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

Michael R. Pence
Governor

Carol S. Comer
Commissioner

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a Significant Modification to a Part 70 Operating Permit

for Archer Daniels Midland Company - Frankfort in Clinton County

Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011

The Indiana Department of Environmental Management (IDEM) has received an application from Archer Daniels Midland Company - Frankfort, located at 2191 West County Road 0 N/S, Frankfort, for a significant modification of its Part 70 Operating Permit issued on November 18, 2014. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Archer Daniels Midland Company - Frankfort to make certain changes at its existing source. Archer Daniels Midland Company - Frankfort has applied to add two Expander Units and a Dryer/Cooler.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

A copy of the permit application and IDEM's preliminary findings are available at:

Frankfort-Clinton County Contractual Public Library
208 West Clinton
Frankfort, Indiana 46041

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

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit

application, please contact IDEM at the address below. Please refer to permit number SSM023-36542-00011 and SPM023-36575-00011 in all correspondence.

Comments should be sent to:

Roger Osburn
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 3-0242
Or dial directly: (317) 233-0242
Fax: (317) 232-6749 attn: Roger Osburn
E-mail: rosburn@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Roger Osburn of my staff at the above address.

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

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DRAFT

Denis Oberg
Archer Daniels Midland Company-Frankfort
2191 W. County Road 0 N/S
Frankfort, Indiana 46041

Re: 023-36575-00011
Significant Permit Modification to
Part 70 Renewal No.: T023-34003-00011

Dear Denis Oberg:

Archer Daniels Midland Company-Frankfort was issued Part 70 Operating Permit Renewal No. T023-34003-00011 on November 18, 2014, for a stationary soybean processing and oil refining operation located at 2191 W. County Road 0 N/S. An application requesting changes to this permit was received on November 24, 2015. Pursuant to the provisions of 326 IAC 2-7-12, a Significant Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

Please find attached the entire Part 70 Operating Permit as modified. The permit references the below listed attachments. Since these attachments have been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this modification:

Attachment A - Leak Detection and Correction Program
Attachment B - NSPS Subpart DD - Standards of Performance for Grain Elevators
Attachment C - NSPS Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
Attachment D - NSPS Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
Attachment E - NESHAP Subpart GGGG - Solvent Extraction for Vegetable Oil Production
Attachment F- NESHAP Subpart DDDDD - Industrial, Commercial, and Institutional Boilers and Process Heaters
Attachment G - NESHAP Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines

Previously issued approvals for this source containing these attachments are available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

DRAFT

If you have any questions on this matter, please contact Roger Osburn of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Roger Osburn or extension 3-0242 or dial (317) 233-0242.

Sincerely,

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

Attachments: Significant Permit Modification, Technical Support Document, and Appendix A

cc: File - Clinton County
Clinton County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch

Indiana Department of Environmental Management
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Michael R. Pence
Governor

Carol S. Comer
Commissioner

Part 70 Operating Permit Renewal

DRAFT

OFFICE OF AIR QUALITY

Archer Daniels Midland Company
2191 West County Road 0 N/S
Frankfort, Indiana 46041

(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.: T023-34003-00011	
Issued by: Original Signed Jason R. Krawczyk, Section Chief Permits Branch, Office of Air Quality	Issuance Date: November 18, 2014 Expiration Date: November 18, 2019

Significant Permit Modification No.: 023-36575-00011	
Issued by: Jenny Acker, Section Chief Permits Branch Office of Air Quality	 Issuance Date: Expiration Date: November 18, 2019

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Attachment F- NESHAP Subpart DDDDD - Industrial, Commercial, and Institutional Boilers and Process Heaters
Attachment G - NESHAP Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines

SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary soybean processing and vegetable refining operations.

Source Address:	2191 West County Road 0 N/S, Frankfort, Indiana 46041
General Source Phone Number:	765-654-3091
SIC Code:	2075 (Soybean and Other Oilseed Processing)
County Location:	Clinton
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

(a) One (1) rail unloading operation, identified as EU01, constructed in 1946 and modified in 2004, with a maximum throughput of 1,444,500 tons per year, controlled for particulate matter by one (1) baghouse (GR-1) and exhausting to one (1) stack (EP01), including the following:

(1) Two (2) discharge drag conveyors (S-1 and S-1A);

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

(b) One (1) truck unloading operation, identified as EU02, constructed in 1946, with a maximum throughput of 1,444,500 tons per year, controlled for particulate matter by one (1) baghouse (GR-1) