either:
- (1) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil, natural gas, wood, a mixture of these fuels, or any of these fuels (or a mixture of these fuels) in combination with other fuels that are known to contain an insignificant amount of sulfur in §60.42b(j) or §60.42b(k) shall obtain and maintain at the affected facility fuel receipts from the fuel supplier that certify that the oil meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in §60.41b and the applicable sulfur limit. For the purposes of this section, the distillate oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period; or
- (2) The owner or operator of an affected facility who elects to demonstrate compliance based on fuel analysis in §60.42b or §60.43b shall develop and submit a site-specific fuel analysis plan to the Administrator for review and approval no later than 60 days before the date you intend to demonstrate compliance. Each fuel analysis plan shall include a minimum initial requirement of weekly testing and each analysis report shall contain, at a minimum, the following information:
- (i) The potential sulfur emissions rate of the representative fuel mixture in ng/J heat input;
- (ii) The method used to determine the potential sulfur emissions rate of each constituent of the mixture. For distillate oil and natural gas a fuel receipt or tariff sheet is acceptable;
- (iii) The ratio of different fuels in the mixture; and
- (iv) The owner or operator can petition the Administrator to approve monthly or quarterly sampling in place of weekly sampling.
- (s) Facility specific NO_xstandard for Cytec Industries Fortier Plant's C.AOG incinerator located in Westwego, Louisiana:
- (1) Definitions.

Oxidation zone is defined as the portion of the C.AOG incinerator that extends from the inlet of the oxidizing zone combustion air to the outlet gas stack.

Reducing zone is defined as the portion of the C.AOG incinerator that extends from the burner section to the inlet of the oxidizing zone combustion air.

Total inlet air is defined as the total amount of air introduced into the C.AOG incinerator for combustion of natural gas and chemical by-product waste and is equal to the sum of the air flow into the reducing zone and the air flow into the oxidation zone.

- (2) Standard for nitrogen oxides . (i) When fossil fuel alone is combusted, the NO_X emission limit for fossil fuel in $\S60.44b(a)$ applies.
- (ii) When natural gas and chemical by-product waste are simultaneously combusted, the NO_xemission limit is 289 ng/J (0.67 lb/MMBtu) and a maximum of 81 percent of the total inlet air provided for combustion shall be provided to the reducing zone of the C.AOG incinerator.
- (3) Emission monitoring. (i) The percent of total inlet air provided to the reducing zone shall be determined at least every 15 minutes by measuring the air flow of all the air entering the reducing zone and the air flow of all the air entering the oxidation zone, and compliance with the percentage of total inlet air that is provided to the reducing zone shall be determined on a 3-hour average basis.
- (ii) The NO_xemission limit shall be determined by the compliance and performance test methods and procedures for NO_xin §60.46b(i).
- (iii) The monitoring of the NO_xemission limit shall be performed in accordance with §60.48b.
- (4) Reporting and recordkeeping requirements. (i) The owner or operator of the C.AOG incinerator shall submit a report on any excursions from the limits required by paragraph (a)(2) of this section to the Administrator with the quarterly report required by paragraph (i) of this section.
- (ii) The owner or operator of the C.AOG incinerator shall keep records of the monitoring required by paragraph (a)(3) of this section for a period of 2 years following the date of such record.
- (iii) The owner of operator of the C.AOG incinerator shall perform all the applicable reporting and recordkeeping requirements of this section.

- (t) Facility-specific NO_xstandard for Rohm and Haas Kentucky Incorporated's Boiler No. 100 located in Louisville, Kentucky:
- (1) Definitions.

Air ratio control damper is defined as the part of the low NO_Xburner that is adjusted to control the split of total combustion air delivered to the reducing and oxidation portions of the combustion flame.

Flue gas recirculation line is defined as the part of Boiler No. 100 that recirculates a portion of the boiler flue gas back into the combustion air.

- (2) Standard for nitrogen oxides . (i) When fossil fuel alone is combusted, the NO_X emission limit for fossil fuel in §60.44b(a) applies.
- (ii) When fossil fuel and chemical by-product waste are simultaneously combusted, the NO_Xemission limit is 473 ng/J (1.1 lb/MMBtu), and the air ratio control damper tee handle shall be at a minimum of 5 inches (12.7 centimeters) out of the boiler, and the flue gas recirculation line shall be operated at a minimum of 10 percent open as indicated by its valve opening position indicator.
- (3) Emission monitoring for nitrogen oxides. (i) The air ratio control damper tee handle setting and the flue gas recirculation line valve opening position indicator setting shall be recorded during each 8-hour operating shift.
- (ii) The NO_xemission limit shall be determined by the compliance and performance test methods and procedures for NO_xin §60.46b.
- (iii) The monitoring of the NO_xemission limit shall be performed in accordance with §60.48b.
- (4) Reporting and recordkeeping requirements. (i) The owner or operator of Boiler No. 100 shall submit a report on any excursions from the limits required by paragraph (b)(2) of this section to the Administrator with the quarterly report required by §60.49b(i).
- (ii) The owner or operator of Boiler No. 100 shall keep records of the monitoring required by paragraph (b)(3) of this section for a period of 2 years following the date of such record.
- (iii) The owner of operator of Boiler No. 100 shall perform all the applicable reporting and recordkeeping requirements of §60.49b.
- (u) Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia. (1) This paragraph (u) applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site") and only to the natural gas-fired boilers installed as part of the powerhouse conversion required pursuant to 40 CFR 52.2454(g). The requirements of this paragraph shall apply, and the requirements of §§60.40b through 60.49b(t) shall not apply, to the natural gas-fired boilers installed pursuant to 40 CFR 52.2454(g).
- (i) The site shall equip the natural gas-fired boilers with low NO_xtechnology.
- (ii) The site shall install, calibrate, maintain, and operate a continuous monitoring and recording system for measuring NO_Xemissions discharged to the atmosphere and opacity using a continuous emissions monitoring system or a predictive emissions monitoring system.
- (iii) Within 180 days of the completion of the powerhouse conversion, as required by 40 CFR 52.2454, the site shall perform a performance test to quantify criteria pollutant emissions.
- (2) [Reserved]
- (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.
- (x) Facility-specific NO_Xstandard for Weyerhaeuser Company's No. 2 Power Boiler located in New Bern, North Carolina:
- (1) Standard for nitrogen oxides. (i) When fossil fuel alone is combusted, the NO_Xemission limit for fossil fuel in §60.44b(a) applies.

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- (ii) When fossil fuel and chemical by-product waste are simultaneously combusted, the NO_X emission limit is 215 ng/J (0.5 lb/MMBtu).
- (2) *Emission monitoring for nitrogen oxides* . (i) The NO_xemissions shall be determined by the compliance and performance test methods and procedures for NO_xin §60.46b.
- (ii) The monitoring of the NO_xemissions shall be performed in accordance with §60.48b.
- (3) Reporting and recordkeeping requirements. (i) The owner or operator of the No. 2 Power Boiler shall submit a report on any excursions from the limits required by paragraph (x)(2) of this section to the Administrator with the quarterly report required by §60.49b(i).
- (ii) The owner or operator of the No. 2 Power Boiler shall keep records of the monitoring required by paragraph (x)(3) of this section for a period of 2 years following the date of such record.
- (iii) The owner or operator of the No. 2 Power Boiler shall perform all the applicable reporting and recordkeeping requirements of §60.49b.
- (v) Facility-specific NO_x standard for INEOS USA's AOGI located in Lima, Ohio:
- (1) Standard for NO $_{\chi}$. (i) When fossil fuel alone is combusted, the NO $_{\chi}$ emission limit for fossil fuel in §60.44b(a) applies.
- (ii) When fossil fuel and chemical byproduct/waste are simultaneously combusted, the NO_xemission limit is 645 ng/J (1.5 lb/MMBtu).
- (2) Emission monitoring for NO $_{\rm X}$. (i) The NO $_{\rm X}$ emissions shall be determined by the compliance and performance test methods and procedures for NO $_{\rm X}$ in §60.46b.
- (ii) The monitoring of the NO_xemissions shall be performed in accordance with §60.48b.
- (3) Reporting and recordkeeping requirements. (i) The owner or operator of the AOGI shall submit a report on any excursions from the limits required by paragraph (y)(2) of this section to the Administrator with the quarterly report required by paragraph (i) of this section.
- (ii) The owner or operator of the AOGI shall keep records of the monitoring required by paragraph (y)(3) of this section for a period of 2 years following the date of such record.
- (iii) The owner or operator of the AOGI shall perform all the applicable reporting and recordkeeping requirements of this section.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5089, Jan. 28, 2009]

Attachment D to Part 70 Operating Permit Renewal No. T145-28055-00035

Bunge North America (East), Inc. 700 N Range Line Rd, Morristown, IN 46161

Subpart GGGG—National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for **Vegetable Oil Production**

Source: 66 FR 19011, Apr. 12, 2001, unless otherwise noted.

What This Subpart Covers

§ 63.2830 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for emissions during vegetable oil production. This subpart limits hazardous air pollutant (HAP) emissions from specified vegetable oil production processes. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

§ 63.2831 Where can I find definitions of key words used in this subpart?

You can find definitions of key words used in this subpart in §63.2872.

§ 63.2832 Am I subject to this subpart?

(iv) Peanut;

- (a) You are an affected source subject to this subpart if you meet all of the criteria listed in paragraphs (a)(1) and (2) of this section:
- (1) You own or operate a vegetable oil production process that is a major source of HAP emissions or is collocated within a plant site with other sources that are individually or collectively a major source of HAP emissions.
- (i) A vegetable oil production process is defined in §63.2872. In general, it is the collection of continuous process equipment and activities that produce crude vegetable oil and meal products by removing oil from oilseeds listed in Table 1 to §63.2840 through direct contact with an organic solvent, such as a hexane isomer blend.
- (ii) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year.
- (2) Your vegetable oil production process processes any combination of eight types of oilseeds listed in

paragraphs (a)(2)(i) through (viii) of this section:	
(i) Corn germ;	
(ii) Cottonseed;	
(iii) Flax;	

- (v) Rapeseed (for example, canola);
- (vi) Safflower;
- (vii) Soybean; and
- (viii) Sunflower.
- (b) You are not subject to this subpart if your vegetable oil production process meets any of the criteria listed in paragraphs (b)(1) through (4) of this section:
- (1) It uses only mechanical extraction techniques that use no organic solvent to remove oil from a listed oilseed.
- (2) It uses only batch solvent extraction and batch desolventizing equipment.
- (3) It processes only agricultural products that are not listed oilseeds as defined in §63.2872.
- (4) It functions only as a research and development facility and is not a major source.
- (c) As listed in §63.1(c)(5) of the General Provisions, if your HAP emissions increase such that you become a major source, then you are subject to all of the requirements of this subpart.

§ 63.2833 Is my source categorized as existing or new?

(a) This subpart applies to each existing and new affected source. You must categorize your vegetable oil production process as either an existing or a new source in accordance with the criteria in Table 1 of this section, as follows:

Table 1 to §63.2833—Categorizing Your Source as Existing or New

If your affected source	And if	Then your affected source
(1) was constructed or began construction before May 26, 2000	reconstruction has not occurred	is an existing source.
	(v)	remains an existing source.
(3) began a significant modification, as defined in §63.2872, at any time on an existing source	the modification does not constitute reconstruction	remains an existing source.
(4) began a significant modification, as defined in §63.2872, at any time on a new source	the modification does not constitute reconstruction	remains a new source.

If your affected source	And if		Then your affected source
(5) began reconstruction on or after May 26, 2000	reconstruction was completed later than 3 years after the effective date of this subpart	is a	new source
(6) began construction on or after May 26, 2000		is a	new source.

- (b) Reconstruction of a source. Any affected source is reconstructed if components are replaced so that the criteria in the definition of reconstruction in §63.2 are satisfied. In general, a vegetable oil production process is reconstructed if the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost for constructing a new vegetable oil production process, and it is technically and economically feasible for the reconstructed source to meet the relevant new source requirements of this subpart. The effect of reconstruction on the categorization of your existing and new affected source is described in paragraphs (b)(1) and (2) of this section:
- (1) After reconstruction of an existing source, the affected source is recategorized as a new source and becomes subject to the new source requirements of this subpart.
- (2) After reconstruction of a new source, the affected source remains categorized as a new source and remains subject to the new source requirements of this subpart.
- (c) Significant modification of a source. A significant modification to an affected source is a term specific to this subpart and is defined in §63.2872.
- (1) In general, a significant modification to your source consists of adding new equipment or the modification of existing equipment within the affected source that significantly affects solvent losses from the affected source. Examples include adding or replacing extractors, desolventizer-toasters (conventional and specialty), and meal dryer-coolers. All other significant modifications must meet the criteria listed in paragraphs (c)(1)(i) and (ii) of this section:
- (i) The fixed capital cost of the modification represents a significant percentage of the fixed capital cost of building a comparable new vegetable oil production process.
- (ii) It does not constitute reconstruction as defined in §63.2.
- (2) A significant modification has no effect on the categorization of your source as existing and new. An existing source remains categorized as an existing source and subject to the existing source requirements of this subpart. A new source remains categorized as a new source and subject to the new source requirements of this subpart.
- (d) Changes in the type of oilseed processed by your affected source does not affect the categorization of your source as new or existing. Recategorizing an affected source from existing to new occurs only when you add or modify process equipment within the source which meets the definition of *reconstruction*.

§ 63.2834 When do I have to comply with the standards in this subpart?

You must comply with this subpart in accordance with one of the schedules in Table 1 of this section, as follows:

Table 1 of §63.2834—Compliance Dates for Existing and New Sources

If your affected source is categorized as	And if	Then your compliance date is
(a) an existing source		3 years after the effective date of this subpart.
(b) a new source	you startup your affected source before the effective date of this subpart	the effective date of this subpart.
(c) a new source	you startup your affected source on or after the effective date of this subpart	your startup date.

Standards

§ 63.2840 What emission requirements must I meet?

For each facility meeting the applicability criteria in §63.2832, you must comply with either the requirements specified in paragraphs (a) through (d), or the requirements in paragraph (e) of this section.

(a)(1) The emission requirements limit the number of gallons of HAP lost per ton of listed oilseeds processed. For each operating month, you must calculate a compliance ratio which compares your actual HAP loss to your allowable HAP loss for the previous 12 operating months as shown in Equation 1 of this section. An operating month, as defined in §63.2872, is any calendar month in which a source processes a listed oilseed, excluding any entire calendar month in which the source operated under an initial startup period subject to §63.2850(c)(2) or (d)(2) or a malfunction period subject to §63.2850(e)(2). Equation 1 of this section follows:

Compliance Ratio=
$$\frac{\text{Actual Hap Loss}}{\text{Allowable Hap Loss}} \qquad (Eq. 1)$$

(2) Equation 1 of this section can also be expressed as a function of total solvent loss as shown in Equation 2 of this section. Equation 2 of this section follows:

Compliance Ratio=
$$\frac{f * Actual Solvent Loss}{0.64 * \sum_{i=1}^{n} ((Oilseed)_{i} * (SLF)_{i})}$$
(Eq. 2)

Where:

f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, as determined in §63.2854, dimensionless.

0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless.

Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months, as determined in §63.2853.

Oilseed = Tons of each oilseed type "i" processed during the previous 12 operating months, as shown in §63.2855.

SLF = The corresponding solvent loss factor (gal/ton) for oilseed "i" listed in Table 1 of this section, as follows:

Table 1 of §63.2840—Oilseed Solvent Loss Factors for Determining Allowable HAP Loss

			Oilseed solvent loss factor (gal/ton)		
Type of oilseed process	A source that	Existing sources	New sources		
(i) Corn Germ, Wet Milling	processes corn germ that has been separated from other corn components using a "wet" process of centrifuging a slurry steeped in a dilute sulfurous acid solution	0.4	0.3		
(ii) Corn Germ, Dry Milling	processes corn germ that has been separated from the other corn components using a "dry" process of mechanical chafing and air sifting	0.7	0.7		
(iii) Cottonseed, Large	processes 120,000 tons or more of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period	0.5	0.4		
(iv) Cottonseed, Small	processes less than 120,000 tons of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period	0.7	0.4		
(v) Flax	processes flax	0.6	0.6		
(vi) Peanuts	processes peanuts	1.2	0.7		
(vii) Rapeseed	processes rapeseed	0.7	0.3		
(viii) Safflower	processes safflower	0.7	0.7		
(ix) Soybean, Conventional	uses a conventional style desolventizer to produce crude soybean oil products and soybean animal feed products	0.2	0.2		
(x) Soybean, Specialty	uses a special style desolventizer to produce soybean meal products for human and animal consumption	1.7	1.5		
(xi) Soybean, Combination Plant with Low Specialty Production	processes soybeans in both specialty and conventional desolventizers and the quantity of soybeans processed in specialty desolventizers during normal operating periods is less than 3.3 percent of total soybeans processed during all normal operating periods in a 12 operating month period. The corresponding solvent loss factor is an overall value and applies to the total quantity of soybeans processed.	0.25	0.25		
(xii) Sunflower	processes sunflower	0.4	0.3		

(b) When your source has processed listed oilseed for 12 operating months, calculate the compliance ratio by the end of each calendar month following an operating month using Equation 2 of this section. When

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calculating your compliance ratio, consider the conditions and exclusions in paragraphs (b)(1) through (6) of this section:

- (1) If your source processes any quantity of listed oilseeds in a calendar month and the source is not operating under an initial startup period or malfunction period subject to §63.2850, then you must categorize the month as an operating month, as defined in §63.2872.
- (2) The 12-month compliance ratio may include operating months occurring prior to a source shutdown and operating months that follow after the source resumes operation.
- (3) If your source shuts down and processes no listed oilseed for an entire calendar month, then you must categorize the month as a nonoperating month, as defined in §63.2872. Exclude any nonoperating months from the compliance ratio determination.
- (4) If your source is subject to an initial startup period as defined in §63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the initial startup period.
- (5) If your source is subject to a malfunction period as defined in §63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the malfunction period.
- (6) For sources processing cottonseed or specialty soybean, the solvent loss factor you use to determine the compliance ratio may change each operating month depending on the tons of oilseed processed during all normal operating periods in a 12 operating month period.
- (c) If the compliance ratio is less than or equal to 1.00, your source was in compliance with the HAP emission requirements for the previous operating month.
- (d) To determine the compliance ratio in Equation 2 of this section, you must select the appropriate oilseed solvent loss factor from Table 1 of this section. First, determine whether your source is new or existing using Table 1 of §63.2833. Then, under the appropriate existing or new source column, select the oilseed solvent loss factor that corresponds to each type oilseed or process operation for each operating month.
- (e) Low-HAP solvent option. For all vegetable oil production processes subject to this subpart, you must exclusively use solvent where the volume fraction of each HAP comprises 1 percent or less by volume of the solvent (low-HAP solvent) in each delivery, and you must meet the requirements in paragraphs (e)(1) through (5) of this section. Your vegetable oil production process is not subject to the requirements in §§63.2850 through 63.2870 unless specifically referenced in paragraphs (e)(1) through (5) of this section.
- (1) You shall determine the HAP content of your solvent in accordance with the specifications in §63.2854(b)(1).
- (2) You shall maintain documentation of the HAP content determination for each delivery of the solvent at the facility at all times.
- (3) You must submit an initial notification for existing sources in accordance with §63.2860(a).
- (4) You must submit an initial notification for new and reconstructed sources in accordance with §63.2860(b).
- (5) You must submit an annual compliance certification in accordance with §63.2861(a). The certification should only include the information required under §63.2861(a)(1) and (2), and a certification indicating whether the source complied with all of the requirements in paragraph (e) of this section.

(f) You may change compliance options for your source if you submit a notice to the Administrator at least 60 days prior to changing compliance options. If your source changes from the low-HAP solvent option to the compliance ratio determination option, you must determine the compliance ratio for the most recent 12 operating months beginning with the first month after changing compliance options.

[66 FR 19011, Apr. 12, 2001, as amended at 69 FR 53341, Sept. 1, 2004]

Compliance Requirements

§ 63.2850 How do I comply with the hazardous air pollutant emission standards?

- (a) General requirements. The requirements in paragraphs (a)(1)(i) through (iv) of this section apply to all affected sources:
- (1) Submit the necessary notifications in accordance with §63.2860, which include:
- (i) Initial notifications for existing sources.
- (ii) Initial notifications for new and reconstructed sources.
- (iii) Initial notifications for significant modifications to existing or new sources.
- (iv) Notification of compliance status.
- (2) Develop and implement a plan for demonstrating compliance in accordance with §63.2851.
- (3) Develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provisions in §63.2852.
- (4) Maintain all the necessary records you have used to demonstrate compliance with this subpart in accordance with §63.2862.
- (5) Submit the reports in paragraphs (a)(5)(i) through (iii) of this section:
- (i) Annual compliance certifications in accordance with §63.2861(a).
- (ii) Periodic SSM reports in accordance with §63.2861(c).
- (iii) Immediate SSM reports in accordance with §63.2861(d).
- (6) Submit all notifications and reports and maintain all records required by the General Provisions for performance testing if you add a control device that destroys solvent.
- (b) Existing sources under normal operation. You must meet all of the requirements listed in paragraph (a) of this section and table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for existing sources under normal operation in table 2 of this section.
- (c) New sources. Your new source, including a source that is categorized as new due to reconstruction, must meet the requirements associated with one of two compliance options. Within 15 days of the startup date, you must choose to comply with one of the options listed in paragraph (c)(1) or (2) of this section:

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- (1) Normal operation. Upon startup of your new source, you must meet all of the requirements listed in §63.2850(a) and table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for new sources under normal operation in table 2 of this section.
- (2) Initial startup period. For up to 6 calendar months after the startup date of your new source, you must meet all of the requirements listed in paragraph (a) of this section and table 1 of this section for sources operating under an initial startup period, and the schedules for demonstrating compliance for new sources operating under an initial startup period in Table 2 of this section. After a maximum of 6 calendar months, your new source must then meet all of the requirements listed in table 1 of this section for sources under normal operation.
- (d) Existing or new sources that have been significantly modified. Your existing or new source that has been significantly modified must meet the requirements associated with one of two compliance options. Within 15 days of the modified source startup date, you must choose to comply with one of the options listed in paragraph (d)(1) or (2) of this section:
- (1) Normal operation. Upon startup of your significantly modified existing or new source, you must meet all of the requirements listed in paragraph (a) of this section and table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for an existing or new source that has been significantly modified in table 2 of this section.
- (2) *Initial startup period.* For up to 3 calendar months after the startup date of your significantly modified existing or new source, you must meet all of the requirements listed in paragraph (a) of this section and table 1 of this section for sources operating under an initial startup period, and the schedules for demonstrating compliance for a significantly modified existing or new source operating under an initial startup period in table 2 of this section. After a maximum of 3 calendar months, your new or existing source must meet all of the requirements listed in Table 1 of this section for sources under normal operation.
- (e) Existing or new sources experiencing a malfunction. A malfunction is defined in §63.2. In general, it means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or process equipment to function in a usual manner. If your existing or new source experiences an unscheduled shutdown as a result of a malfunction, continues to operate during a malfunction (including the period reasonably necessary to correct the malfunction), or starts up after a shutdown resulting from a malfunction, then you must meet the requirements associated with one of two compliance options. Routine or scheduled process startups and shutdowns resulting from, but not limited to, market demands, maintenance activities, and switching types of oilseed processed, are not startups or shutdowns resulting from a malfunction and, therefore, do not qualify for this provision. Within 15 days of the beginning date of the malfunction, you must choose to comply with one of the options listed in paragraphs (e)(1) through (2) of this section:
- (1) Normal operation. Your source must meet all of the requirements listed in paragraph (a) of this section and one of the options listed in paragraphs (e)(1)(i) through (iii) of this section:
- (i) Existing source normal operation requirements in paragraph (b) of this section.
- (ii) New source normal operation requirements in paragraph (c)(1) of this section.
- (iii) Normal operation requirements for sources that have been significantly modified in paragraph (d)(1) of this section.
- (2) *Malfunction period.* Throughout the malfunction period, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating during a malfunction period.

At the end of the malfunction period, your source must then meet all of the requirements listed in table 1 of this section for sources under normal operation. Table 1 of this section follows:

Table 1 of §63.2850—Requirements for Compliance with HAP Emission Standards

Are you required to	For periods of normal operation?	For initial startup periods subject to §63.2850(c)(2) or (d)(2)?	For malfunction periods subject to §63.2850(e)(2)?
(a) Operate and maintain your source in accordance with general duty provisions of §63.6(e)?		Yes, you are required to minimize emissions to the extent practible throughout the initial startup period. Such measures should be described in the SSM plan.	Yes, you are required to minimize emissions to the extent practible throughout the initial startup period. Such measures should be described in the SSM plan.
(b) Determine and record the extraction solvent loss in gallons from your source?	Yes, as described in §63.2853	Yes, as described in §63.2862(e)	Yes, as described in §63.2862(e).
(c) Record the volume fraction of HAP present at greater than 1 percent by volume and gallons of extraction solvent in shipment received?	Yes	Yes	Yes.
(d) Determine and record the tons of each oilseed type processed by your source?	Yes, as described in §63.2855	No	No.
(e) Determine the weighted average volume fraction of HAP in extraction solvent received as described in §63.2854 by the end of the following calendar month?		No. Except for solvent received by a new or reconstructed source commencing operation under an initial startup period, the HAP volume fraction in any solvent received during an initial startup period is included in the weighted average HAP determination for the next operating month	No, the HAP volume fraction in any solvent received during a malfunction period is included in the weighted average HAP determination for the next operating month.
(f) Determine and record the actual solvent loss, weighted average volume fraction HAP, oilseed	Yes,	No, these requirements are not applicable because your source is not required to determine the compliance ratio with	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for a malfunction period.

Are you required to	For periods of normal operation?	For initial startup periods subject to §63.2850(c)(2) or (d)(2)?	For malfunction periods subject to §63.2850(e)(2)?
processed and compliance ratio for each 12 operating month period as described in §63.2840 by the end of the following calendar month?		data recorded for an initial startup period	
(g) Submit a Notification of Compliance Status or Annual Compliance Certification as appropriate?		No. However, you may be required to submit an annual compliance certification for previous operating months, if the deadline for the annual compliance certification happens to occur during the initial startup period	No. However, you may be required to submit an annual compliance certification for previous operating months, if the deadline for the annual compliance certification happens to occur during the malfunction period.
(h) Submit a Deviation Notification Report by the end of the calendar month following the month in which you determined that the compliance ratio exceeds 1.00 as described in §63.2861(b)?	Yes	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for an initial startup period	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for a malfunction period.
(i) Submit a Periodic SSM Report as described in §63.2861(c)?	No, a SSM activity is not categorized as normal operation	Yes	Yes.
(j) Submit an Immediate SSM Report as described in §63.2861(d)?	No, a SSM activity is not categorized as normal operation	Yes, only if your source does not follow the SSM plan	Yes, only if your source does not follow the SSM plan.

Table 2 of §63.2850—Schedules for Demonstrating Compliance Under Various Source Operating Modes

If your source is	and is operating under	then your recordkeeping schedule	You must determine your first compliance ratio by the end of the calendar month following	Base your first compliance ratio on information recorded
(a) Existing	Normal operation	Begins on the compliance date	The first 12 operating months after the compliance date	During the first 12 operating months after the compliance date.
(b) New	(1) Normal operation	Begins on the startup date of your new source	The first 12 operating months after the startup date of the new source	During the first 12 operating months after the startup date of the new source.
	(2) An initial startup period	Begins on the startup date of your new source	months after termination	During the first 12 operating months after the initial startup period, which can last for up to 6 months.
(c) Existing or new that has been significantly modified	(1) Normal operation	Resumes on the startup date of the modified source	The first operating month after the startup date of the modified source	During the previous 11 operating months prior to the significant modification and the first operating month following the initial startup date of the source.
	(2) An initial startup period	Resumes on the startup date of the modified source	of the initial startup period, which can last up	During the 11 operating months before the significant modification and the first operating month after the initial startup period.

[66 FR 19011, Apr. 12, 2001, as amended at 71 FR 20463, Apr. 20, 2006]

§ 63.2851 What is a plan for demonstrating compliance?

(a) You must develop and implement a written plan for demonstrating compliance that provides the detailed procedures you will follow to monitor and record data necessary for demonstrating compliance with this subpart. Procedures followed for quantifying solvent loss from the source and amount of oilseed processed vary from source to source because of site-specific factors such as equipment design characteristics and operating conditions. Typical procedures include one or more accurate measurement methods such as weigh scales, volumetric displacement, and material mass balances. Because the industry does not have a uniform set of procedures, you must develop and implement your own site-specific plan for demonstrating compliance before the compliance date for your source. You must also incorporate the plan for demonstrating compliance by reference in the source's title V permit and keep the plan on-site and readily available as long as the source is operational. If you make any changes to the plan for demonstrating compliance, then you must keep all previous versions of the plan and make them readily available for inspection for at least 5 years after each revision. The plan for demonstrating compliance must include the items in paragraphs (a)(1) through (7) of this section:

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

- (2) The physical address of the vegetable oil production process.
- (3) A detailed description of all methods of measurement your source will use to determine your solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.
- (4) When each measurement will be made.
- (5) Examples of each calculation you will use to determine your compliance status. Include examples of how you will convert data measured with one parameter to other terms for use in compliance determination.
- (6) Example logs of how data will be recorded.
- (7) A plan to ensure that the data continue to meet compliance demonstration needs.
- (b) The responsible agency of these NESHAP may require you to revise your plan for demonstrating compliance. The responsible agency may require reasonable revisions if the procedures lack detail, are inconsistent or do not accurately determine solvent loss, HAP content of the solvent, or the tons of oilseed processed.

§ 63.2852 What is a startup, shutdown, and malfunction plan?

You must develop a written SSM plan in accordance with §63.6(e)(3). You must complete the SSM plan before the compliance date for your source. You must also keep the SSM plan on-site and readily available as long as the source is operational. The SSM plan provides detailed procedures for operating and maintaining your source to minimize emissions during a qualifying SSM event for which the source chooses the §63.2850(e)(2) malfunction period, or the §63.2850(c)(2) or (d)(2) initial startup period. The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions. Some or all of the procedures may come from plans you developed for other purposes such as a Standard Operating Procedure manual or an Occupational Safety and Health Administration Process Safety Management plan. To qualify as a SSM plan, other such plans must meet all the applicable requirements of these NESHAP.

[66 FR 19011, Apr. 12, 2001, as amended at 67 FR 16321, Apr. 5, 2002; 71 FR 20463, Apr. 20, 2006]

§ 63.2853 How do I determine the actual solvent loss?

By the end of each calendar month following an operating month, you must determine the total solvent loss in gallons for the previous operating month. The total solvent loss for an operating month includes all solvent losses that occur during normal operating periods within the operating month. If you have determined solvent losses for 12 or more operating months, then you must also determine the 12 operating months rolling sum of actual solvent loss in gallons by summing the monthly actual solvent loss for the previous 12 operating months. The 12 operating months rolling sum of solvent loss is the "actual solvent loss," which is used to calculate your compliance ratio as described in §63.2840.

- (a) To determine the actual solvent loss from your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (7) of this section:
- (1) The dates that define each operating status period during a calendar month. The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If the source maintains the same operating status during an entire calendar month, these dates are the beginning and ending dates of the calendar month. If, prior to the effective date

of this rule, your source determines the solvent loss on an *accounting month*, as defined in §63.2872, rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP.

(2) Source operating status. You must categorize the operating status of your source for each recorded time interval in accordance with criteria in Table 1 of this section, as follows:

Table 1 of §63.2853—Categorizing Your Source Operating Status

If during a recorded time interval	then your source operating status is
	A normal operating period.
(ii) Your source processes no agricultural product and your source is not operating under an initial startup period or malfunction period subject to §63.2850(c)(2), (d)(2), or (e)(2)	A nonoperating period.
(iii) You choose to operate your source under an initial startup period subject to §63.2850(c)(2) or (d)(2)	An initial startup period.
(iv) You choose to operate your source under a malfunction period subject to §63.2850(e)(2)	A malfunction period.
(v) Your source processes agricultural products not defined as listed oilseed	An exempt period.

- (3) Measuring the beginning and ending solvent inventory. You are required to measure and record the solvent inventory on the beginning and ending dates of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in §63.2851, to determine the extraction solvent inventory, and maintain readily available records of the actual solvent loss inventory, as described in §63.2862(c)(1). In general, you must measure and record the solvent inventory only when the source is actively processing any type of agricultural product. When the source is not active, some or all of the solvent working capacity is transferred to solvent storage tanks which can artificially inflate the solvent inventory.
- (4) Gallons of extraction solvent received. Record the total gallons of extraction solvent received in each shipment. For most processes, the gallons of solvent received represents purchases of delivered solvent added to the solvent storage inventory. However, if your process refines additional vegetable oil from off-site sources, recovers solvent from the off-site oil, and adds it to the on-site solvent inventory, then you must determine the quantity of recovered solvent and include it in the gallons of extraction solvent received.
- (5) Solvent inventory adjustments. In some situations, solvent losses determined directly from the measured solvent inventory and quantity of solvent received is not an accurate estimate of the "actual solvent loss" for use in determining compliance ratios. In such cases, you may adjust the total solvent loss for each normal operating period as long as you provide a reasonable justification for the adjustment. Situations that may require adjustments of the total solvent loss include, but are not limited to, situations in paragraphs (a)(5)(i) and (ii) of this section:

- (i) Solvent destroyed in a control device. You may use a control device to reduce solvent emissions to meet the emission standard. The use of a control device does not alter the emission limit for the source. If you use a control device that reduces solvent emissions through destruction of the solvent instead of recovery, then determine the gallons of solvent that enter the control device and are destroyed there during each normal operating period. All solvent destroyed in a control device during a normal operating period can be subtracted from the total solvent loss. Examples of destructive emission control devices include catalytic incinerators, boilers, or flares. Identify and describe, in your plan for demonstrating compliance, each type of reasonable and sound measurement method that you use to quantify the gallons of solvent entering and exiting the control device and to determine the destruction efficiency of the control device. You may use design evaluations to document the gallons of solvent destroyed or removed by the control device instead of performance testing under §63.7. The design evaluations must be based on the procedures and options described in §63.985(b)(1)(i)(A) through (C) or §63.11, as appropriate. All data, assumptions, and procedures used in such evaluations must be documented and available for inspection. If you use performance testing to determine solvent flow rate to the control device or destruction efficiency of the device, follow the procedures as outlined in §63.997(e)(1) and (2). Instead of periodic performance testing to demonstrate continued good operation of the control device, you may develop a monitoring plan, following the procedures outlined in §63.988(c) and using operational parametric measurement devices such as fan parameters, percent measurements of lower explosive limits, and combustion temperature.
- (ii) Changes in solvent working capacity. In records you keep on-site, document any process modifications resulting in changes to the solvent working capacity in your vegetable oil production process. *Solvent working capacity* is defined in §63.2872. In general, solvent working capacity is the volume of solvent normally retained in solvent recovery equipment such as the extractor, desolventizer-toaster, solvent storage, working tanks, mineral oil absorber, condensers, and oil/solvent distillation system. If the change occurs during a normal operating period, you must determine the difference in working solvent volume and make a one-time documented adjustment to the solvent inventory.
- (b) Use Equation 1 of this section to determine the actual solvent loss occurring from your affected source for all normal operating periods recorded within a calendar month. Equation 1 of this section follows:

Monthly Actual
$$Solvent = \sum_{i=1}^{n} (SOLV_B - SOLV_B + SOLV_R \pm SOLV_A)_i \qquad (Eq. 1)$$

$$(gal)$$

Where:

SOLV_B= Gallons of solvent in the inventory at the beginning of normal operating period "i" as determined in paragraph (a)(3) of this section.

 $SOLV_E$ = Gallons of solvent in the inventory at the end of normal operating period "i" as determined in paragraph (a)(3) of this section.

SOLV_R= Gallons of solvent received between the beginning and ending inventory dates of normal operating period "i" as determined in paragraph (a)(4) of this section.

 $SOLV_A$ = Gallons of solvent added or removed from the extraction solvent inventory during normal operating period "i" as determined in paragraph (a)(5) of this section.

n = Number of normal operating periods in a calendar month.

- (c) The actual solvent loss is the total solvent losses during normal operating periods for the previous 12 operating months. You determine your actual solvent loss by summing the monthly actual solvent losses for the previous 12 operating months. You must record the actual solvent loss by the end of each calendar month following an operating month. Use the actual solvent loss in Equation 2 of §63.2840 to determine the compliance ratio. Actual solvent loss does not include losses that occur during operating status periods listed in paragraphs (c)(1) through (4) of this section. If any one of these four operating status periods span an entire month, then the month is treated as nonoperating and there is no compliance ratio determination.
- (1) Nonoperating periods as described in paragraph (a)(2)(ii) of this section.
- (2) Initial startup periods as described in §63.2850(c)(2) or (d)(2).
- (3) Malfunction periods as described in §63.2850(e)(2).
- (4) Exempt operation periods as described in paragraph (a)(2)(v) of this section.

§ 63.2854 How do I determine the weighted average volume fraction of HAP in the actual solvent loss?

- (a) This section describes the information and procedures you must use to determine the weighted average volume fraction of HAP in extraction solvent received for use in your vegetable oil production process. By the end of each calendar month following an operating month, determine the weighted average volume fraction of HAP in extraction solvent received since the end of the previous operating month. If you have determined the monthly weighted average volume fraction of HAP in solvent received for 12 or more operating months, then also determine an overall weighted average volume fraction of HAP in solvent received for the previous 12 operating months. Use the volume fraction of HAP determined as a 12 operating months weighted average in Equation 2 of §63.2840 to determine the compliance ratio.
- (b) To determine the volume fraction of HAP in the extraction solvent determined as a 12 operating months weighted average, you must comply with paragraphs (b)(1) through (3) of this section:
- (1) Record the volume fraction of each HAP comprising more than 1 percent by volume of the solvent in each delivery of solvent, including solvent recovered from off-site oil. To determine the HAP content of the material in each delivery of solvent, the reference method is EPA Method 311 of appendix A of this part. You may use EPA Method 311, an approved alternative method, or any other reasonable means for determining the HAP content. Other reasonable means of determining HAP content include, but are not limited to, a material safety data sheet or a manufacturer's certificate of analysis. A certificate of analysis is a legal and binding document provided by a solvent manufacturer. The purpose of a certificate of analysis is to list the test methods and analytical results that determine chemical properties of the solvent and the volume percentage of all HAP components present in the solvent at quantities greater than 1 percent by volume. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. However, if the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.
- (2) Determine the weighted average volume fraction of HAP in the extraction solvent each operating month. The weighted average volume fraction of HAP for an operating month includes all solvent received since the end of the last operating month, regardless of the operating status at the time of the delivery. Determine the monthly weighted average volume fraction of HAP by summing the products of the HAP volume fraction of each delivery and the volume of each delivery and dividing the sum by the total volume of all deliveries as expressed in Equation 1 of this section. Record the result by the end of each calendar month following an operating month. Equation 1 of this section follows:

Where:

Received_i= Gallons of extraction solvent received in delivery "i."

Content_i= The volume fraction of HAP in extraction solvent delivery "i."

Total Received = Total gallons of extraction solvent received since the end of the previous operating month.

n = Number of extraction solvent deliveries since the end of the previous operating month.

(3) Determine the volume fraction of HAP in your extraction solvent as a 12 operating months weighted average. When your source has processed oilseed for 12 operating months, sum the products of the monthly weighted average HAP volume fraction and corresponding volume of solvent received, and divide the sum by the total volume of solvent received for the 12 operating months, as expressed by Equation 2 of this section. Record the result by the end of each calendar month following an operating month and use it in Equation 2 of §63.2840 to determine the compliance ratio. Equation 2 of this section follows:

$$\frac{12\text{-Month Weighted}}{\text{Average of HAP Content}} = \frac{\sum_{i=1}^{12} \left(\text{Received}_{i} * Content_{i}\right)}{\text{Total Received}}$$
(Eq. 2)
(volume fraction)

Where:

Received_i= Gallons of extraction solvent received in operating month "i" as determined in accordance with §63.2853(a)(4).

Content_i= Average volume fraction of HAP in extraction solvent received in operating month "i" as determined in accordance with paragraph (b)(1) of this section.

Total Received = Total gallons of extraction solvent received during the previous 12 operating months.

§ 63.2855 How do I determine the quantity of oilseed processed?

All oilseed measurements must be determined on an *as received* basis, as defined in §63.2872. The as received basis refers to the oilseed chemical and physical characteristics as initially received by the source and prior to any oilseed handling and processing. By the end of each calendar month following an operating month, you must determine the tons as received of each listed oilseed processed for the operating month. The total oilseed processed for an operating month includes the total of each oilseed processed during all normal operating periods that occur within the operating month. If you have determined the tons of oilseed processed for 12 or more operating months, then you must also determine the 12 operating months rolling sum of each type oilseed processed by summing the tons of each type of

oilseed processed for the previous 12 operating months. The 12 operating months rolling sum of each type of oilseed processed is used to calculate the compliance ratio as described in §63.2840.

- (a) To determine the tons as received of each type of oilseed processed at your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (5) of this section:
- (1) The dates that define each operating status period. The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If, prior to the effective date of this rule, your source determines the oilseed inventory on an accounting month rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP. The dates on each oilseed inventory log must be consistent with the dates recorded for the solvent inventory.
- (2) Source operating status. You must categorize the source operation for each recorded time interval. The source operating status for each time interval recorded on the oilseed inventory for each type of oilseed must be consistent with the operating status recorded on the solvent inventory logs as described in §63.2853(a)(2).
- (3) Measuring the beginning and ending inventory for each oilseed. You are required to measure and record the oilseed inventory on the beginning and ending dates of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in §63.2851, to determine the oilseed inventory on an as received basis and maintain readily available records of the oilseed inventory as described by §63.2862(c)(3).
- (4) *Tons of each oilseed received.* Record the type of oilseed and tons of each shipment of oilseed received and added to your on-site storage.
- (5) Oilseed inventory adjustments. In some situations, determining the quantity of oilseed processed directly from the measured oilseed inventory and quantity of oilseed received is not an accurate estimate of the tons of oilseed processed for use in determining compliance ratios. For example, spoiled and molded oilseed removed from storage but not processed by your source will result in an overestimate of the quantity of oilseed processed. In such cases, you must adjust the oilseed inventory and provide a justification for the adjustment. Situations that may require oilseed inventory adjustments include, but are not limited to, the situations listed in paragraphs (a)(5)(i) through (v) of this section:
- (i) Oilseed that mold or otherwise become unsuitable for processing.
- (ii) Oilseed you sell before it enters the processing operation.
- (iii) Oilseed destroyed by an event such as a process malfunction, fire, or natural disaster.
- (iv) Oilseed processed through operations prior to solvent extraction such as screening, dehulling, cracking, drying, and conditioning; but that are not routed to the solvent extractor for further processing.
- (v) Periodic physical measurements of inventory. For example, some sources periodically empty oilseed storage silos to physically measure the current oilseed inventory. This periodic measurement procedure typically results in a small inventory correction. The correction factor, usually less than 1 percent, may be

used to make an adjustment to the source's oilseed inventory that was estimated previously with indirect measurement techniques. To make this adjustment, your plan for demonstrating compliance must provide for such an adjustment.

(b) Use Equation 1 of this section to determine the quantity of each oilseed type processed at your affected source during normal operating periods recorded within a calendar month. Equation 1 of this section follows:

Monthly Quantity of Each Oilseed =
$$\sum_{n=1}^{n} (SEED_{E} - SEED_{F} + SEED_{R} \pm SEED_{A})$$
 (Eq. 1) Processed (tons)

Where:

SEED_B= Tons of oilseed in the inventory at the beginning of normal operating period "i" as determined in accordance with paragraph (a)(3) of this section.

SEED_E= Tons of oilseed in the inventory at the end of normal operating period "i" as determined in accordance with paragraph (a)(3) of this section.

SEED_R= Tons of oilseed received during normal operating period "i" as determined in accordance with paragraph (a)(4) of this section.

SEED_A= Tons of oilseed added or removed from the oilseed inventory during normal operating period "i" as determined in accordance with paragraph (a)(5) of this section.

n = Number of normal operating periods in the calendar month during which this type oilseed was processed.

- (c) The quantity of each oilseed processed is the total tons of each type of listed oilseed processed during normal operating periods in the previous 12 operating months. You determine the tons of each oilseed processed by summing the monthly quantity of each oilseed processed for the previous 12 operating months. You must record the 12 operating months quantity of each type of oilseed processed by the end of each calendar month following an operating month. Use the 12 operating months quantity of each type of oilseed processed to determine the compliance ratio as described in §63.2840. The quantity of oilseed processed does not include oilseed processed during the operating status periods in paragraphs (c)(1) through (4) of this section:
- (1) Nonoperating periods as described in §63.2853 (a)(2)(ii).
- (2) Initial startup periods as described in §63.2850(c)(2) or (d)(2).
- (3) Malfunction periods as described in §63.2850(e)(2).
- (4) Exempt operation periods as described in §63.2853 (a)(2)(v).
- (5) If any one of these four operating status periods span an entire calendar month, then the calendar month is treated as a nonoperating month and there is no compliance ratio determination.

Notifications, Reports, and Records

§ 63.2860 What notifications must I submit and when?

You must submit the one-time notifications listed in paragraphs (a) through (d) of this section to the responsible agency:

- (a) *Initial notification for existing sources.* For an existing source, submit an initial notification to the agency responsible for these NESHAP no later than 120 days after the effective date of this subpart. In the notification, include the items in paragraphs (a)(1) through (5) of this section:
- (1) The name and address of the owner or operator.
- (2) The physical address of the vegetable oil production process.
- (3) Identification of the relevant standard, such as the vegetable oil production NESHAP, and compliance date.
- (4) A brief description of the source including the types of listed oilseeds processed, nominal operating capacity, and type of desolventizer(s) used.
- (5) A statement designating the source as a major source of HAP or a demonstration that the source meets the definition of an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
- (b) Initial notifications for new and reconstructed sources. New or reconstructed sources must submit a series of notifications before, during, and after source construction per the schedule listed in §63.9. The information requirements for the notifications are the same as those listed in the General Provisions with the exceptions listed in paragraphs (b)(1) and (2) of this section:
- (1) The application for approval of construction does not require the specific HAP emission data required in §63.5(d)(1)(ii)(H) and (iii), (d)(2) and (d)(3)(ii). The application for approval of construction would include, instead, a brief description of the source including the types of listed oilseeds processed, nominal operating capacity, and type of desolventizer(s) used.
- (2) The notification of actual startup date must also include whether you have elected to operate under an initial startup period subject to §63.2850(c)(2) and provide an estimate and justification for the anticipated duration of the initial startup period.
- (c) Significant modification notifications. Any existing or new source that plans to undergo a significant modification as defined in §63.2872 must submit two reports as described in paragraphs (c)(1) and (2) of this section:
- (1) Initial notification. You must submit an initial notification to the agency responsible for these NESHAP 30 days prior to initial startup of the significantly modified source. The initial notification must demonstrate that the proposed changes qualify as a significant modification. The initial notification must include the items in paragraphs (c)(1)(i) and (ii) of this section:
- (i) The expected startup date of the modified source.
- (ii) A description of the significant modification including a list of the equipment that will be replaced or modified. If the significant modification involves changes other than adding or replacing extractors,

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desolventizer-toasters (conventional and specialty), and meal dryer-coolers, then you must also include the fixed capital cost of the new components, expressed as a percentage of the fixed capital cost to build a comparable new vegetable oil production process; supporting documentation for the cost estimate; and documentation that the proposed changes will significantly affect solvent losses.

- (2) Notification of actual startup. You must submit a notification of actual startup date within 15 days after initial startup of the modified source. The notification must include the items in paragraphs (c)(2)(i) through (iv) of this section:
- (i) The initial startup date of the modified source.
- (ii) An indication whether you have elected to operate under an initial startup period subject to §63.2850(d)(2).
- (iii) The anticipated duration of any initial startup period.
- (iv) A justification for the anticipated duration of any initial startup period.
- (d) Notification of compliance status. As an existing, new, or reconstructed source, you must submit a notification of compliance status report to the responsible agency no later than 60 days after determining your initial 12 operating months compliance ratio. If you are an existing source, you generally must submit this notification no later than 50 calendar months after the effective date of these NESHAP (36 calendar months for compliance, 12 operating months to record data, and 2 calendar months to complete the report). If you are a new or reconstructed source, the notification of compliance status is generally due no later than 20 calendar months after initial startup (6 calendar months for the initial startup period, 12 operating months to record data, and 2 calendar months to complete the report). The notification of compliance status must contain the items in paragraphs (d)(1) through (6) of this section:
- (1) The name and address of the owner or operator.
- (2) The physical address of the vegetable oil production process.
- (3) Each listed oilseed type processed during the previous 12 operating months.
- (4) Each HAP identified under §63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 operating months period used for the initial compliance determination.
- (5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
- (6) A compliance certification indicating whether the source complied with all of the requirements of this subpart throughout the 12 operating months used for the initial source compliance determination. This certification must include a certification of the items in paragraphs (d)(6)(i) through (iii) of this section:
- (i) The plan for demonstrating compliance (as described in §63.2851) and SSM plan (as described in §63.2852) are complete and available on-site for inspection.
- (ii) You are following the procedures described in the plan for demonstrating compliance.
- (iii) The compliance ratio is less than or equal to 1.00.

§ 63.2861 What reports must I submit and when?

After the initial notifications, you must submit the reports in paragraphs (a) through (d) of this section to the agency responsible for these NESHAP at the appropriate time intervals:

- (a) Annual compliance certifications. The first annual compliance certification is due 12 calendar months after you submit the notification of compliance status. Each subsequent annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. Include the information in paragraphs (a)(1) through (6) of this section in the annual certification:
- (1) The name and address of the owner or operator.
- (2) The physical address of the vegetable oil production process.
- (3) Each listed oilseed type processed during the 12 calendar months period covered by the report.
- (4) Each HAP identified under §63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.
- (5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
- (6) A compliance certification to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, you must include a certification of the items in paragraphs (a)(6)(i) through (ii) of this section:
- (i) You are following the procedures described in the plan for demonstrating compliance.
- (ii) The compliance ratio is less than or equal to 1.00.
- (b) Deviation notification report. Submit a deviation report for each compliance determination you make in which the compliance ratio exceeds 1.00 as determined under §63.2840(c). Submit the deviation report by the end of the month following the calendar month in which you determined the deviation. The deviation notification report must include the items in paragraphs (b)(1) through (4) of this section:
- (1) The name and address of the owner or operator.
- (2) The physical address of the vegetable oil production process.
- (3) Each listed oilseed type processed during the 12 operating months period for which you determined the deviation.
- (4) The compliance ratio comprising the deviation. You may reduce the frequency of submittal of the deviation notification report if the agency responsible for these NESHAP does not object as provided in §63.10(e)(3)(iii).
- (c) Periodic startup, shutdown, and malfunction report. If you choose to operate your source under an initial startup period subject to §63.2850(c)(2) or (d)(2) or a malfunction period subject to §63.2850(e)(2), you

must submit a periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the items in paragraphs (c)(1) through (3) of this section:

- (1) The name, title, and signature of a source's responsible official who is certifying that the report accurately states that all actions taken during the initial startup or malfunction period were consistent with the SSM plan.
- (2) A description of events occurring during the time period, the date and duration of the events, and reason the time interval qualifies as an initial startup period or malfunction period.
- (3) An estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.
- (d) *Immediate SSM reports*. If you handle a SSM during an initial startup period subject to §63.2850(c)(2) or (d)(2) or a malfunction period subject to §63.2850(e)(2) differently from procedures in the SSM plan and the relevant emission requirements in §63.2840 are exceeded, then you must submit an immediate SSM report. Immediate SSM reports consist of a telephone call or facsimile transmission to the responsible agency within 2 working days after starting actions inconsistent with the SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the items in paragraphs (d)(1) through (3) of this section:
- (1) The name, title, and signature of a source's responsible official who is certifying the accuracy of the report, an explanation of the event, and the reasons for not following the SSM plan.
- (2) A description and date of the SSM event, its duration, and reason it qualifies as a SSM.
- (3) An estimate of the solvent loss for the duration of the SSM event with supporting documentation.

[66 FR 19011, Apr. 12, 2001, as amended at 67 FR 16321, Apr. 5, 2002]

§ 63.2862 What records must I keep?

- (a) You must satisfy the recordkeeping requirements of this section by the compliance date for your source specified in Table 1 of §63.2834.
- (b) Prepare a plan for demonstrating compliance (as described in §63.2851) and a SSM plan (as described in §63.2852). In these two plans, describe the procedures you will follow in obtaining and recording data, and determining compliance under normal operations or a SSM subject to the §63.2850(c)(2) or (d)(2) initial startup period or the §63.2850(e)(2) malfunction period. Complete both plans before the compliance date for your source and keep them on-site and readily available as long as the source is operational.
- (c) If your source processes any listed oilseed, record the items in paragraphs (c)(1) through (5) of this section:
- (1) For the solvent inventory, record the information in paragraphs (c)(1)(i) through (vii) of this section in accordance with your plan for demonstrating compliance:
- (i) Dates that define each operating status period during a calendar month.
- (ii) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval.

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- (iii) Record the gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period.
- (iv) The gallons of all extraction solvent received, purchased, and recovered during each calendar month.
- (v) All extraction solvent inventory adjustments, additions or subtractions. You must document the reason for the adjustment and justify the quantity of the adjustment.
- (vi) The total solvent loss for each calendar month, regardless of the source operating status.
- (vii) The actual solvent loss in gallons for each operating month.
- (2) For the weighted average volume fraction of HAP in the extraction solvent, you must record the items in paragraphs (c)(2)(i) through (iii) of this section:
- (i) The gallons of extraction solvent received in each delivery.
- (ii) The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent.
- (iii) The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in accordance with §63.2854(b)(2).
- (3) For each type of listed oilseed processed, record the items in paragraphs (c)(3)(i) through (vi) of this section, in accordance with your plan for demonstrating compliance:
- (i) The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory.
- (ii) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval. On the log for each type of listed oilseed that is not being processed during a normal operating period, you must record which type of listed oilseed is being processed in addition to the source operating status.
- (iii) The oilseed inventory for the type of listed oilseed being processed on the beginning and ending dates of each normal operating period.
- (iv) The tons of each type of listed oilseed received at the affected source each normal operating period.
- (v) All listed oilseed inventory adjustments, additions or subtractions for normal operating periods. You must document the reason for the adjustment and justify the quantity of the adjustment.
- (vi) The tons of each type of listed oilseed processed during each operating month.
- (d) After your source has processed listed oilseed for 12 operating months, and you are not operating during an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2), record the items in paragraphs (d)(1) through (5) of this section by the end of the calendar month following each operating month:
- (1) The 12 operating months rolling sum of the actual solvent loss in gallons as described in §63.2853(c).

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- (2) The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months as described in §63.2854(b)(3).
- (3) The 12 operating months rolling sum of each type of listed oilseed processed at the affected source in tons as described in §63.2855(c).
- (4) A determination of the compliance ratio. Using the values from §§63.2853, 63.2854, 63.2855, and Table 1 of §63.2840, calculate the compliance ratio using Equation 2 of §63.2840.
- (5) A statement of whether the source is in compliance with all of the requirements of this subpart. This includes a determination of whether you have met all of the applicable requirements in §63.2850.
- (e) For each SSM event subject to an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2), record the items in paragraphs (e)(1) through (3) of this section by the end of the calendar month following each month in which the initial startup period or malfunction period occurred:
- (1) A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction.
- (2) An estimate of the solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation.
- (3) A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.

§ 63.2863 In what form and how long must I keep my records?

- (a) Your records must be in a form suitable and readily available for review in accordance with §63.10(b)(1).
- (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, in accordance with §3.10(b)(1). You can keep the records off-site for the remaining 3 years.

Other Requirements and Information

§ 63.2870 What parts of the General Provisions apply to me?

Table 1 of this section shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. Table 1 of §63.2870 follows:

Table 1 of §63.2870—Applicability of 40 CFR Part 63, Subpart A, to 40 CFR, Part 63, Subpart GGGG

General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions; notifications	Yes	
§63.2	Definitions	Definitions for part 63 standards	Yes	Except as specifically provided in this subpart.
§63.3	Units and abbreviations	Units and abbreviations for part 63 standards	Yes	
§63.4	Prohibited activities and circumvention	Prohibited activities; compliance date; circumvention; severability	Yes	
§63.5	Construction/reconstruction	Applicability; applications; approvals	Yes	Except for subsections of §63.5 as listed below.
§63.5(c)	[Reserved]			
§63.5(d)(1)(ii)(H)	Application for approval	Type and quantity of HAP, operating parameters	No	All sources emit HAP. Subpart GGGG does not require control from specific emission points.
§63.5(d)(1)(ii)(l)	[Reserved]			
§63.5(d)(1)(iii), (d)(2), (d)(3)(ii)		Application for approval	No	The requirements of the application for approval for new, reconstructed and significantly modified sources are described in §63.2860(b) and (c) of subpart GGGG. General provision requirements for identification of HAP emission points or estimates of actual emissions are not required. Descriptions of control and methods, and the estimated and actual control efficiency of such do not apply. Requirements for

General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	
				describing control equipment and the estimated and actual control efficiency of such equipment apply only to control equipment to which the subpart GGGG requirements for quantifying.
§63.6	Applicability of General Provisions	Applicability	Yes	Except for subsections of §63.6 as listed below.
§63.6(b)(1)–(3)	Compliance dates, new and reconstructed sources			Section 63.2834 of subpart GGGG specifies the compliance dates for new and reconstructed sources.
§63.6(b)(6)	[Reserved]			
§63.6(c)(3)-(4)	[Reserved]			
§63.6(d)	[Reserved]			
§63.6(e)(1) through (e)(3)(ii) and §63.6(e)(3)(v) through (vii)	Operation and maintenance requirements			Minimize emissions to the extent practical.
§63.6(e)(3)(iii)	Operation and maintenance requirements			Minimize emissions to the extent practical
§63.6(e)(3)(iv)	Operation and maintenance requirements			Report SSM and in accordance with §63.2861(c) and (d).
§63.6(e)(3)(viii)	Operation and maintenance requirements			Except, report each revision to your SSM plan in accordance with §63.2861(c) rather than §63.10(d)(5) as required under §63.6(e)(3) (viii).
§63.6(e)(3)(ix)	Title V permit		Yes	
§63.6(f)–(g)	Compliance with nonopacity emission standards except during SSM	Comply with emission standards at all times except during SSM		Subpart GGGG does not have nonopacity requirements.
§63.6(h)	Opacity/Visible emission (VE) standards		No	Subpart GGGG has no opacity or VE standards.
§63.6(i)	Compliance extension	Procedures and criteria for responsible	Yes	

General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	Explanation
		agency to grant compliance extension		
§63.6(j)	Presidential compliance exemption	President may exempt source category from requirement to comply with subpart	Yes	
§63.7	Performance testing requirements	Schedule, conditions, notifications and procedures		Subpart GGGG requires performance testing only if the source applies additional control that destroys solvent. Section 63.2850(a)(6) requires sources to follow the performance testing guidelines of the General Provisions if a control is added.
§63.8	Monitoring requirements			Subpart GGGG does not require monitoring other than as specified therein.
§63.9	Notification requirements	Applicability and state delegation	Yes	Except for subsections of §63.9 as listed below.
§63.9(b)(2)	Notification requirements	Initial notification requirements for existing sources		Section 63.2860(a) of subpart GGGG specifies the requirements of the initial notification for existing sources.
§63.9(b)(3)–(5)	Notification requirements	Notification requirement for certain new/reconstructed sources		Except the information requirements differ as described in §63.2860(b) of subpart GGGG.
§63.9(e)	Notification of performance test	Notify responsible agency 60 days ahead		Applies only if performance testing is performed.
§63.9(f)	Notification of VE/opacity observations	Notify responsible agency 30 days ahead	No	Subpart GGGG has no opacity or VE standards.
§63.9(g)	Additional notifications when using a continuous monitoring system (CMS)	Notification of performance evaluation; Notification using COMS data; notification that	No	Subpart GGGG has no CMS requirements.

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General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	Explanation
		exceeded criterion for relative accuracy		
§63.9(h)	Notification of compliance status	Contents		Section 63.2860(d) of subpart GGGG specifies requirements for the notification of compliance status.
§63.10	Recordkeeping/reporting	Schedule for reporting, record storage	Yes	Except for subsections of §63.10 as listed below.
§63.10(b)(2)(i)	Recordkeeping	Record SSM event		Applicable to periods when sources must implement their SSM plan as specified in subpart GGGG.
§63.10(b)(2)(ii)–(iii)	Recordkeeping	Malfunction of air pollution equipment		Applies only if air pollution control equipment has been added to the process and is necessary for the source to meet the emission limit.
§63.10(b)(2)(vi)	Recordkeeping	CMS recordkeeping	No	Subpart GGGG has no CMS requirements.
§63.10(b)(2)(viii)— (ix)	Recordkeeping	Conditions of performance test	Yes	Applies only if performance tests are performed. Subpart GGGG does not have any CMS opacity or VE observation requirements.
§63.10(b)(2)(x)– (xii)	Recordkeeping	CMS, performance testing, and opacity and VE observations recordkeeping	No	Subpart GGGG does not require CMS.
§63.10(c)	Recordkeeping	Additional CMS recordkeeping	No	Subpart GGGG does not require CMS.
§63.10(d)(2)	Reporting	Reporting performance test results	Yes	Applies only if performance testing is performed.
§63.10(d)(3)	Reporting	Reporting opacity or VE observations	No	Subpart GGGG has no opacity or VE standards.
§63.10(d)(4)	Reporting	Progress reports	Yes	Applies only if a condition of compliance extension exists.

General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	
§63.10(d)(5)	Reporting	SSM reporting	No	Section 63.2861(c) and (d) specify SSM reporting requirements.
§63.10(e)	Reporting	Additional CMS reports	No	Subpart GGGG does not require CMS.
§63.11	Control device requirements	Requirements for flares	Yes	Applies only if your source uses a flare to control solvent emissions. Subpart GGGG does not require flares.
§63.12	State authority and delegations	State authority to enforce standards	Yes	
§63.13	State/regional 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 and confidentiality	Public and confidential information	Yes	

[66 FR 19011, Apr. 12, 2001, as amended at 67 FR 16321, Apr. 5, 2002; 71 FR 20463, Apr. 20, 2006]

§ 63.2871 Who implements and enforces this subpart?

- (a) This subpart can be implemented by us, the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, as well as the U.S. EPA, has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.
- (c) The authorities that will not be delegated to State, local, or tribal agencies are as follows:
- (1) Approval of alternative nonopacity emissions standards under §63.6(g).
- (2) Approval of alternative opacity standards under §63.6(h)(9).
- (3) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.
- (4) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

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

§ 63.2872 What definitions apply to this subpart?

Terms used in this subpart are defined in the sources listed:

- (a) The Clean Air Act, section 112(a).
- (b) In 40 CFR 63.2, the NESHAP General Provisions.
- (c) In this section as follows:

Accounting month means a time interval defined by a business firm during which corporate economic and financial factors are determined on a consistent and regular basis. An accounting month will consist of approximately 4 to 5 calendar weeks and each accounting month will be of approximate equal duration. An accounting month may not correspond exactly to a calendar month, but 12 accounting months will correspond exactly to a calendar year.

Actual solvent loss means the gallons of solvent lost from a source during 12 operating months as determined in accordance with §63.2853.

Agricultural product means any commercially grown plant or plant product.

Allowable HAP loss means the gallons of HAP that would have been lost from a source if the source was operating at the solvent loss factor for each listed oilseed type. The allowable HAP loss in gallons is determined by multiplying the tons of each oilseed type processed during the previous 12 operating months, as determined in accordance with §63.2855, by the corresponding oilseed solvent loss factor (gal/ton) listed in Table 1 of §63.2840, and by the dimensionless constant 0.64, and summing the result for all oilseed types processed.

Area source means any source that does not meet the major source definition.

As received is the basis upon which all oilseed measurements must be determined and refers to the oilseed chemical and physical characteristics as initially received by the source and prior to any oilseed handling and processing.

Batch operation means any process that operates in a manner where the addition of raw material and withdrawal of product do not occur simultaneously. Typically, raw material is added to a process, operational steps occur, and a product is removed from the process. More raw material is then added to the process and the cycle repeats.

Calendar month means 1 month as specified in a calendar.

Compliance date means the date on which monthly compliance recordkeeping begins. For existing sources, recordkeeping typically begins 3 years after the effective date of the subpart. For new and reconstructed sources, recordkeeping typically begins upon initial startup, except as noted in §63.2834.

Compliance ratio means a ratio of the actual HAP loss in gallons from the previous 12 operating months to an allowable HAP loss in gallons, which is determined by using oilseed solvent loss factors in Table 1 of §63.2840, the weighted average volume fraction of HAP in solvent received for the previous 12 operating months, and the tons of each type of listed oilseed processed in the previous 12 operating months. Months during which no listed oilseed is processed, or months during which the §63.2850(c)(2) or (d)(2) initial

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startup period or the §63.2850(e)(2) malfunction period applies, are excluded from this calculation. Equation 2 of §63.2840 is used to calculate this value. If the value is less than or equal to 1.00, the source is in compliance. If the value is greater than 1.00, the source is deviating from compliance.

Continuous operation means any process that adds raw material and withdraws product simultaneously. Mass, temperature, concentration and other properties typically approach steady-state conditions.

Conventional desolventizer means a desolventizer toaster that operates with indirect and direct-contact steam to remove solvent from the extracted meal. Oilseeds processed in a conventional desolventizer produce crude vegetable oil and crude meal products, such as animal feed.

Corn germ dry milling means a source that processes corn germ that has been separated from the other corn components using a "dry" process of mechanical chafing and air sifting.

Corn germ wet milling means a source that processes corn germ that has been separated from other corn components using a "wet" process of centrifuging a slurry steeped in a dilute sulfurous acid solution.

Exempt period means a period of time during which a source processes agricultural products not defined as listed oilseed.

Extraction solvent means an organic chemical medium used to remove oil from an oilseed. Typically, the extraction solvent is a commercial grade of hexane isomers which have an approximate HAP content of 64 percent by volume.

Hazardous air pollutant (HAP) means any substance or mixture of substances listed as a hazardous air pollutant under section 112(b) of the Clean Air Act, as of April 12, 2001.

Initial startup date means the first calendar day that a new, reconstructed or significantly modified source processes any listed oilseed.

Initial startup period means a period of time from the initial startup date of a new, reconstructed or significantly modified source, for which you choose to operate the source under an initial startup period subject to §63.2850(c)(2) or (d)(2). During an initial startup period, a source complies with the standards by minimizing HAP emissions to the extent practical. The initial startup period following initial startup of a new or reconstructed source may not exceed 6 calendar months. The initial startup period following a significant modification may not exceed 3 calendar months. Solvent and oilseed inventory information recorded during the initial startup period is excluded from use in any compliance ratio determinations.

Large cottonseed plant means a vegetable oil production process that processes 120,000 tons or more of cottonseed and other listed oilseed during all normal operating periods in a 12 operating months period used to determine compliance.

Malfunction period means a period of time between the beginning and end of a process malfunction and the time reasonably necessary for a source to correct the malfunction for which you choose to operate the source under a malfunction period subject to §63.2850(e)(2). This period may include the duration of an unscheduled process shutdown, continued operation during a malfunction, or the subsequent process startup after a shutdown resulting from a malfunction. During a malfunction period, a source complies with the standards by minimizing HAP emissions to the extent practical. Therefore, solvent and oilseed inventory information recorded during a malfunction period is excluded from use in any compliance ratio determinations.

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Mechanical extraction means removing vegetable oil from oilseeds using only mechanical devices such as presses or screws that physically force the oil from the oilseed. Mechanical extraction techniques use no organic solvents to remove oil from an oilseed.

Nonoperating period means any period of time in which a source processes no agricultural product. This operating status does not apply during any period in which the source operates under an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period, as described in §63.2850(e)(2).

Normal operating period means any period of time in which a source processes a listed oilseed that is not categorized as an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period, as described in §63.2850(e)(2). At the beginning and ending dates of a normal operating period, solvent and oilseed inventory information is recorded and included in the compliance ratio determination.

Oilseed or listed oilseed means the following agricultural products: corn germ, cottonseed, flax, peanut, rapeseed (for example, canola), safflower, soybean, and sunflower.

Oilseed solvent loss factor means a ratio expressed as gallons of solvent loss per ton of oilseed processed. The solvent loss factors are presented in Table 1 of §63.2840 and are used to determine the allowable HAP loss.

Operating month means any calendar or accounting month in which a source processes any quantity of listed oilseed, excluding any entire calendar or accounting month in which the source operated under an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2). An operating month may include time intervals characterized by several types of operating status. However, an operating month must have at least one normal operating period.

Significant modification means the addition of new equipment or the modification of existing equipment that:

- (1) Significantly affects solvent losses from your vegetable oil production process:
- (2) The fixed capital cost of the new components represents a significant percentage of the fixed capital cost of building a comparable new vegetable oil production process;
- (3) The fixed capital cost of the new equipment does not constitute reconstruction as defined in §63.2; and
- (4) Examples of significant modifications include replacement of or major changes to solvent recovery equipment such as extractors, desolventizer-toasters/dryer-coolers, flash desolventizers, and distillation equipment associated with the mineral oil system, and equipment affecting desolventizing efficiency and steady-state operation of your vegetable oil production process such as flaking mills, oilseed heating and conditioning equipment, and cracking mills.

Small cottonseed plant means a vegetable oil production process that processes less than 120,000 tons of cottonseed and other listed oilseed during all normal operating periods in a 12 operating months period used to determine compliance.

Solvent extraction means removing vegetable oil from listed oilseed using an organic solvent in a direct-contact system.

Solvent working capacity means the volume of extraction solvent normally retained in solvent recovery equipment. Examples include components such as the solvent extractor, desolventizer-toaster, solvent storage and working tanks, mineral oil absorption system, condensers, and oil/solvent distillation system.

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Specialty desolventizer means a desolventizer that removes excess solvent from soybean meal using vacuum conditions, energy from superheated solvent vapors, or reduced operating conditions (e.g., temperature) as compared to the typical operation of a conventional desolventizer. Soybeans processed in a specialty desolventizer result in high-protein vegetable meal products for human and animal consumption, such as calf milk replacement products and meat extender products.

Vegetable oil production process means the equipment comprising a continuous process for producing crude vegetable oil and meal products, including specialty soybean products, in which oil is removed from listed oilseeds through direct contact with an organic solvent. Process equipment typically includes the following components: oilseed preparation operations (including conditioning, drying, dehulling, and cracking), solvent extractors, desolventizer-toasters, meal dryers, meal coolers, meal conveyor systems, oil distillation units, solvent evaporators and condensers, solvent recovery system (also referred to as a mineral oil absorption system), vessels storing solvent-laden materials, and crude meal packaging and storage vessels. A vegetable oil production process does not include vegetable oil refining operations (including operations such as bleaching, hydrogenation, and deodorizing) and operations that engage in additional chemical treatment of crude soybean meals produced in specialty desolventizer units (including operations such as soybean isolate production).

[66 FR 19011, Apr. 12, 2001, as amended at 71 FR 20464, Apr. 20, 2006]

Indiana Department of Environmental Management

Office of Air Quality

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

Source Background and Description

Source Name: Bunge North America (East), Inc.

Source Location: 700 N Range Line Rd, Morristown, IN 46161

County: Shelby **SIC Code:** 2075

Permit Renewal No.: T145-28055-00035
Permit Reviewer: Teresa Freeman

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Bunge North America (East), Inc. relating to the operation of a stationary soybean processing plant.

On October 28, 2008, Bunge North America (East), Inc. submitted an application to the OAQ requesting to renew its operating permit. Bunge North America (East), Inc. was issued a Part 70 Operating Permit on June 29, 2004.

On January 16, 2007, a consent decree was entered into between U.S. EPA and Bunge North America. The consent decree addresses claims for violations of New Source Review requirements at Part C and Part D of Title I of the Act, 42 U.S.C. §§ 7470-7492 and 7501-7515, and regulations promulgated there under; certain New Source Performance Standards ("NSPS"), 40 C.F.R. Part 60; the state implementation plans ("SIPs") that implement the above-listed federal requirements; and SIP permitting programs for construction and operation of new and modified stationary sources of air pollution. On June 26, 2008, IDEM issued Significant Permit Modification No. 145-25639-00035 to satisfy the requirements of the consent decree relating to the solvent extraction processes.

Permitted Emission Units and Pollution Control Equipment

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

- (a) Truck receiving operations, constructed in 1996, consisting of the following units, using the truck receiving/storage baghouse for control, and exhausting at stack Pt #1:
 - (1) Two (2) truck dumps (#1 & #2);
 - (2) Two (2) truck receiving conveyors (#1 & #2);
 - (3) Two (2) receiving legs (#1 & #2), using the truck receiving/storage baghouse and oil applications;
 - (4) One (1) screen;
 - (5) Two (2) receiving legs (#1 & #2) extending from the screen;
 - (6) Two (2) screening conveyors:
 - (7) One (1) screening leg;
 - (8) One (1) screening leg;
 - (9) Two (2) conveyors (#1 & #2) extending to storage silos and to bulk storage;

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- (10) Two (2) conveyors extending to bulk storage feeding and continuing to the bulk storage silos;
- (11) Ten (10) silos;
- (12) One (1) screening bin;
- (13) Two (2) bulk storage bins;
- (14) One (1) screening conveyor extending from the screening silo;
- (15) One (1) screening storage conveyor;
- (16) Two (2) totally enclosed screenings transfer conveyors arranged in a series, transferring screenings from the screenings storage conveyors to the screening bucket elevator;
- One (1) screening bucket elevator, transferring screenings from the screenings transfer conveyors to the screenings surge bin;
- (18) Two (2) bulk storage return conveyors (#1 & #2) arranged in a series;
- (19) Two (2) conveyors from storage (#1 & #2);
- (20) One (1) conveyor extending to the surge bin leg;
- One (1) truck receiving/storage baghouse conveyor which transfers dust from the baghouse back to the screening leg;
- (22) Two (2) screens, identified as #4, with a total maximum throughput rate of 1,210 tons per hour;
- (23) One (1) transfer system, identified as #9a, with a maximum throughput rate of 1,150 tons per hour, transferring soybeans from the bulk storage elevator to the bulk storage silos;
- One (1) enclosed whole bean conveyor, identified as #16a, with a maximum throughput rate of 340 tons per hour, conveying beans from the surge bin leg to the whole bean surge silo (#28a);
- One (1) whole bean surge silo, identified as #28a, with a maximum storage capacity of 40,000 bushels;
- One (1) enclosed conveyor, identified as #29a, approved in 2009 for construction, with a maximum throughput of 1200 tons per hour;
- One (1) walled and tarped ground pile, identified as #29b, approved in 2009 for construction, with ten (10) aeration fans and a maximum storage capacity of 1,300,000 bushels;
- One (1) grain reclaim truck loadout operation, identified as #29c, approved in 2009 for construction, with a maximum throughput rate of 648 tons per hour;

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(29) One (1) grain reclaim truck dump operation, identified as #29d, approved in 2009 for construction, with a maximum throughput rate of 648 tons per hour;

- (30) One (1) enclosed conveyor, identified as #17a, with a maximum throughput rate of 40 tons per hour, conveying the dust from the truck receiving/storage baghouse to the screening leg;
- (31) One (1) new bean screening screw conveyor, identified as #1a, with a maximum throughput rate of 36 tons per hour, transferring soybeans from the screening system (#4) to the screening leg baghouse;
- (32) Two (2) screening legs, identified as #7a;
- (33) Two (2) transfer conveyors aspirated to truck receiving/storage baghouse, identified as #13a; and

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- (34) Four (4) aspirators between conveyor from storage, identified as #16, and surge bin leg, identified as #27, aspirated to truck receiving/storage baghouse.
- (b) Rail receiving operations, constructed in 1996, consisting of the following units, using the truck receiving baghouse for control, and exhausting at stack Pt #1:
 - (1) One (1) rail car dump; and
 - (2) One (1) rail car receiving conveyor;
- (c) One (1) column dryer, constructed in 1996, exhausting at stack Pt #3;
- (d) Milling operations, constructed in 1996, consisting of the following units, using the RF filter baghouse for control, and exhausting at stack Pt #4:
 - (1) One (1) soy bean scale with upper and lower scale garners;
 - (2) Six (6) cracking rolls with primary dehulling aspirators, using the primary aspiration cyclone and RF filter baghouse for control;
 - (3) Three (3) conveyors extending from the primary dehulling aspirators, with a maximum combined capacity of 100 tons per hour;
 - (4) Three (3) surge bins;
 - (5) Three (3) cracked bean conditioners;
 - (6) Three (3) conveyors extending from the cracked bean conditioners;
 - (7) Three (3) impactors with secondary dehulling aspirators, using the secondary aspiration cyclones and RF filter baghouse for control;
 - (8) One (1) primary aspiration cyclone;
 - (9) One (1) secondary aspiration cyclone;
 - (10) Two (2) hull refining screeners, exhausting to the hull refining cyclone;

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(11) Four (4) hull refining aspirators, exhausting to the hull refining cyclone;

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- (12) One (1) hull refining cyclone;
- (13) Two (2) millfeed grinders;
- (14) Three (3) surge bins;
- (15) One (1) meal screen;
- (16) Two (2) hammer mills;
- (17) Two (2) totally enclosed sized meal conveyors, in a series; and
- (18) One (1) millfeed weight belt;
- (e) Flaking mill operations, constructed in 1996, consisting of the following units, using the flaker aspiration baghouse, and exhausting at stack Pt #6:
 - (1) Nine (9) flakers; and
 - (2) One (1) flake collecting conveyor;
- (f) One (1) flow coating material bin, using the flow coat receiving baghouse for control, and exhausting at stack Pt #11;
- (g) Truck meal loadout operations, constructed in 1996, consisting of the following units, using the truck meal loadout baghouse, and exhausting at stack Pt #12:
 - (1) One (1) mixer, extending from the hull grinders;
 - (2) One (1) millfeed elevator leg;
 - (3) One (1) totally enclosed millfeed conveyor;
 - (4) Three (3) millfeed bins;
 - (5) One (1) millfeed weigh belt;
 - (6) One (1) meal conveyor extending from the coolers;
 - (7) One (1) DTDC unground meal conveyor extending to another set of conveyors;
 - (8) One (1) unground meal conveyor;
 - (9) One (1) feeder;
 - (10) One (1) flow coating material screw;
 - (11) One (1) mixing screw conveyor;
 - (12) One (1) production meal elevator;
 - (13) One (1) product meal conveyor #2;

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- (14) Six (6) meal storage bins;
- (15) One (1) truck load out conveyor;
- (16) One (1) truck loader; and
- (17) One (1) truck scale;
- (h) Rail meal loadout operations, constructed in 1996, consisting of the following units, using the rail meal loadout baghouse, and exhausting at stack Pt #13:
 - (1) a rail load out conveyor;
 - (2) One (1) rail scale; and
 - (3) One (1) rail loader;
- (i) Oil extraction and processing operations, constructed in 1996, consisting of the following units:
 - (1) One (1) soybean oil extractor, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (2) One (1) set of evaporators, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (3) One (1) desolventizer/toaster, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - One (1) set of condensers and water separators to separate hexane and water, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (5) Two (2) mineral oil absorbers, using a mineral oil absorber for control, and exhausting at stack Pt #9;
 - (6) One (1) spent flake conveyor extending to the meal dryer;
 - (7) One (1) totally enclosed seal screw conveyor, installed in a series with the slurry loader conveyor;
 - (8) One (1) flake conveyor extending to the slurry loader conveyor;
 - (9) One (1) slurry loader conveyor;
 - (10) One (1) hexane storage tank, identified as #1 (storage);
 - (11) One (1) hexane storage tank, identified as #2 (process tank);
 - (12) One (1) hexane storage tank, identified as #3 (work/separation);
- (j) Two (2) DTDC meal dryers (#1 & #2), both constructed in 1996, using a cyclone for control and exhausting at stack Pt #7;

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- (k) One (1) cyclone for the control of the meal dryers, constructed in 1996, and exhausting at stack Pt #7;
- (I) Two (2) DTDC meal coolers (#1 & #2), both constructed in 1996, using a cyclone for control, and exhausting at stack Pt #8;
- (m) One (1) cyclone for the control of the meal coolers, constructed in 1996, and exhausting at stack Pt #8;
- (n) One (1) boiler, identified as the Murray boiler, constructed in 1996, firing natural gas, vegetable oil, #2 distillate fuel oil, or blends of vegetable oil and #2 distillate fuel oil, rated at 96 million Btu per hour:
- (o) One (1) vegetable oil refinery process, constructed in 2002, consisting of crude vegetable oil receiving, storage, filtration, and degumming equipment; lecithin drying and processing equipment; oil refining, deodorizing, and filtration equipment; bulk oil handling, blending, storage, and loadout facilities; and including the following equipment:
 - (1) One (1) storage silo, identified as R-101, equipped with a baghouse for particulate matter control, exhausting to Stack R-101;
 - One (1) surge tank, identified as R-102, equipped with a baghouse for particulate matter control, exhausting to Stack R-102;
 - One (1) storage silo, identified as R-103, equipped with a baghouse for particulate matter control, exhausting to Stack R-103;
 - (4) One (1) surge tank, identified as R-104, equipped with a baghouse for particulate matter control, exhausting to Stack R-104;
 - (5) One (1) storage silo, identified as R-105, equipped with a baghouse for particulate matter control, exhausting to Stack R-105;
 - (6) One (1) surge tank, identified as R-106, equipped with a baghouse for particulate matter control, exhausting to Stack R-106; and
 - (7) One (1) natural gas-fired boiler, identified as R-107, exhausting to Stack R-107.
- (p) One (1) pelletizing mill, labeled as part of EU# 26, with a maximum rate of 36,000 lbs raw material per hour (18 tph), where air stream from mill does not vent to atmosphere but instead passes on to pellet cooler;
- (q) One (1) pellet cooler, labeled as part of EU# 26, with a maximum rate of 36,000 lbs raw material per hour (18 tph), using a high efficiency cyclone control device with a rating of 0.01 grains/dscf and 7,500 acfm at stack Pt#26;
- (r) One (1) totally enclosed drag conveyor, with a maximum rate of 18 tons per hour;
- (s) One (1) totally enclosed "L" path conveyor, with a maximum rate of 18 tons per hour; and
- (t) One (1) bucket leg, with a maximum rate of 18 tons per hour.

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(u) One (1) screening bin, identified as #10a.

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- - (w) One (1) totally enclosed dryer feed conveyor to the dryer feed elevator, identified as #29a.

Three (3) totally enclosed conveyors to hull refining screener, identified as #25a.

(x) Two (2) hull refining screeners, identified as #48a.

(v)

- (y) Four (4) hull refining aspirators, identified as #49a, exhausting to hull refining cyclone.
- (z) One (1) totally enclosed millfeed conveyor to storage, identified as #53a.
- (aa) One (1) millfeed elevator, identified as #54a, controlled by truck load out baghouse, and exhausting at stack Pt #12.
- (ab) One (1) seal screw conveyor, identified as #61a.
- (ac) The following emission units used in the one (1) totally enclosed sized meal conveyor, identified as #79a, aspirated to meal sizing system baghouse for control, and exhausting through stack Pt #24:
 - (1) One (1) enclosed meal screener feeder conveyor, identified as #74a, with a maximum throughput rate of 80 tons per hour, conveying the meal produced to the meal screen system.
 - One (1) enclosed meal grinder feed conveyor, identified as #75a, with a maximum throughput rate of 80 tons per hour, conveying the meal from the meal screen system to meal feeders.
 - One (1) meal grinding system, identified as #76, consisting of three (3) hammer mills, with a total maximum process rate of 80 tons per hour. This process rate is limited by the maximum throughput rate of the conveyors.
 - (4) Two (2) enclosed sized meal conveyors, identified as #78a, with a total maximum throughput rate of 80 tons per hour, conveying the ground meal from the meal grinding system (#76) to the meal handling system.
- (ad) Grain screening operations, consisting of the following units, using the screenings baghouse, and exhausting at stack Pt #5:
 - (1) One (1) screening surge bin;
 - (2) One (1) conveyor extending to the de-stoner;
 - (3) One (1) de-stoner, using a cyclone and the screening baghouse for control;
 - (4) One (1) screening grinder;
 - (5) Four (4) totally enclosed conveyors in a series, extending to the hull refining screener;
 - (6) One (1) cyclone exhausting to the screening baghouse;
 - (7) One (1) surge bin elevator;
 - (8) One (1) whole bean surge bin;

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 - (9) One (1) dryer feed elevator;
 - (10) One (1) totally enclosed dryer feed conveyor, transferring beans to the dryer feed elevator;
 - (11) Two (2) whole bean aspirators, in parallel;
 - (12) One (1) dryer discharge conveyor;
 - (13) One (1) day bin elevator;
 - (14) Two (2) day bins;
 - (15) Two (2) totally enclosed conveyors, arranged in a series;
 - (16) Two (2) conveyors extending from the dryer to the dryer discharge conveyor;
 - (17) One (1) milling elevator;
 - (18) One (1) product meal conveyor, identified as #1
 - (19) One (1) meal surge conveyor, identified as #2;
 - (20) Three (3) meal storage silos;
 - (21) One (1) load out leg conveyor;
 - (22) One (1) load out meal elevator;
 - (23) One (1) meal transfer conveyor; and
 - (24) One (1) screening transfer conveyor to screenings bucket elevator.

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- (ae) One (1) totally enclosed millfeed conveyor to storage, identified as #2b.
- (af) One (1) millfeed elevator, identified as #3b, exhausting at stack Pt #12.
- (ag) One (1) aspirator between milling leg and bean scale, identified as #4b, aspirated to milling baghouse, and exhausting at stack Pt #4.
- (ah) One (1) totally enclosed hull collecting conveyor, identified as #5b, feeding the "B" plant hull refining screener.
- (ai) One (1) "B" plant whole bean surge bin #2, identified as #6b.
- (aj) One (1) "B" plant hull grinder, identified as #7b, discharging to the screening baghouse, and exhausting at stack Pt #5.
- (ak) One (1) "B" plant whole soybean feed bucket elevator, identified as #8b, controlled by the screening baghouse, and exhausting at stack Pt #5.
- (al) One (1) "B" plant totally enclosed bean heater discharge conveyor, identified as #9b.

- (am) One (1) "B" plant whole bean aspiration, identified as #10b, controlled by the screening baghouse, and exhausting at stack Pt #4.
- (an) One (1) "B" plant bean weighing system, identified as #11b, controlled by the screening baghouse, and exhausting at stack Pt #4.
- (ao) One (1)"B" plant totally enclosed millfeed grinding conveyor, identified as #12b, controlled by the screening baghouse, and exhausting at stack Pt #5.
- (ap) Two (2) "B" plant hull refining screeners, identified as #13b, controlled by the screening baghouse, and exhausting at stack Pt #5.
- (aq) Two (2) "B" plant aspirator, identified as #14b, controlled by a hull refining cyclone, exhausting at stack Pt #18.
- (ar) One (1) "B" plant totally enclosed feed conveyor, identified as #15b.
- (as) One (1) "B" plant bean heater, identified as #16b, controlled by a bean heater cyclone, and exhausting at stack Pt # 25.
- (at) One (1) totally enclosed "B" plant soybean conveyor (feeding the jet dryers), identified as #17b, controlled by a cyclone, and exhausting at stack Pt # 18.
- (au) One (1) set of "B" plant jet dryers, identified as #18b, controlled by a dryer cyclone, and exhausting at stack Pt # 18.
- (av) One (1) "B" plant bean heaters cyclone, identified as #19b, exhausting at stack Pt # 18A.
- (aw) One (1) "B" plant bean dryers cyclone, identified as #20b, exhausting at stack Pt # 18A.
- (ax) Two (2) "B" plant hulloosenators, identified as #21b.
- (ay) One (1) set of "B" plant cascade dryers controlled by CCD cyclone and exhausted at stack Pt #18, identified as #22b.
- (az) One (1) set of "B" plant cracking rolls, identified as #23b.
- (ba) One (1) set of "B" plant cascade coolers, identified as #24b, controlled by a cyclone, and exhausting at stack Pt # 18.
- (bb) Two (2) "B" plant totally enclosed after cascade coolers conveyors (feeding the flakers), identified as #25b, controlled by a soybean flaking baghouse, and exhausting at stack Pt #19.
- (bc) One (1) "B" plant cyclone, identified as #26b, exhausting at stack Pt # 18A.
- (bd) One (1) set of "B" plant flakers, identified as #27b, controlled by a flakers baghouse, and exhausting at stack Pt # 19.
- (be) One (1) "B" plant flakers baghouse, identified as #28b, exhausting at stack Pt # 19.
- (bf) Two (2) "B" plant totally enclosed flake conveyors (feeding the seal conveyor), identified as #29b.

- (bg) One (1) "B" plant totally enclosed seal screw conveyor (feeding the slurry loader conveyor), identified as #30b.
- (bh) One (1) "B" plant totally enclosed slurry loader conveyor (feeding the extractor), identified as #31b.
- (bi) One (1) "B" plant soybean oil extractor, identified as #32b, controlled by one (1) mineral oil absorption system, and exhausted at stack Pt # 23.
- (bj) A set of "B" plant evaporators, identified as #33b, controlled by two (2) mineral oil absorption systems, and exhausted at stack Pt # 23.
- (bk) A set of "B" plant condensers, hexane handling system and water separator to separate hexane and water, identified as #34b, controlled by one (1) mineral oil absorption system, and exhausted at stack Pt # 23.
- (bl) One (1) "B" plant mineral oil absorption system with a mineral oil to control hexane emissions, identified as #35b, and exhausted at stack Pt # 23.
- (bm) One (1) totally enclosed "B" plant spent flake conveyor, identified as #36b.
- (bn) Two (2) "B" plant meal dryers (#1 & #2), identified as #37b, controlled by one (1) dryer cyclone, and exhausting at stack Pt # 21.
- (bo) One (1) "B" plant meal cooler (#3), identified as #38b, controlled by one (1) cooler cyclone, and exhausting at stack Pt # 22.
- (bp) Four (4) "B" plant totally enclosed unground meal conveyors in series (meal screening system), identified as #39b.
- (bq) One (1) meal sizing baghouse, identified as #40b, exhausting at stack Pt #24.
- (br) One (1) boiler, identified as Boiler No. 2, firing natural gas, vegetable oil, #2 distillate fuel oil, or blends of vegetable oil and #2 distillate fuel oil, rated at 240 million Btu per hour, controlled by low NOx burners and flue gas recirculation, and exhausting at stack Pt. # 20.
- (bs) One (1) screening leg, identified as #41b, transferring screenings from the screenings transfer conveyors to the screening surge bin.
- (bt) One (1) totally enclosed dryer feed conveyor, identified as #43b, transferring beans to the dryer feed elevator, controlled by screening baghouse, and exhausting at stack Pt #5.
- (bu) One (1) whole bean surge silos discharge conveyors feeding "B" Milling bucket elevator, identified as #49b, controlled by screenings baghouse and exhausting at stack Pt #5.
- (bv) One (1) "B" milling bucket elevator, identified as #50b, controlled by the Milling aspiration baghouse and exhausting at stack Pt #4.
- (bw) One (1) bean heater feed bucket elevator, identified as #51b, controlled by the screenings baghouse and exhausting at stack Pt #5.
- (bx) One (1) bean heater discharge bucket elevator, identified as #52b, controlled by the screenings baghouse and exhausting at stack Pt #5.

- (by) One (1) screenings transfer conveyors to the cracking rolls, identified as #53b, controlled by East jet dryer cyclone and exhausting at stack Pt #18.
- (bz) One (1) hull grinder controlled screenings baghouse and exhausting at stack Pt #5.
- (ca) One (1) "B" unground meal bucket elevator, identified as #55b, controlled by meal grinding baghouse at stack Pt #24.
- (cb) One (1) "B" DT feed conveyor, identified as #56b.
- (cc) One (1) "B" desolventizer toaster, identified as #57b, controlled by the mineral oil absorption system and exhausting at stack Pt #23.
- (cd) One (1) "B" above ground hexane storage tank controlled by the mineral oil absorption system and exhausting at stack Pt #23.

Insignificant Activities

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

- (a) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower [326 IAC 6-3-2];
- (b) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment [326 IAC 6-3-2];
- (c) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:
 - (1) One (1) #2 fuel oil storage tank, identified as #4, with a capacity of 3,958 cubic feet [326 IAC 12];
 - One (1) soybean oil storage tank, identified as #6, with a capacity of 38,000 cubic feet [326 IAC 12];
 - (3) One (1) soybean oil storage tank, identified as #7, with a capacity of 38,000 cubic feet [326 IAC 12];
 - (4) One (1) #2 fuel oil storage tank, identified as #10, with a capacity of 3,958 cubic feet [326 IAC 12]; and
- (d) Paved and unpaved roads and parking lots with public access [326 IAC 6-5].

Existing Approvals

The source was issued Part 70 Operating Permit No. 145-9004-00035 on June 29, 2004. The source has since received the following approvals:

(a) Administrative Amendment No. 145-19331-00035, issued on August 11, 2004;

- (b) Administrative Amendment No. 145-19517-00035, issued on September 7, 2004;
- (c) Significant Source Modification No. 145-21206-00035, issued July 21, 2005;
- (d) Significant Permit Modification No. 145-21327-00035, issued on August 3, 2005;
- (e) Minor Source Modification No. 145-21892-00035, issued December 6, 2005;
- (f) Significant Permit Modification No. 145-21512-00035, issued on January 12, 2006;
- (g) Significant Permit Modification No. 145-21927-00035, issued on February 3, 2006;
- (h) Administrative Amendment No. 145-22619-00035, issued on March 27, 2006;
- (i) Significant Permit Modification No. 145-19796-00035, issued August 9, 2006;
- (j) Significant Permit Modification No. 145-25639-00035, issued June 26, 2008;
- (k) Significant Source Modification No. 145-27878-00035, issued September 2, 2009; and
- (I) Significant Permit Modification No. 145-28130-00035, issued September 21, 2009.

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.

Air Pollution Control Justification as an Integral Part of the Process

During the permit application process for CP145-14642-00035, Central Soya (now Bunge NA (East), Inc. submitted the following justification such that the baghouses associated with the three (3) silos and three (3) surge tanks identified as R-101 through R-106 be considered as an integral part of the vegetable oil refinery process:

A positive displacement blower will be used to provide air as the motive force for conveying the material through contained piping to the appropriate location. The entire stream of air and dry product enters the filter. The material retained by the filter falls into the storage bins. The filters for these units are not pollution control devices but are mechanisms to separate product (dry material) from the air stream.

IDEM, OAQ evaluated the justifications and agreed in CP-145-14642-00035 that the baghouses associated with the three (3) silos and three (3) surge tanks, identified as R-101 through R-106, will be considered as an integral part of the vegetable oil refinery process. Therefore, the permitting level will be determined using the potential to emit after the baghouses. Operating conditions in the permit will specified that these baghouses shall operate at all times when the material transfer processes are in operation.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Shelby County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Attainment effective October 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

Unclassifiable or attainment effective April 5, 2005, for PM2.5.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Shelby County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Shelby County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants

Shelby County has been classified as attainment or unclassifiable in Indiana for PM₁₀, SO₂, NO₂, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Fugitive Emissions

This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, however, grain elevators are one of the categories of sources regulated by a New Source Performance Standard that was in effect on August 7, 1980, therefore fugitive emissions from the emission units in the affected source category are counted toward the determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions					
Pollutant	Tons/year				
PM	Greater than 250				
PM ₁₀	Greater than 250				
PM _{2.5}	Greater than 250				
SO ₂	Greater than 250				
VOC	Greater than 250				
СО	Greater than 100, Less 250				
NO _X	Greater than 250				
Hexane	Greater than 10				
Total	Greater than 25				

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM₁₀, PM_{2.5}, SO₂, and VOC is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (d) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there is an applicable New Source Performance Standard that was in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD applicability.

Part 70 Permit Conditions

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

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

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all NSR limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

						-	
Process/Emission Unit	PM	PM10	SO ₂	NOx	VOC	СО	Total HAPs
Truck receiving Operations (Pt#1)	9.37	9.37				-	
Rail Receiving & Conveying (Pt #1)	0.62	0.62					
Milling Operations (Pt #4)	5.69	5.69					
A Flaking & Conveying (Pt #6)	1.8	1.8					
Flow coating material bin (Pt #11)	0.11	0.11					
Truck meal loadout operations (Pt #12)	7.23	7.23					
Rail meal loadout operations (Pt #13)	0.44	0.44					
A Extractor & Processing (Pt #9)	0	0			24.2	1	greater than 10
DTDC meal dryers, #1 and #2 (Pt #7)	16.6	16.6			32.2		
DTDC meal coolers, #1 and #2 (Pt #8)	24.97	24.97			32.2		
Vegetable oil refinery process (R-101 through R-106)	4.51	4.51					
Pellet Mill Operations (Pt #26)	12	6				1	
Grain screening operations (Pt #5)	6.66	6.66				-	
Bean Heater (Pt #25)	2.72	2.72					
B Hot Dehulling (Pt #18)	113	113					
B Flaking (Pt #19)	3.02	3.02					
B Meal Dryer (Pt #21)	19.97	19.97			322		
B Meal Cooler (Pt # 22)	16.5	16.5			32.2		
Meal Grinding Pt #24)	5.65	5.65					
B Extractor & Processing (Pt #23)	0	0			24.2		greater than 10

Process/Emission Unit	PM	PM10	SO ₂	NOx	voc	СО	Total HAPs
Column dryer (Pt #3)	13.3	3.31					
Boilers/Column Dryer	21.5	21.5	735.9	225.3	182.6	135.7	Less than 0.01
Soybean Ground Pile System (Pt 29a-29d)	6.87	2.50					
Fugitive Emissions	>1.07	>0.21					
Total PTE of Entire Source	>292.6	>272.2	735.9	225.3	378.2	135.7	Greater than 10 for a single HAP
PSD Major Source Thresholds	250	250	250	250	250	250	N/A

(a) This existing stationary source is major for PSD because the emissions of at least one attainment pollutant are greater than two hundred fifty (>250) tons per year, and it is not in one of the twenty-eight (28) listed source categories.

Federal Rule Applicability

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Truck receiving Operations (Pt#1)-PM	baghouse	Υ	201.5	9.37	100	N*	N
Truck receiving Operations (Pt#1)-PM10	baghouse	Y	59.6	9.37	100	N	N
Rail Revieving & conveying (Pt #1)-PM	baghouse	Y	56.1	0.62	100	N	N
Rail Revieving & conveying (Pt #1)-PM10	baghouse	Y	13.7	0.62	100	N	N
Milling operations (Pt #4)-PM	baghouse	Y	156.1	5.69	100	Υ	N
Milling operations (Pt #4)-PM10	baghouse	Υ	216.8	5.69	100	Υ	N

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Flaking Mill operations (Pt #6)-PM	baghouse	Υ	43.4	1.8	100	N	N
Flaking Mill operations (Pt #6)-PM10	baghouse	Υ	26.0	1.8	100	N	N
Flow coating material bin (Pt #11)-PM	baghouse	Υ	184	0.11	100	Y	N
Flow coating material bin (Pt #11)-PM10	baghouse	Υ	52.6	0.11	100	N	N
Truck meal loadout operations (Pt #12)-PM	baghouse	Υ	446.8	7.01	100	Υ	N
Truck meal loadout operations (Pt #12)-PM10	baghouse	Υ	44.7	7.01	100	N	N
Rail meal loadout operations (Pt #13)-PM	baghouse	Υ	80.2	0.44	100	N	N
Rail meal loadout operations (Pt #13)-PM	baghouse	Υ	44.7	0.44	100	N	N
A Extractor & Processing (Pt #9)-VOC	Mineral oil absorber	Υ	987.25	88.6*	100	Υ	N
DTDC meal dryers, #1 and #2 (Pt #7)-PM	cyclone	Υ	78.1	16.6	100	N	N
DTDC meal dryers, #1 and #2 (Pt #7)-PM10	cyclone	Υ	78.1	16.6	100	N	N
DTDC meal coolerss, #1 and #2 (Pt #8)-PM	cyclone	Υ	78.1	24.97	100	N	N
DTDC meal coolerss, #1 and #2 (Pt #8)-PM10	cyclone	Υ	78.1	24.97	100	N	N
vegetable oil refinery process (R-101 through R-106)-PM	baghouse	Υ	337.9	4.51	100	Υ	N
vegetable oil refinery process (R-101 through R-106)-PM10	baghouse	Υ	105.1	4.51	100	Υ	N
Pellet Mill Operations (Pt #26)-PM	cyclone	Υ	11.8	12	100	N	N
Pellet Mill Operations (Pt #26)-PM10	cyclone	Υ	5.91	6	100	N	N
Meal Grinding (Pt #24)-PM	baghouse	Υ	1191	5.65	100	Υ	N
Meal Grinding (Pt #24)-PM10	baghouse	Υ	1191	5.65	100	Υ	N
Grain screening operations (Pt #5)-PM	baghouse	Υ	225.2	6.66	100	Υ	N
Grain screening operations (Pt #5)-PM10	baghouse	Υ	66.6	6.66	100	N	N
B Flaking (Pt #19)-PM	baghouse	Υ	151.4	3.02	100	Υ	N
B Flaking (Pt #19)-PM10	baghouse	Υ	37.8	3.02	100	N	N
B Hot Dehulling (Pt #18)-PM	cyclone	Υ	201.8	114.3**	100	Υ	N
B Hot Dehulling (Pt #18)-PM10	cyclone	Υ	280.3	114.3**	100	Υ	N
Bean Heater (Pt #25)-PM	cyclone	Υ	40.9	2.72	100	N	N

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Bean Heater (Pt #25)- PM10	cyclone	Y	40.9	2.72	100	N	Z
B Meal Dryer (Pt #21)-PM	cyclone	Υ	36.6	19.97	100	N	Ν
B Meal Dryer (Pt #21)- PM10	cyclone	Y	36.3	19.97	100	N	N
B Meal Cooler (Pt # 22)-PM	cyclone	Y	38.3	16.5	100	N	N
B Meal Cooler (Pt # 22)-PM10	cyclone	Y	38.3	16.5	100	N	Ζ
B Extractor & Processing (Pt #23)-VOC	Mineral oil absorber	Y	987.25	88.66*	100	Υ	N

^{*}Emissions from this process include VOC from meal dryers and mealcoolers)

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the flow coating material bin (Pt #11), truck meal loadout operations (Pt #12), grain screening operations (Pt#5), B Flaking (Pt #19) for PM.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the milling operations (Pt #4), vegetable oil refinery process (R101 through R106), meal grinding (Pt #24), B hot dehulling (Pt #18), B meal dryer (Pt #21) for PM and PM10.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the A extractor and processing (Pt #9) and B extractor and processing (Pt #23) for VOC.

*No CAM requirements are necessary for PM requirements at the grain handling operations (Pt#1 and Pt#2) because there is an applicable NSPS.

A CAM plan will be incorporated into this Part 70 permit renewal.

For NSPS/NESHAPs

(a) All truck receiving operations, rail receiving operations, and grain screening operations venting to stack Pt #1, #2, and #5 are subject to 40 CFR Part 60, Subpart DD (Standards of Performance for Grain Elevators) because they are located at a grain storage elevator with a permanent storage capacity of more than 2.5 million U.S. bushels, as defined under 40 CFR 60.301(c), and were constructed after August 3, 1978.

The Soybean Ground Pile System consisting of a conveyor, ground pile, truck loadout operation, and Grain reclaim truck dump operation, identified as #29a, 29b, 29c and 29d, respectively, are subject to the following portions of Subpart DD. A copy of the entire rule is included as Attachment A to this permit.

Nonapplicable portions of the NSPS will not be included in the permit. The emission units are subject to the following portions of Subpart DD:

- (1) 40 CFR 60.300
- (2) 40 CFR 60.301
- (3) 40 CFR 60.302(b), (c)
- (4) 40 CFR 60.303
- (5) 40 CFR 60.304

^{**}Emissions are from two units exhausted through one stack

The provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60, Subpart DD.

(b) The Murray boiler is subject to the New Source Performance Standard for Small Industrial-Institutional Steam generating units, 40 CFR 60.40c, Subpart Dc, which is incorporated by reference as 326 IAC 12. The Murray boiler was constructed after 1989 and has a maximum capacity greater than 10 million Btu per hour but less than 100 Btu per hour. A copy of the entire rule is included as Attachment B to this permit.

There are no requirements in 40 CFR 60 Subpart Dc specifically related to vegetable oil combustion. Pure vegetable oil does not conform to the definition of "oil" under 326 IAC 40 CFR 60.41c because it is not petroleum based. Therefore, the fuel oil limits apply only to burning distillate fuel oil or blends of vegetable oil and distillate fuel oil.

Nonapplicable portions of the NSPS will not be included in the permit. The emission units are subject to the following portions of Subpart Dc:

- (1) 40 CFR 60.42c (c)
- (2) 40 CFR 60.42c (d)
- (3) 40 CFR 60.44c (h)

The provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60, Subpart Dc.

(c) Boiler No. 2 is subject to the New Source Performance Standard for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40b, Subpart Db, which is incorporated by reference as 326 IAC 12. Boiler No. 2 was constructed after June 19, 1984 and the maximum heat input capacity is greater than 100 MMBtu per hour. A copy of the entire rule is included as Attachment C to this permit.

There are no requirements in 40 CFR 60 Subpart Db specifically related to vegetable oil combustion. Pure vegetable oil does not conform to the definition of "oil" under 326 IAC 40 CFR 60.41b because it is not petroleum based. Therefore, the fuel oil limits apply only to burning distillate fuel oil or blends of vegetable oil and distillate fuel oil.

Nonapplicable portions of the NSPS will not be included in the permit. The emission units are subject to the following portions of Subpart Db:

- (1) 40 CFR 60.42b (d)
- (2) 40 CFR 60.43b (f)
- (3) 40 CFR 60.44b (a)

The provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60, Subpart Db.

- (d) The requirements of the Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60.110b, Subpart Kb, are not included in the permit for the #2 fuel oil storage tanks #4 and #10 (each are 112 m³). This rule does not include with a capacity greater than or equal to 151 m³ 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 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure less than 15.0 kPa.
- (e) The requirements of the Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60.110b, Subpart Kb, are not included in the permit for the soybean oil storage tank #6, soybean oil storage tank #7 and hexane storage tanks #1, 2 and 3. Vessels subject to subpart GGGG of 40 CFR part 63 are exempt from the requirements of Subpart Kb.
- (f) The vegetable oil refinery is not subject to 40 CFR Part 63, Subject GGGG (National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production) because an affected source is described as "a vegetable oil production process" which is defined at 40 CFR 63.2872, where the definition states "A vegetable oil production process does not include vegetable oil refining operations..."
- (g) The vegetable oil production processes, are subject to the National Emission Standards for Hazardous Air Pollutants for Solvent Extraction for Vegetable Oil Production 40 CFR 63, Subpart GGGG, which is incorporated by reference as 326 IAC 20-1-1. A copy of the entire rule is included as Attachment D to this permit.

Non applicable portions of the NESHAP will not be included in the permit. The vegetable oil production processes are subject to the following portions of Subpart GGGG:

- (1) 40 CFR 63.2830
- (2) 40 CFR 63.2831
- (3) 40 CFR 63.2832(a)
- (4) 40 CFR 63.2833
- (5) 40 CFR 63.2834(a)
- (6) 40 CFR 63.2840(a)-(d), (f)
- (7) 40 CFR 63.2850(a), (b), (d), (e)
- (8) 40 CFR 63.2851
- (9) 40 CFR 63.2852
- (10) 40 CFR 63.2853
- (11) 40 CFR 63.2854
- (12) 40 CFR 63.2855
- (13) 40 CFR 63.2860
- (14) 40 CFR 63.2861
- (15) 40 CFR 63.2862
- (16) 40 CFR 63.2863
- (17) 40 CFR 63.2870
- (18) 40 CFR 63.2871
- (19) 40 CFR 63.2872

The provisions of 40 CFR Part 63, Subpart A (General Provisions), which are incorporated as 326 IAC 20-1, apply to the affected source except when otherwise specified in 40 CFR 63, Subpart GGGG.

State Rule Applicability - Entire Source

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

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

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted annually by July 1. Therefore, the next emission statement for this source must be submitted by July 1, 2011. 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.

State Rule Applicability - Individual Facilities

Receiving

326 IAC 2-2 (PSD Minor Limit)

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable:

(a) the Permittee shall comply with the following particulate emissions:

Process	Baghouse/	PM Limit	PM10 Limit
	Cyclone	(lb/hr)	(lb/hr)
Grain receiving system, whole bean transfer, receiving and screening system	Pt #1	5.59	3.31

Compliance with these limits shall limit the PM and PM10 emissions to less than twenty-five (25) and fifteen (15) tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 not applicable.

- (b) In order to make the requirements of 326 IAC 2-2 (PSD) not applicable:
 - (1) the soybeans processed by the Soybean Ground Pile System, including #29a, 29b, 29c and 29d, shall be limited to less than a total of 39,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (2) the Permittee shall comply with the following PM and PM0 emissions:

Emission Unit	PM Emission Limit (lb/ton)	PM10 Emission Limit (lb/ton)
Grain Handling (29a)	0.061	0.034
Ground Pile (29b)	0.025	0.0063
Truck Loadout (29c)	0.086	0.029
Truck Dump (29d)	0.180	0.059

Compliance with these limits shall limit the PM and PM10 emissions to less than twenty-five (25) and fifteen (15) tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 not applicable.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
Truck receiving Operations (Pt#1)	648	72.1
Rail Receiving & Conveying (Pt #1)	400	66.3
column dryer (Pt #3)	126	53.6

These limitations were calculated using the following:

Interpolation and extrapolation of the data for process weight rates 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

Milling

326 IAC 2-2 (PSD Minor Limit)

(a) In order to make the requirements of 326 IAC 2-2 (PSD) not applicable-the Permittee shall comply with the following PM emissions:

Process	Baghouse/	PM Limit	PM10 Limit
	Cyclone	(lb/hr)	(lb/hr)
Milling operations	Pt #4	1.3	1.3
Flaking mill operations	Pt #6	0.41	0.41
Flow coating bin	Pt #11	0.026	0.026
Truck meal loadout	Pt #12	1.65	1.65
operations			
Rail meal loadout operations	Pt #13	0.10	0.10

Compliance with these limits in combination with the limits in D.1.1(a), D.1.1 (b) and D.2.1 shall limit the PM and PM10 emissions to less than twenty-five (25) and fifteen (15) tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 not applicable.

(b) Pursuant to CP-A145-9458-00035, issued on June 9, 1998, visible emissions from the flow coat receiving baghouse and rail meal loadout baghouse shall not exceed 5% opacity.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
Milling Operations (Pt #4)	99	51.2
A Flaking & Conveying (Pt #6)	99	51.2
Flow coating material bin (Pt #11)	30	40
Truck meal loadout operations (Pt #12)	300	63

These limitations were calculated using the following:

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

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

and

Interpolation and extrapolation of the data for process weight rates 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

Oil Extraction and Processing Operation

326 IAC 2-2 (PSD Minor Limit)

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable:

(a) the Permittee shall comply with the following PM and PM10 emissions:

Process	Baghouse/ Cyclone	PM Limit (lb/hr)	PM10 Limit (lb/hr)
DTDC meal dryers, #1 and #2	Pt #7	3.8	3.8
DTDC meal coolers, #1 and #2	Pt #8	5.7	5.7

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
A Extractor & Processing (Pt #9)	46	43.8
DTDC meal dryers, #1 and #2 (Pt #7)	99	51.2

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
DTDC meal coolers, #1 and #2 (Pt #8)	99	51.2

These limitations were calculated using the following:

Interpolation and extrapolation of the data for process weight rates 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

326 IAC 8-1-6 (Volatile Organic Compounds (VOC))

- (a) The soybeans processed by the "A" plant, on an "as received" basis, shall be limited to less than 828,837 tons per twelve (12) consecutive month period (equivalent to an oil extraction process throughput of 803,000 tons per twelve (12) consecutive month period) with compliance determined at the end of each month.
- (b) 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) applies to the soy bean extractor processes, meal dryers, and coolers. Pursuant to CP145-4300-00035, issued July 17, 1995, and 326 IAC 8-1-6, the following is BACT and these limitations apply:

Facility	Control	VOC (Hexane) Emission Limit (including upset emissions)	
Oil Extractor, Meal Desolventizer, Oil Desolventizer, Solvent Separator, Vent System	Mineral oil absorber	0.12 lb/ton of processed grain	
Meal Dryers	None	0.16 lb/ton of processed grain	
Meal Coolers	None	0.16 lb/ton of processed grain	
Maximum soybean extraction process throughput = 803,000 tons per twelve (12) consecutive month period			

The total amount of hexane used by the source shall not exceed 1.2 pounds of hexane per ton of beans processed. This limit is based on information from the Technical Support Document for CP 145-4300-00035, issued on July 17, 1995 and is equivalent to 481.8 tons of hexane per twelve (12) consecutive month period. Compliance with this limit is equivalent to VOC emissions of less than 176.7 tons per year. Compliance with this hexane usage limit, in addition to the limits listed in the table above, will satisfy the requirements of 326 IAC 8-1-6 (BACT).

Murray Boiler

326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating)

326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating) applies to the Murray boiler because it was constructed in 1996 which is after the applicability date of September 21, 1983. Pursuant to this rule, the particulate emissions from the boiler shall be limited to 0.33 pounds per million Btu heat input.

The emission limits for the Murray boiler were calculated by the following equation:

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

Where Pt = emission rate limit (lbs/MMBtu)
Q = total source heat input capacity (MMBtu/hr)

326 IAC 7-1.1-1 (SO₂ Emissions Limitations)

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations):

(a) The SO₂ emissions from the Murray boiler shall not exceed five tenths (0.5) pounds per million Btu heat input, when firing fuel oil.

Vegetable Oil Refinery Process

326 IAC 2-2 (PSD Minor Limit)

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall be limited by the following PM emissions:

Process	Baghouse/ Cyclone	PM Limit (lb/hr)
R-101 through R-106	R-101 - R-106	1.029 (combined)

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
vegetable oil refinery process (R-101 through R-106)	60	46.3

These limitations were calculated using the following:

Interpolation and extrapolation of the data for process weight rates 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

326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating), the particulate emissions from R-107 shall be limited to less than 0.316 pounds per million British thermal units per hour.

The emission limits for Boiler R-107 were calculated by the following equation:

$$Pt = 1.09$$

Where Pt = emission rate limit (lbs/MMBtu)

Q = total source heat input capacity (MMBtu/hr)

326 IAC 2-4.1 (Hazardous Air Pollutants (HAPs))

In order to make the requirements of 326 IAC 2-4.1 not applicable, the Permittee shall comply with the following:

- (a) the total amount of off-site soybean oil processed by the vegetable oil refinery shall be limited to less than 347,220,000 pounds per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) the Single HAP (n-hexane) shall be limited as follows:

Process	Baghouse/ Cyclone	Single HAP Limit (lb/ton)
R-101 through R-106	none	0.114 (combined)

Compliance with these limitations shall limit the single HAP to less than 10 ton per year and renders the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) not applicable.

326 IAC 8-1-6 (New Facilities: General Reduction Requirements)

In order to make the requirements of 326 IAC 8-1-6 not applicable, the Permittee shall comply with the following:

- (a) the total amount of off-site soybean oil processed by the vegetable oil refinery shall be limited to less than 347,220,000 pounds per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) the VOC shall be limited shall be limited as follows:

Process	Baghouse/ Cyclone	Single HAP Limit (lb/ton)
R-101 through R-106	none	0.288 (combined)

Compliance with these limitations shall limit the VOC to less than 25 ton per year and renders the requirements of 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) not applicable.

Pelletizing Mill

326 IAC 2-2 (PSD Minor Limit)

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the PM and PM10 emissions from the Pellet Mill and Cooler emission unit (Pt #26) shall not exceed the emissions limits listed in the table below:

Emission Unit	PM Emission Limit (lbs/hr)	PM10 Emission Limit (lbs/hr)
Pellet Mill and Cooler emission unit (Pt #26)	5.59	3.31

Compliance with this condition is necessary in order to limit emissions to less than 25 tons/year PM and less than 15 tons/year PM_{10} and will render the requirements of 326 IAC 2-2 not applicable to the Pellet Mill and Cooler emission unit (EU#26).

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
Pellet Mill Operations (Pt #26)	18	28.4

These limitations were calculated using the following:

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

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

B-Plant Operations

326 IAC 2-2 (PSD Minor Limit)

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable:

- (a) the soybeans processed by the "B" plant, on an "as received" basis, shall be limited to 1,073,159 tons per twelve (12) consecutive months (equivalent to an oil extraction process throughput of 1,065,538 tons per 12-month period), rolled on a monthly basis. This soybean limitation is required to limit the potential to emit of PM and PM10 to 225 and 218 tons per 12 consecutive months, rolled on a monthly basis, respectively.
- (b) the Permittee shall comply with the following PM and PM10 emissions:

Process	Baghouse/ Cyclone	PM Limit (lb/hr)	PM-10 Limit (lb/hr)
Screening Baghouse	Baghouse Pt #5	1.52	1.52
Truck unloading #1 fugitives		7.29	2.39
Rail unloading fugitives		0.64	0.156
B Bean Heater	Cyclone Pt #25	0.62	0.62
Hot cracking and dehulling system, B-plant	Four Cyclones Pt #18	25.8	25.8
Soybean Flaking, B-Plant	Baghouse Pt #19	0.69	0.69
DTDC meal dryers #1 and #2, B-Plant	Cyclone Pt #21	4.56	4.56
DTDC meal coolers #1 and #2, B-Plant	Cyclone Pt #21	12.82	12.82
Meal sizing system	Baghouse Pt. #24	1.29	1.29
Boiler No. 2	Stack Pt #20	10.5 tpy	10.5 tpy

(c) The amount of distillate oil with 0.05% sulfur maximum, combusted in the Boiler No. 2 shall be limited to 6,343.949 gallons per 12 consecutive months rolled on a monthly basis.

Distillate oil shall not exceed 0.05% sulfur by weight. These distillate oil limitations are required to limit SO₂ emissions to 249 tons per 12 month period, rolled on a monthly basis.

In accordance with the Morristown, Indiana CTP, when not using natural gas, the Permittee shall on and after December 31,2005, use only, as an alternative fuel for firing facility boilers, fuel oil with a reduced sulfur content less than or equal to 0.05% sulfur.

- (d) The amount of vegetable oil combusted in Boiler No. 2 shall not exceed 4,540,000 gallons per 12 consecutive months rolled on a monthly basis. When using blends of vegetable oil and distillate fuel oil, only the volume of fuel which is vegetable oil shall count toward the usage limit.
- (e) When burning vegetable oil, or blends of vegetable oil and distillate fuel oil, PM₁₀ emissions shall not exceed 0.016 pounds per million Btu heat input. This limit in combination with the vegetable oil usage limit in D.7.1(c) is required to restrict the emissions of PM₁₀ from Boiler No. 2 to less than 10.5 tons per 12 month period, rolled on a monthly basis.

Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable for PM, PM₁₀ and SO₂ emissions.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate:

Emission Unit	Process Weight Rate (tons/hr)	PM Emission Limit (lb/hr)
Grain screening operations (Pt #5)	724	73.5
Bean Heater (Pt #25)	128	53.8
B Hot Dehulling (Pt #18)	128	53.8
B Flaking (Pt #19)	128	53.8
B Meal Dryer (Pt #21)	128	53.8
B Meal Cooler (Pt # 22)	128	53.8
Meal Grinding Pt #24)	80	49.1
B Extractor & Processing (Pt #23)	99	43.8

These limitations were calculated using the following:

Interpolation and extrapolation of the data for process weight rates 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

326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-4, the PM emissions from Boiler No. 2 shall not exceed 0.24 pound per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:

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

Where Pt = emission rate limit (lbs/MMBtu)

Q = total source capacity (349 MMBtu/hr)

326 IAC 8-1-6 (Best Available Control Technology (BACT))

Pursuant to 326 IAC 2-2-3 (BACT Requirements):

(a) the Permittee shall control volatile organic compound (VOC) emissions from the combined "A" and "B" soybean oil extraction processes as follows:

Facility	Control	Emission Limit
Oil extractor "B" plant	Mineral oil absorber system	0.069 lb VOC/ton soybean
Meal dryers "B" plant	None	0.152 lb VOC/ton soybean
Meal coolers "B" plant	None	0.152 lb VOC/ton soybean
Combined "A" and "B" plants	First Year	0.20 gal VOC/ton soybean processed
	After first year	0.19 gal VOC/ton soybean processed
Maximum annual soybean processed by combined "A" and "B" plants, as received		1,901,996 tons per year

(b) BACT for fugitive hexane loss will include an annual leak check in accordance with Bunge's standard operating procedures accompanied by continuous monitoring of the process area by flammable gas monitors. The leak check will be completed on the affected system after hexane is reintroduced into the system.

For emergency repairs and/or maintenance completed between annual maintenance shutdowns, a leak check will be completed on the affected system.

(1) The Permittee shall immediately tag all detected leaks with a weatherproof and readily visible identification tag with a distinct number. Once a leaking component is detected, first-attempt repairs must be done within five days and be completed within 15 days of detecting the leaking components. If the repair cannot be accomplished within 15 days, then the Permittee shall send a notice of inability to repair to the OAQ within 20 days of detecting the leak. The notice must be received by:

Indiana Department of Environmental Management Technical Support and Modeling, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

within 20 days after the leak was detected. At a minimum the notice shall include the following:

- (A) Equipment, operator, and instrument identification number, and date of leak detection
- (B) Measured concentration (ppm) and background (ppm)
- (C) Leak identification number associated with the corresponding tag

(D) Reason of inability to repair within 5 to 15 days of detection

Insignificant Activities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate 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 shall not exceed 0.551 pounds per hour. The following insignificant activities are subject to this rule: blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower; and replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

Consent Decree

Consent Decree Limits, Compliance, and Record Keeping Requirements

- (a) As used in this section, "Consent Decree" shall mean the consent decree entered on January 16, 2007, in Civil Action No. 2:06-CV-02209, United States District Court for the Central District of Illinois, in which the Permittee and IDEM were parties.
- (b) The provisions of this subsection are designed to ensure compliance with the final volatile organic compound solvent loss ratio requirements of the Consent Decree entered into between the Permittee and IDEM on October 26, 2006. Nothing in this subsection is intended to expand, restrict or otherwise alter the obligations imposed on the Permittee by the Consent Decree.
- (c) The VOC solvent loss ratio (SLR) for this facility shall not exceed 0.16 gallons of solvent lost per ton of oilseed processed for conventional soybean processing at this existing source. To determine compliance with the VOC SLR limit, the Permittee shall maintain a Compliance Ratio of less than or equal to 1.0, which shall be calculated as follows:

Compliance Ratio = Actual Solvent Loss (gal) / Allowable Solvent Loss (gal)

Where:

Actual Solvent Loss (gal) = Gallons of solvent loss during previous 12 operating months

Allowable Solvent Loss (gal) = Oilseed (tons) * VOC Solvent Loss Ratio Limit (gal/ton)

Oilseed (tons) = Tons of each oilseed processed during the previous 12 operating months

VOC Solvent Loss Ratio (SLR) Limit = 0.16 gallons per ton of oilseed

- (d) Solvent losses and quantities of oilseed processed during startup and shutdown periods shall not be excluded in determining solvent losses.
- (e) For purposes of calculating SLR, the Permittee may apply the provisions of 40 CFR Part 63, Subpart GGGG, pertaining to malfunction periods when both of the following conditions are met:
 - (1) The malfunction results in a total plant shutdown, which means a shutdown of the solvent extraction system; and

(2) The total amount of solvent loss to which the provisions of 40 CFR Part 63, Subpart GGGG relating to malfunctions is applied in a rolling 12-month period does not exceed the Allowable Malfunction Volume as determined below. The Allowable Malfunction Volume in gallons is equal to the facility's 12-month Crush capacity times its final VOC SLR limit (0.16 gal/ton) times 0.024, as follows:

Allowable Malfunction Volume (gal) = 12-month Crush capacity (tons) * Final VOC SLR limit (0.16 gal/ton) * 0.024

Where:

12-month Crush capacity (tons) = the 12-month design capacity of the plant (tons)

Except as otherwise set forth herein, the Permittee shall include all solvent losses when determining compliance with the VOC SLR limit. The total solvent loss corresponding to a malfunction period shall be calculated as the difference in the solvent inventory, as defined in 40 CFR 63.2862(c)(1), for the day before the malfunction period began and the solvent inventory on the day the plant resumes normal operation. During a malfunction period, the facility shall comply with the Startup, Shutdown, Malfunction (SSM) Plan as required under Subpart GGGG.

- (f) To document compliance with the Consent Decree, the Permittee shall:
 - (1) Conduct daily monitoring and recordkeeping of solvent losses.
 - (2) Maintain a Solvent Loss Records Table including (A) through (F) below. Records maintained for (A) through (D) below shall be documented on a monthly and on a 12-month rolling basis and shall be complete and sufficient to establish compliance with the VOC SLR limit established in paragraph (c) above. Records maintained for (E) and (F) shall be determined monthly. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period and shall be maintained for a period of five (5) years from the date of generation.
 - (A) The amount of oilseed processed (tons).
 - (B) The total solvent loss (gal).
 - (C) The solvent loss during malfunction periods (gal).
 - (D) The adjusted solvent loss (gal), where:
 - Adjusted solvent loss (gal) = total solvent loss (gal) solvent loss during malfunction periods (gal).
 - (E) The actual solvent loss ratio (gal/ton), where:
 - Actual solvent loss ratio (gal/ton) = 12-month rolling adjusted solvent loss (gal) / 12-month rolling amount of oilseed processed (ton).
 - (F) Compliance Ratio, as determined in paragraph (c) above.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance determination requirements applicable to this source are as follows:

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing
Receiving operations (PT # 1)	baghouse	5 years from the latest test	Opacity, PM and PM-10	Once every 5 years
Oil extraction system (Pt #7 and Pt #8)	mineral oil absorber	5 years from the latest test	VOC	Once every 5 years
Pellet Mill Operations (Pt #26)	cyclone	5 years from the latest test	PM and PM-10	Once every 5 years
Hot cracking and dehulling system, B- plant bean heater (Pt #18, #25)	cyclones	180days from issuance of this permit and then every 5 years	PM and PM-10	Once every 5 years
Soybean flaking, B-plant (PT# 19)	baghouse	180days from issuance of this permit and then every 5 years	PM and PM-10	Once every 5 years
Millfeed and meal storage and truck loadout (PT# 12)	baghouse	180days from issuance of this permit and then every 5 years	PM and PM-10	Once every 5 years
Meal sizing system (PT# 24)	baghouse	180days from issuance of this permit and then every 5 years	PM and PM-10	Once every 5 years
"B" plant soybean oil extractor (Pt #23)	Mineral Oil absorption system	180days from issuance of this permit and then every 5 years	VOC and Mineral oil flow rate	Once every 5 years

(a) Particulate Control

(1) The baghouses for truck receiving/storage and rail car receiving/storage shall be in operation at all times those facilities are in operation.

- (2) Dust control oil shall be applied at the starting end of the truck and rail car receiving conveyors at all times these conveyors are in operation, at a rate determined at the time of PM compliance tests performed as required by CP-145-4300-00035.
- (3) Fugitive emissions shall be controlled by keeping paved roads free of particulate matter with a vacuum or wet sweeper.
- (4) The truck and rail receiving operations, flaking mill, flow coating material bin operations, truck meal loadout, and rail meal loadout baghouses shall be in operation at all times that their respective facilities are in operation.
- (5) The primary aspiration, secondary aspiration, and hull refining cyclones shall be in operation at all times that there respective facilities are in operation.
- (6) Fugitive emissions shall be controlled by keeping paved roads free of particulate matter with a vacuum or wet sweeper.
- (7) Pursuant to CP-145-4300-00035, issued July 17, 1995 and in order to demonstrate compliance with Conditions D.3.2 and D.3.3. The cyclones for meal dryers and coolers shall operate at all times that those facilities are in operation.
- (8) Pursuant to CP145-14642-00035, issued October 4, 2001, and order to demonstrate compliance Condition D.5.1 and D.5.2, the baghouses for PM control shall be in operation and control emissions from the storage silos and surge tanks, identified as R-101 through R-106, at all times when the storage silos and surge tanks are in operation.
- (9) In order to demonstrate compliance with D.6.1 and D.6.2, the cyclone for particulate control shall be in operation and control emissions from the Pellet Mill and Cooler (Pt #26) at all times that the Pellet Mill and Cooler emission unit is in operation.
- (10) In order to demonstrate compliance with Condition D.7.1 (a) and (b), the baghouses and cyclones shall be in operation at all times that the processes are in operation.
- (11) In order to demonstrate compliance with Condition D.7.4, the absorber shall be operated at all times the oil extractor process is in operation at an average mineral oil flow rate to be determined at the time of the VOC (hexane) test.
- (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.

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 that the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicted by a significant drop in the baghouses 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.

Cyclone Failure Detection

(a) In the event that cyclone failure has been observed:

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

VOC and HAPs Compliance

- (a) The compliance with Condition D.3.1 shall be demonstrated per twelve (12) consecutive month period with compliance determined at the end of each month:
 - (1) The amount of VOC (hexane) used per calendar month; and
 - (2) The amount of soybean processed by the extraction process.
- (b) The compliance with Condition D.5.4 shall be demonstrated within 30 days of the end of each month based on the total single HAP emissions for the twelve (12) month period.
- (c) In order to comply with Condition D.5.4, the mineral oil absorption system for VOC control shall be in operation at all times when the vegetable oil refinery is in operation.
- (d) The compliance with Condition D.5.5 shall be demonstrated within 30 days of the end of each month based on the total VOC emissions for the twelve (12) month period.
- (e) In order to comply with Condition D.5.5, all condensers for VOC control shall be in operation at all times when the vegetable oil refinery is in operation.

The compliance monitoring requirements applicable to this source are as follows:

Control	Parameter	Frequency	Range	Excursions and Exceedances
	Pressure		0.5 to 8.0	
Receiving operations (Pt #1	Drop	Daily	inches	Response Steps
and Pt #3)	Visible	Daily	Normal-	
	Emissions		Abnormal	
milling operations (Pt #4)	Pressure	Daily	0.5 to 8.0	Response Steps
milling operations (Pt #4)	Drop	Dally	inches	

Control	Parameter	Frequency	Range	Excursions and Exceedances
	Visible		Normal-	
	Emissions		Abnormal	
	Pressure		0.5 to 8.0	
flaking meal operations (Pt #6)	Drop	Daily	inches	Response Steps
	Visible	Dany	Normal-	
	Emissions		Abnormal	
	Pressure		0.5 to 8.0	
flow coating material bin	Drop	Daily	inches	Response Steps
operations (Pt #11)	Visible	Dany	Normal-	
	Emissions		Abnormal	
	Pressure		0.5 to 8.0	
truck meal loadout operations	Drop	Daily	inches	Response Steps
(Pt #12)	Visible	Dany	Normal-	
	Emissions		Abnormal	
	Water		0.5 to 8.0	
rail meal loadout operations	Pressure		inches	Response Steps
(Pt #13)	Drop	Daily		response otops
(11110)	Visible		Normal-	
	Emissions		Abnormal	
DTDC meal dryers #1 & #2 (Pt				Response Steps
#7)	Visible	Daily	Normal-	response otops
#1)	Emissions		Abnormal	
DTDC mool coolers #1 9 #2	Visible		Normal-	Dooponee Stone
DTDC meal coolers #1 & #2	Emissions	Daily	Abnormal	Response Steps
(Pt #8)				
				Response Steps
Murray boiler	Visible	Daily	Normal-	Response Steps
	Emissions		Abnormal	
				Response Steps
Pellet Cooler Pt #26	Visible	Daily	Normal-	Liveshouse orehs
	Emissions		Abnormal	
B-Plant:				
milling operation (Pt # 4), hull				
grinder (Pt #5), mill elevator	Pressure		0.5 to 8.0	
(Pt #12), Hot cracking and	Drop		inches	
dehulling system (Pt #18),				
Soybean flaking (Pt #19),		-		Response Steps
Boiler No. 2 (Pt #20), DTDC	Visible	Daily	Normal-	rtesponse Steps
meal dryers #1 & #2 (Pt #21),	Emissions		Abnormal	
DTDC meal coolers #1 & #2				
(Pt #22), soybean oil extractor	Visible		Normal-	
(Pt #23), Meal sizing system	Emissions		Abnormal	
(Pt #24) and bean heater (Pt			7	
#25)				

(a) Alarms shall be operational on all cyclone high level indicators. If an alarm sounds, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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Bunge North America (East), Inc. Morristown, Indiana Permit Reviewer: Teresa Freeman

VOC Monitoring

- (a) The Permittee shall monitor and record the mineral oil flow rate at least once per day. The Preventive Maintenance Plan for the absorber shall contain troubleshooting contingency and corrective actions for when the flow rate readings are outside of the normal range for any one reading.
- (b) The instruments used for determining the flow rate shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every eighteen (18) months.
- (c) The gauge employed to take the mineral oil flow across the scrubber shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within + 10% of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
- (d) In the event that the absorber's failure has been observed, an inspection will be conducted. Based upon the findings of the inspection, any corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.
- (e) The mineral oil to the mineral-oil-stripping column shall be kept at a minimum temperature of 160 °F or a temperature for adequate stripping of the absorbed hexane from the oil. When the process is in operation, an electronic data management system (EDMS) shall record the instantaneous temperature on a frequency of not less than every two hours. As an alternative to installing an EDMS, manual readings shall be taken every two hours.

These monitoring conditions are necessary to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 8-1-6 (Best Available Control Technology (BACT) for Volatile Organic Compounds (VOC)), 326 IAC 2-7 (Part 70), 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating, 326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations) and 40 CFR Part 64 (CAM).

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 28, 2008.

Conclusion

The operation of this stationary soybean processing plant shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T145-28055-00035.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Teresa Freeman at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-1243 or toll free at 1-800-451-6027 extension 4-1243.
- (b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

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For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: (c) www.idem.in.gov

Emission Summary

Company Name: Bunge North America (East), Inc.

Address City IN Zip: 700 N. Rangeline Rd., Morristown, IN 46161

Permit No.: 145-28055-00035 Reviewer: Teresa Freeman Date: October 12, 2010

Uncontrolled Source PTE (tons/year)									
Process	PM	PM-10	SO2	NO _x	CO	VOC			
Truck Receiving Operations (Pt#1)	201.5	59.6	-	- ^	-	-			
Rail Receiving & Conveying (Pt #2)	56.1	13.7	-	-	-	-			
Milling Operations (Pt #4)	156.1	216.8	-	-	-	-			
A Flaking & Conveying (Pt #6)	43.4	26	-	-	-	-			
Flow coating material bin (Pt #11)	183.96	52.6	-	-	-	-			
Truck meal loadout operations (Pt #12)	446.8	44.7	-	-	-	-			
Rail meal loadout operations (Pt #13)	80.2	44.7	-	-	-	-			
A Extractor & Processing (Pt #9)	-	-	-	-	-	987.3			
DTDC meal dryers, #1 and #2 (Pt #7)	36.3	36.3	-	-	-	-			
DTDC meal coolers, #1 and #2 (Pt #8)	36.3	36.3	-	-	-	-			
Vegetable oil refinery process (R-101 through R-106)	367.9	105.1	-	-	-	-			
Pellet Mill Operations (Pt #26)	239	119.5	-	-	-	-			
Grain screening operations (Pt #5)	225.2	66.6	-	-	-	-			
Bean Heater (Pt #25)	40.90	40.90	-	-	-	-			
B Hot Dehulling (Pt #18)	201.80	280.30	-	-	-	-			
B Flaking (Pt #19)	151.40	37.80	-	-	-	-			
B Meal Dryer (Pt #21)	36.30	36.30	-	-	-	-			
B Meal Cooler (Pt # 22)	38.30	38.30	-	-	-	-			
Meal Grinding Pt #24)	119.10	119.10	-	-	-	-			
B Extractor & Processing (Pt #23)	-	=	-	-	-	987.30			
column dryer (Pt #3)	13.30	3.31	-	-	-	-			
column dryer (Pt #3) (combustion)	0.67	0.67	0.050	8.76	7.36	0.48			
Grain Handling (29a)	320.60	178.70	-	-	-	-			
Ground Pile (29b)	155.80	57.50	-	-	-	-			
Grain Reclaim Truck loadout (29c)	244.10	82.30	-	-	-	-			
Grain Truck Dump (29d)	510.90	167.50	-	-	-	-			
Murray Boiler (worst case)	6.73	6.73	210.20	61.50	35.30	57.20			
Boiler No. 2 (worst case)	13.70	13.70	525.60	149.30	88.30	142.96			
Refinery Boiler (R-107) (worst case)	0.43	0.43	0.03	5.69	4.78	0.31			
Totals	3926.79	1885.44	735.88	225.25	135.74	2175.55			

	Controlled Sou	rce PTE (tons/yea	r)			
Process	PM	PM-10	SO2	NO _x	CO	VOC
Truck Receiving Operations (Pt#1)	9.37	9.37	-	-	-	-
Rail Receiving & Conveying (Pt #2)	0.62	0.62	-	-	-	-
Milling Operations (Pt #4)	5.69	5.69	-	-	-	-
A Flaking & Conveying (Pt #6)	1.80	1.80	-	-	-	-
Flow coating material bin (Pt #11)	0.11	0.11	-	-	-	-
Truck meal loadout operations (Pt #12)	7.01	7.01	-	-	-	-
Rail meal loadout operations (Pt #13)	0.44	0.44	-	-	-	-
A Extractor & Processing (Pt #9)	-	-	-	-	-	24.2
DTDC meal dryers, #1 and #2 (Pt #7)	16.6	16.6	-	-	-	32.2
DTDC meal coolers, #1 and #2 (Pt #8)	24.97	24.97	-	-	-	32.2
egetable oil refinery process (R-101 through R-106)	4.51	4.51	-	-	-	-
Pellet Mill Operations (Pt #26)	12	6	-	-	-	-
Grain screening operations (Pt #5)	6.66	6.66	-	-	-	-
Bean Heater (Pt #25)	2.72	2.72	-	-	-	-
B Hot Dehulling (Pt #18)	113	113	-	-	-	-
B Flaking (Pt #19)	3.02	3.02	-	-	-	-
B Meal Dryer (Pt #21)	19.97	19.97	-	-	-	32.2
B Meal Cooler (Pt # 22)	16.5	16.5	-	-	-	32.2
Meal Grinding Pt #24)	5.65	5.65	-	-	-	-
B Extractor & Processing (Pt #23)	-	-	-	-	-	24.2
column dryer (Pt #3)	13.3	3.31	-	-	-	-
column dryer (Pt #3) (combustion)	0.67	0.67	0.050	8.76	7.36	0.48
Grain Handling (29a)	1.19	0.66	-	-	-	-
Ground Pile (29b)	0.49	0.12	-	-	-	-
Grain Reclaim Truck loadout (29c)	1.68	0.57	-	-	-	-
Grain Truck Dump (29d)	3.51	1.15	-	-	-	-
Murray Boiler (worst case)	6.73	6.73	210.20	61.50	35.30	57.20
Boiler No. 2 (worst case)	13.70	13.70	525.60	149.30	88.30	142.96
Refinery Boiler (R-107) (worst case)	0.43	0.43	0.03	5.69	4.78	0.31
Totals	292.34	271.98	735.88	225.25	135.74	378.15

Totals 292.34 271.98 735.88 225.25 135.74 3

Note: Uncontrolled VOC applied only to A and B Extractor & Processing, but Controlled VOC includes emissions from meal dryers and coolers.

Company Name: Bunge North America (East), Inc.

Address City IN Zip: 700 N. Rangeline Rd., Morristown, IN 46161

Permit No.: 145-28055-00035 Reviewer: Teresa Freeman Date: October 4, 2010

					PM Em	issions	PM10 E	missions
S/V ID	Process Description	Control Description	CFM	gr/dscf	lbs/hr	tons/yr	lbs/hr	tons/yr
1	Grain receiving system, whole bean transfer, receiving and screening system	baghouse	50000	0.005	2.14	9.39	2.14	9.39
2	Rail unloading	baghouse	3300	0.005	0.141	0.62	0.141	0.62
5	Grain screening Operations	baghouse	35500	0.005	1.52	6.66	1.52	6.66
4	Milling Operations	baghouse	25400	0.006	1.3	5.72	1.3	5.72
6	Flaking Mill Operations	baghouse	9600	0.005	0.41	1.80	0.41	1.80
11	Flow Coating Bin	baghouse	600	0.005	0.026	0.11	0.026	0.11
12	Truck Meal Loadout Operations	baghouse	38500	0.005	1.65	7.23	1.65	7.23
13	Rail Meal Loadout Operations	baghouse	2000	0.006	0.10	0.45	0.10	0.45
7	DTDC Meal Dryers, #1 and #2	cyclone	22000	0.02	3.8	16.52	3.77	16.52
8	DTDC Meal Coolers, #1 and #2	cyclone	22000	0.03	5.7	24.78	5.66	24.78
R-101	Storage Silo	integral baghouse	3000	0.01	0.257	1.13	0.257	1.126
R-102	Surge Tank	integral baghouse	1000	0.01	0.086	0.38	0.086	0.375
R-103	Storage Silo	integral baghouse	3000	0.01	0.257	1.13	0.257	1.126
R-104	Surge Tank	integral baghouse	1000	0.01	0.086	0.38	0.086	0.375
R-105	Storage Silo	integral baghouse	3000	0.01	0.257	1.13	0.257	1.126
R-106	Surge Tank	integral baghouse	1000	0.01	0.086	0.38	0.086	0.375
R-101 through R-106	Vegetable Oil RefineryProcess				1.029		1.029	
26	Pellet Mill Operations	baghouse	7500	0.01	2.74	12.00	1.37	6.00
25	Bean Heater	baghouse/cyclone	18000	0.004	0.62	2.70	0.62	2.70
18	B Hot Dehulling	4 cyclones	121800	0.025	26.10	114.32	26.10	114.32
19	B Flaking	baghouse	16000	0.005	0.69	3.00	0.69	3.00
21	DTDC Meal Dryers, #1 and #2 (Plant B)	cyclone	38000	0.014	4.56	19.97	4.56	19.97
22	DTDC Meal Coolers, #1 and #2 (Plant B)	cyclone	22000	0.02	3.77	16.52	3.77	16.52
24	Meal Grinding Pt	baghouse	30000	0.005	1.29	5.63	1.29	5.63
		-		Total	_	251.93		245.93

Appendix A: Emissions Calculations PM and VOC Emissions from Grain Handling Processes

Company Name: Bunge North Ameerica (East), Inc.

Address City IN Zip: 700 North Rangeline Road, Morristown, IN 46161-9643
ID: 145-28055-00035

Reviewer: Teresa Freeman
Date: 06/24/10

Process / Units	Throughput	PM EF	PM ₁₀ EF	VOC EF	Control Eff	Potential to Emit PM	Potential to Emit PM	Potential to Emit PM ₁₀	Potential to Emit PM ₁₀	Potential to Emit VOC	Limited VOC	VOC after Controls	PM after Controls	Controlled PTE PM	PM10 after Controls	Controlled PTE PM10
	(ton/hr)	(lb/ton)	(lb/ton)	(lb/ton)		(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(ton/yr)	(lb/ton)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Truck Receiving Operations (Pt#1)	648	0.071	0.021		0.9534	46.01	201.52	13.61	59.60	0.00		0.00	2.14	9.37	2.14	9.37
Rail Receiving & Conveying (Pt #2)	400	0.032	0.008			12.80	56.06	3.12	13.67	0.00		0.00	0.141	0.62	0.141	0.62
Milling Operations (Pt #4)	99	0.360	0.500			35.64	156.10	49.50	216.81	0.00		0.00	1.3	5.69	1.3	5.69
A Flaking & Conveying (Pt #6)	99	0.100	0.060			9.90	43.36	5.94	26.02	0.00		0.00	0.41	1.80	0.41	1.80
Flow coating material bin (Pt #11)	30	1.400	0.400			42.00	183.96	12.00	52.56	0.00		0.00	0.026	0.11	0.026	0.11
Truck meal loadout operations (Pt #12)	300	0.340	0.034			102.00	446.76	10.20	44.68	0.00		0.00	1.65	7.23	1.65	7.23
Rail meal loadout operations (Pt #13)	300	0.061	0.034			18.30	80.15	10.20	44.68	0.00		0.00	0.1	0.44	0.1	0.44
A Extractor & Processing (Pt #9)	46	0.000	0.000	4.900		0.00	0.00	0.00	0.00	987.25	0.120	24.18	0	0.00	0	0.00
DTDC meal dryers, #1 and #2 (Pt #7)	46	0.180	0.180			8.28	36.27	8.28	36.27	0.00	0.16	32.24	3.8	16.64	3.8	16.64
DTDC meal coolers, #1 and #2 (Pt #8)	46	0.180	0.180			8.28	36.27	8.28	36.27	0.00	0.16	32.24	5.7	24.97	5.7	24.97
Vegetable oil refinery process (R-101 through R-106)	60	1.400	0.400			84.00	367.92	24.00	105.12	0.00		0.00	1.029	4.51	1.029	4.51
Pellet Mill Operations (Pt #26)	18	0.152	0.076			2.73	239.00	1.36	119.50	0.00		0.00	2.74	12.00	1.37	6.00
Grain screening operations (Pt #5)	724	0.071	0.021			51.40	225.15	15.20	66.59	0.00		0.00	1.52	6.66	1.52	6.66
Bean Heater (Pt #25)	128	0.073	0.073			9.34	40.93	9.34	40.93	0.00		0.00	0.62	2.72	0.62	2.72
B Hot Dehulling (Pt #18)	128	0.360	0.500			46.08	201.83	64.00	280.32	0.00		0.00	26.1	114.32	26.1	114.32
B Flaking (Pt #19)	128	0.270	0.068			34.56	151.37	8.64	37.84	0.00		0.00	0.69	3.02	0.69	3.02
B Meal Dryer (Pt #21)	46	0.180	0.180			8.28	36.27	8.28	36.27	0.00	0.16	32.24	4.56	19.97	4.56	19.97
B Meal Cooler (Pt # 22)	46	0.190	0.190			8.74	38.28	8.74	38.28	0.00	0.16	32.24	3.77	16.51	3.77	16.51
Meal Grinding Pt #24)	80	0.340	0.340			27.20	119.14	27.20	119.14	0.00		0.00	1.29	5.65	1.29	5.65
B Extractor & Processing (Pt #23)	46	0.000	0.000	4.900		0.00	0.00	0.00	0.00	987.25	0.120	24.18	0	0.00	0	0.00
column dryer (Pt #3)	126	0.024	0.006			3.02	13.25	0.76	3.31	0.00	•	0.00	3.02	13.23	3.02	13.23

Totals: 2,673.58 1,377.84 1,974.50 177.30 265.45 259.45

Uncontrolled PM/PM₁₀(lb/hr) = Throughput (ton/hr) * EF (lb/ton) Uncontrolled PM/PM₁₀(ton/hr) = Throughput (ton/hr) * EF (lb/ton) * 8760 (hr/yr) * 1 ton/2000lb Emission Factors from AP-42, Table 9.9.1-1 and Table 9.11.1-1 VOC (Hexane) emissions from AP-42, Chapter 9.11.1.3 After control limits are calculated on the lb/hr limits established in the permit.

Grain Handling

Company Name: Bunge North America (East), Inc.

Address City IN Zip: 700 N. Rangeline Rd., Morristown, IN 46161

Permit No.: 145-28055-00035 Reviewer: Teresa Freeman Date: June 29, 2010

Total Bu Total Tons
Receipts 1,300,000 39,000

Handling 1,300,000 39,000 Commodity: soybeans
Truck shipments 1,300,000 39,000 Max: 60 lb/bu

Truck Receiving

Source #1

Grain Handling - Unlimited

Source # 29a

PM Emission Factor 0.061 lb/ton Emission Factors (Table 9.9.1-1, Mar 2003 Headhouse & Grain Handling EF)

PM10 Emission Factor 0.034 lb/ton SCC 30200530

Conveying rate/hour 1200 ton/hr Maximum Capacity

Potential PM emissions = Emission Factor * Maximum Capacity

a. Max Hourly = $(lb/ton)^*(load rate ton/hr)$

= 73.20 lb/hr

b. Max Yearly = ((lb/hr)*8760 hr/yr)/(2000 lb/ton)

= 320.62 ton/yr

Potential PM10 emissions = Emission Factor * Maximum Capacity

a. Max Hourly = $(PM hrly)^*(PM10/PM ratio)$

= 40.80 lb/hr

b. Max Yearly = (PM yrly)*(PM10/PM ratio)

= 178.70 ton/yr

Grain Handling - Limited

Source # 29a

PM Emission Factor 0.061 lb/ton Emission Factors (Table 9.9.1-1, Mar 2003 Headhouse & Grain Handling EF)

PM10 Emission Factor 0.034 lb/ton SCC 30200530

Conveying rate/year 39,000 ton/yr Limited Throughput

Potential PM emissions = Emission Factor * Limited Throughput

a. Max Hourly = $(lb/ton)^*(load rate ton/hr)$

= 0.27 lbs/hr

b. Max Yearly = ((lb/hr)*8760 hr/yr)/(2000 lb/ton)

= 1.19 ton/yr

Potential PM10 emissions = Emission Factor * Limited Throughput

a. Max Hourly = (PM hrly)*(PM10/PM ratio)

= 0.15 lb/hr

b. Max Yearly = (PM yrly)*(PM10/PM ratio)

= 0.66 ton/yr

Truck Loadout

Company Name: Bunge North America (East), Inc.

Address City IN Zip: 700 N. Rangeline Rd., Morristown, IN 46161

Permit No.: 145-28055-00035 Reviewer: Teresa Freeman Date: June 29, 2010

Grain Reclaim Truck Loadout - Unlimited Source 29c from Source #28a

PM Emission Factor 0.086 lb/ton (Table 9.9.1-1, Mar 2003 Grain Shipping EF)

PM10 Emission Factor 0.029 lb/ton SCC 30200560
Unloading rate/hour 648 ton/hr Maximum Capacity

Process Rate is set by existing truck grain receiving system

Potential PM emissions for grain loadout = Emission Factor * Maximum Capacity

a. Max Hourly = (lb/ton)*(load rate ton/hr)

= 55.73 lb/hr

b. Max Yearly = ((lb/hr)*8760 hr/yr)/(2000 lb/ton)

= 244.09 ton/yr

Potential PM10 emissions for grain = Emission Factor * Maximum Capacity

a. Max Hourly = (PM hrly)*(PM10/PM ratio)

18.79 lb/hr

b. Max Yearly = (PM yrly)*(PM10/PM ratio)

= 82.31 ton/yr

Grain Reclaim Truck Loadout - Limited

Source 29c from Source #28a

PM Emission Factor 0.086 lb/ton (Table 9.9.1-1, Mar 2003 Grain Shipping EF)

PM10 Emission Factor 0.029 lb/ton SCC 30200551
Unloading rate/year 39,000 ton/yr Limited Throughput

Potential PM emissions due to grain = Emission Factor * Limited Throughput

a. Max Hourly = $(lb/ton)^*(unload rate ton/hr)$

= 0.38 lb/hr

b. Max Yearly = ((lb/hr)*8760 hr/yr)/(2000 lb/ton)

= 1.68 ton/yr

Potential PM10 emissions due to grain = Emission Factor * Limited Throughput

a. Max Hourly = (PM hrly)*(PM10/PM ratio)

= 0.13 lb/hr

b. Max Yearly = (PM yrly)*(PM10/PM ratio)

= 0.57 ton/yr

Grain Pile

Company Name: Bunge North America (East), Inc.

Address City IN Zip: 700 N. Rangeline Rd., Morristown, IN 46161

Permit No.: 145-28055-00035 Reviewer: Teresa Freeman Date: June 29, 2010

Ground Pile - Unlimited

Source # 29b

PM Emission Factor 0.025 lb/ton (Table 9.9.1-1, Mar 2003 Storage Bin EF)

PM10 Emission Factor 0.0063 lb/ton SCC 30200540 Conveying rate/hour 1,200 ton/hr Maximum Capacity

Potential PM emissions due to grain handling Emission Factor * Maximum Capacity

> a. Max Hourly (lb/ton)*(load rate ton/hr)

> > 30.00 lb/hr

b. Max Yearly (lb/hr)*8760 hr/yr)/(2000 lb/ton)

=

131.40 ton/yr

Potential PM10 emissions due to grain handling Emission Factor * Maximum Capacity

> a. Max Hourly (PM hrly)*(PM10/PM ratio) =

> > 7.56 lb/hr

b. Max Yearly (PM yrly)*(PM10/PM ratio)

> 33.11 ton/yr

Ground Pile - Limited

Source # 29b

PM Emission Factor 0.025 lb/ton (Table 9.9.1-1, Mar 2003 Storage Bin EF)

PM10 Emission Factor 0.0063 lb/ton SCC 30200540 Conveying rate/year 39,000 ton/yr Limited Throughput

Potential PM emissions due to grain handling Emission Factor * Limited Throughput

> a. Max Hourly (lb/ton)*(load rate ton/hour) =

> > 0.11 lb/hr

b. Max Yearly ((lb/hr)*8760 hr/yr)/(2000 lb/ton) = =

=

0.49 ton/yr

Potential PM10 emissions due to grain handling Emission Factor * Limited Throughput

> (PM hrly)*(PM10/PM ratio) a. Max Hourly =

> > 0.03 lb/hr =

(PM yrly)*(PM10/PM ratio) b. Max Yearly =

> 0.12 ton/yr

Appendix A: Emissions Calculations
Grain Pile - Continued

Company Name: Bunge North America (East), Inc.

Address City IN Zip: 700 N. Rangeline Rd., Morristown, IN 46161

Permit No.: 145-28055-00035 Reviewer: Teresa Freeman Date: June 29, 2010

Maximum controlled PM emissions from aeration fan dischage

Fans 13,000 cfm each

Fan number 10 percent in operation at any one time: 50%

Outlet loading 0.005 gr/cfm 100% assumed for worst case scenario

Operation 8760 hr/yr

a. Max Hourly = (outlet loading gr/scf)*(air flow cfm)*(number of fans)*(60 min/hr)/(7000 gr/lb)

= 5.57 lb/hr

b. Max Yearly = ((lb/hr)*8760 hr/yr)/(2000 lb/ton)

= 24.40 ton/yr

Maximum controlled PM10 emissions from = baghouse outlet grain loading * gas flow rate

truck/rail receiving filter

a. Max Hourly = (outlet loading gr/scf)*(air flow cfm)*(number of fans)*(60 min/hr)/(7000 gr/lb)

= 5.57 lb/hr

b. Max Yearly = ((lb/hr)*8760 hr/yr)/(2000 lb/ton)

= 24.40 ton/yr

Appendix A: Emissions Calculations Truck Receiving

Company Name: Bunge North America (East), Inc.

Address City IN Zip: 700 N. Rangeline Rd., Morristown, IN 46161

Permit No.: 145-28055-00035 Reviewer: Teresa Freeman Date: June 29, 2010

Grain Reclaim Truck Dump - Unlimited

Source #29d to Source #1

PM Emission Factor 0.180 lb/ton (Table 9.9.1-1, Mar 2003 Grain Receiving EF)

PM10 Emission Factor 0.059 lb/ton SCC 30200551

Receiving rate/hour 648 ton/hr Maximum Capacity 21,600 bu/hr

Process Rate is set by existing truck grain receiving system

Potential PM emissions for grain receiving = Emission Factor * Maximum Capacity

a. Max Hourly = $(lb/ton)^*(load rate ton/hr)$

116.6 lb/hr

b. Max Yearly = ((lb/hr)*8760 hr/yr)/(2000 lb/ton)

= 510.9 ton/yr

Potential PM10 emissions for grain receiving = Emission Factor * Maximum Capacity

a. Max Hourly = (PM hrly)*(PM10/PM ratio)

= 38.2 lb/hr

b. Max Yearly (PM 10/PM ratio)

= 167.46 ton/yr

Grain Reclaim Truck Dump - Limited

Source #29d to Source #1

PM Emission Factor 0.180 lb/ton (Table 9.9.1-1, Mar 2003 Grain Receiving EF)

PM10 Emission Factor 0.059 lb/ton SCC 30200551

Unloading rate/year 39,000 ton/yr Limited Throughput 1,300,000 bu/yr

Potential PM emissions due to grain receiving = Emission Factor * Limited Throughput

a. Max Hourly = $(lb/ton)^*(unload rate ton/hr)$

= 0.80 lb/hr

b. Max Yearly = ((lb/hr)*8760 hr/yr)/(2000 lb/ton)

= 3.51 ton/yr

Potential PM10 emissions due to grain = Emission Factor * Limited Throughput

a. Max Hourly = (PM hrly)*(PM10/PM ratio)

= 0.26 lb/hr

b. Max Yearly = (PM yrly)*(PM10/PM ratio)

= 1.15 ton/yr

Paved Road Fugitive Emissions

Company Name: Bunge North America (East), Inc. Address City IN Zip: 700 N. Rangeline Rd., Morristown, IN 46161

> Permit No.: 145-28055-00035 Reviewer: Teresa Freeman

Date: June 29, 2010

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (12/2003).

		Maximum	Weight of	Weight	Maximum	Maximum	Maximum
	Maximum	trips per	Vehicle	driven per	one-way	one-way	one-way
	trips per hour	day	and Load	day	distance	distance	miles
Туре	(trip/hour)	(trip/day)	(ton/trip)	(ton/day)	(feet/trip)	(mi/trip)	(miles/day)
Truck (full)	15.48	371.52	40	14860.8	2698	0.511	189.8
Truck (empty)	15.48	371.52	12	4458.24	2698	0.511	189.8

Vehicle Information (provided by source)

Average Vehicle Weight Per Trip = 26.0 tons/trip

Average Miles Per Trip = 0.51 miles/trip

Unmitigated Emission Factor, Ef = $[k * (sL/2)^0.65 * (W/3)^1.5 - C]$ (Equation 1 from AP-42 13.2.1)

	PM	PM10						
where k =	0.082	0.016	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)					
W =	26.0	26.0	ns = average vehicle weight (provided by source)					
C =	0.00047	0.00047	lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2)					
sL =	1.2	1.2	g/m^2 = Ubigitous Silt Loading Values of typical paved roads (averaged for whole year)					
•		sL (baseline) = 0.6 g/m^2 for 8 months (see AP-42 Table 13.2.1-3)					
		s	L (winter) = 2.4 g/m ² for 4 months (see AP-42 Table 13.2.1-3)					

	PM	PM10	
Unmitigated Emission Factor, Ef =	1.50	0.29	lb/mile

Unlimited	Unlimited	Limited	Limited
PTE of PM	PTE of PM10	PTE of	PTE of
(tons/yr)	(tons/yr)	PM	PM10
51.99	10.13	1.07E+00	2.08E-01

Assume all trucks are filled to capacity each trip.

Methodology

Unlimited/Unmitigated PTE (ton/year) = Unmitigated Emission Factor (lb/mile) x Maximum One-Way Miles (mile/day) x 365 (day/year)/2000 (lb/ton) Limited One-Way Trip Miles (miles/year) = (Throughput Limit (ton/year)/Maximum Weight of Load (ton/truck)) x Maximum One-Way Distance (mile/day) x 2 Limited PTE (tons/year) = Limited Round Trip Miles (mile/year) x Unmitigated Emission Factor (lb/mile)/2000 (lb/ton)

Company Name: Bunge North America (East), Inc.

Address City IN Zip: 700 N. Rangeline Rd., Morristown, IN 46161

Permit No.: 145-28055-00035 Reviewer: Teresa Freeman Date: June 29, 2010

Calculation from Permit No. T45-21512-00035

FM = adjustment for foreign matter $H_20 = adjustment for moisture$

803,000 ton processed *	1.007 (FM) *	$1.025 (H_20) =$	828,836.5 ton received
yr			yr
1,065,538 ton processed * yr	1.007 (FM) *	1.000151 (H ₂ 0) =	1,073,158.8 ton received yr
		Total for Both Plants =	1,901,995.3 <u>ton receive</u> d <u>vr</u>

Company Name: Bunge North America (East), Inc.

Address City IN Zip: 700 N. Rangeline Rd., Morristown, IN 46161

Permit No.: 145-28055-00035 Reviewer: Teresa Freeman Date: June 29, 2010

The following calculations determine PM emissions from existing limits in Permit No. T145-21512-00035

803000 ton grain *	0.12 lb VOC *	ton VOC	=	48.18 ton VOC
yr	ton grain	2000 lb VOC		yr
803000 ton grain *	0.16 lb VOC *	ton VOC	<u> </u>	64.24 ton VOC
yr	ton grain	2000 lb VOC		yr
803000 ton grain *	0.16 lb VOC *	ton VOC	=	64.24 ton VOC
yr	ton grain	2000 lb VOC		yr
			Total =	176.66
803000 ton grain *	1.2 lb VOC *	ton VOC	=	481.8 ton VOC
yr	ton grain	2000 lb VOC		yr

The following calculations determine adjustments to limits in Permit No. T145-21512-00035

	803000 ton process 828837 ton received		=	0.968827405 (ratio)
0.12 lb VOC * ton processed	0.968827 =	0.116259 lb VOC ton received		
0.16 lb VOC * ton processed	0.968827 =	0.155012 lb VOC ton received		
0.16 lb VOC * ton processed	0.968827 =	0.155012 lb VOC ton received		
1.2 lb VOC * ton processed	0.968827 =	1.162593 lb VOC ton received		

Appendix A: Emissions Calculations Natural Gas and Distillate and No. 2 Oil Combustion Emissions **Boilers and Column Dryer**

Company Name: Bunge North America (East), Inc.

Address City IN Zip: 700 N. Rangeline Rd., Morristown, IN 46161

Permit No.: 145-28055-00035 Reviewer: Teresa Freeman Date: June 29, 2010

		Boiler	Emission Factors Emissions											
		Capacity	PM	PM ₁₀		SO ₂	СО	PM	PM ₁₀	NO _X	SO ₂	СО	VOC	
Unit ID	Description	(mmbtu/h	lb/MMBtu	lb/MMBtu	NO _x Ib/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
	Murray Boiler NG	96	0.0076	0.0076	0.1000	0.0006	0.0840	0.0055	3.20	3.20	42.05	0.25	35.32	2.31
Murray Boiler	Murray Boiler Vegetable Oil	96	0.0160	0.0160	0.1463	0	0	6.73	6.73	61.52	0.00	0.00	0.00	
wurray boller	Murray Boiler Distillate	96	0.0088	0.0088	0.1360	0.5000	0.00790	0.1360	3.70	3.70	57.19	210.24	3.32	57.19
						EU39 Wor	st Case Pote	ntial to Emit	6.73	6.73	61.52	210.24	35.32	57.19
	Boiler No.2 NG	210	0.0076	0.0076	0.1000	0.0006	0.0840	0.0055	6.99	6.99	91.98	0.55	77.26	5.06
Pt #20	Boiler No.2 Vegetable Oil	210	0.0130	0.0130	0.142	0.0167	0.0003	0.0024	11.96	11.96	130.61	15.36	0.28	2.21
F1#20	Boiler No.2 Distillate	210	0.0088	0.0088	0.1360	0.5000	0.00790	0.1360	8.09	8.09	125.09	459.90	7.27	125.09
						EU41 Wor	st Case Pote	11.96	11.96	130.61	459.90	77.26	125.09	
R-107	Refinery Boiler NG	13	0.0076								5.69	0.03	4.78	0.31
K-107						EU42 Wor	st Case Pote	ntial to Emit	0.43	0.43	5.69	0.03	4.78	0.31
			-	-	Total	Worst Case	Emissions	from Boilers	19.12	19.12	197.82	670.17	117.37	182.59

Matrical	^	D	
Natural	Gas	DΓ	ve:

	Hatarar Gas Dryci														
		Column Dryer	20	0.0076	0.0076	0.1000	0.0006	0.0840	0.0055	0.67	0.67	8.76	0.05	7.36	0.48
	Ft#3						EU42 Wors	t Case Poter	tial to Emit	0.67	0.67	8.76	0.05	7.36	0.48
-						Total Mara	4 Casa Emia	alama fram (`abatia	40.0	40.0	206.6	670.0	4247	402 4

Total Worst Case Emissions from Combustion 19.8 206.6 670.2 183.1

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Distillate Oil Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MMBtu Potential Natural Gas Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

All emission factors are based on normal firing.

MMBtu = 1.000.000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Natural Gas Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Fuel Oil Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

Potential Natural Gas Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Potential Emissions from fuel oil combustion (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

The emission calculations are based on emission tests conducted February 12, 2001 and July 19, 2001 on the Boiler B010 stack at the Central Soya facility in Bellevue, OH. These tests were supervised by the Ohio EPA.

Methodology for vegetable oil:

(emission at 0% soybean oil) + ((change in emission between 0% and 58% soybean oil) * (scaling factor))

= (emission at the desired % soybean oil)

^{*}PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.



Mitchell E. Daniels Jr. Governor

Thomas W. Easterly Commissioner

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Maranda Mullis

Bunge North America (East), Inc.

700 N. Range Line Rd Morristown, IN 46161

DATE: April 19, 2011

FROM: Matt Stuckey, Branch Chief

> Permits Branch Office of Air Quality

SUBJECT: Final Decision

Title V - Renewal 145-28055-00035

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to: Brian Searfoss (Facility Manager) Jerri Thibaut **OAQ Permits Branch Interested Parties List**

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07







We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr. Governor

Thomas W. Easterly Commissioner

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

April 19, 2011

TO: Shelbyville – Shelby County Public Library

From: Matthew Stuckey, Branch Chief

> Permits Branch Office of Air Quality

Subject: Important Information for Display Regarding a Final Determination

> Bunge North America (East), Inc. **Applicant Name:**

Permit Number: 145-28055-00035

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, we ask that you retain this document for at least 60 days.

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

> **Enclosures** Final Library.dot 11/30/07







We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr. Governor

Thomas W. Easterly Commissioner

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

TO: Interested Parties / Applicant

DATE: April 19, 2011

RE: Bunge North America (East), Inc. / 145-28055-00035

FROM: Matthew Stuckey, Branch Chief

> Permits Branch Office of Air Quality

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at: http://www.in.gov/ai/appfiles/idem-caats/

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201 100 North Senate Avenue, MC 50-07 Indianapolis, IN 46204 Phone: 1-800-451-6027 (ext. 4-0965)

Fax (317) 232-8659

Please Note: If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV.

> **Enclosures** CD Memo.dot 11/14/08



Mail Code 61-53

IDEM Staff	MIDENNEY 4/19	9/2011		
	Bunge North Am	erica (East), Inc. 145-28055-00035 (final)		AFFIX STAMP
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAILING GIVET	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Maranda Mullis Bunge North America (East), Inc. 700 N Range Line Rd Morristown IN	46161-0860	(Source CAA	TS) via confirmed de	livery					
2		Brian Searfoss Facility Mgr Bunge North America (East), Inc. 700 N Range Line Rd Morristown IN 46161-0860 (RO CAATS)									
3		Mr. Daniel Evans 45 Carriage Lake Dr. Brownsburg IN 46112 (Affected Party)									
4		Mr. Charles L. Berger Berger & Berger, Attorneys at Law 313 Main Street Evansville IN	47700 (Aff	ected Party)							
5		Mr. John Evans 316 2nd Street Huntington Beach CA 92648 (Affected Party)	fr. John Evans 316 2nd Street Huntington Beach CA 92648 (Affected Party)								
6		Mr. Hugh Garner 10203 S Degelow Road Milroy IN 46156 (Affected Party)									
7		Michael & Pamela Bassett 4738 East 1100 North Morristown IN 46161 (Affected Pa	rty)								
8		Christopher, Brandon, Kim & Sarah Everhart 10493 N 800 E Arlington IN 46404-960	2 (Affected P	arty)							
9		Ms. Lisa Fox 6820 East 600 South Morristown IN 46161 (Affected Party)									
10		Mr. Kent Gordon 662 South Wash R 1 Morristown IN 46161 (Affected Party)									
11		Ms. Nikki Griffin 4698 East 1100 North Morristown IN 46161 (Affected Party)									
12		Ms. Kathy Hannemann 7004 East 600 South Morristown IN 46161 (Affected Party)									
13		Gary & Mary Harris 6488 East 600 South Morristown IN 46161 (Affected Party)									
14		Robert & Margaret Halvin 6290 East 600 South Morristown IN 46161 (Affected Party	/)								
15		Sandra & Ray Heck PO Box 163 Morristown IN 46161 (Affected Party)	Sandra & Ray Heck PO Box 163 Morristown IN 46161 (Affected Party)								

Total number of pieces Listed by Sender 14	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual R900</i> , \$913, and \$921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
		Louis Hudson 6433 East 1100 North Morristown IN 46161 (Affected Party)									Remarks
1		Louis Audson 6433 East 1100 Notth Montstown in 46161 (Affected Fally)									
2		Ms. Norma Kraft 9266 North Blue River Road Morristown IN 46161 (Affected Party)									
3		Frances & Katrina Macy PO Box 474 Morristown IN 46161 (Affected Party)									
4		Connie Scott 4359 Est 1100 North Morristown IN 46161 (Affected Party)									
5		Ms. Shirley Shepherdson 8849 North Blue River Road Morristown IN 46161 (Affected Party)									
6		Merrill & Donna Storm 11317 North 500 East Morristown IN 46161 (Affected Party)									
7		Ms. Betty Tribby PO Box 174 Morristown IN 46161 (Affected Party)									
8		Morristown Town Council and Town Manager P.O. Box 389 Morristown IN 46161 (L	ocal Official)								
9		Heather & Sean Christopher 4385 West Woodbridge Lane New Palestine IN 46163-9	9487 (Affecte	ed Party)							
10		Mr. Quin McLoughlin 300 South Plum Grove Road Palatine IL 60067 (Affected Party,)								
11		Dennis & Rita Corn 341 East 5th Street Rushville IN 46173 (Affected Party)									
12		Ms. Junita Nigh 5381 East 850 North Shelbyville IN 46176 (Affected Party)									
13		Shelby County Commissioners 25 West Polk Shelbyville IN 46176 (Local Official)									
14		Shelbyville Shelby Co Public 57 W Broadway Shelbyville IN 46176-1294 (Library)									
15		Larry & Patricia Cassidy 7066 East Union Road Shelbyville IN 46176-9109 (Affected Party)									

occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$5 The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual</i> R900, S913, and S921 for limitations of coverage inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on interna	Total number of pieces Listed by Sender 15	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual</i> R900, S913, and S921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on internations mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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address of		Management		USED AS
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1		Ronald & Marianne Smalley 5433 East 1200 North Morristown IN 46161 (Affected Part	ry)								Remarks
2		Mildred, Robert & Doug Smith 10687 North 300 North Morristown IN 46161 (Affecte	d Party)								
3		Ms. Jackie Shannon PO Box 59 Gwynneville IN 46144 (Affected Party)									
4		Shelby County Health Department 1600 E. SR 44B Shelbyville IN 46176 (Health De	partment)								
5		Margaret Brunk Shelby County Council PO Box 107 Fountaintown In 46130 (Affected	l Party)								
6		Tami Grubbs Shelby County Council 2961 N 100 W Shelbyville In 46176 (Affected Pa	arty)								
7		Jerri Thibaut 11720 Borman Drive St. Louis MO 63146 (Source ? addl contact)									
8											
9											
10											
11											
12											
13											
14											
15											

	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual R900</i> , S913, and S921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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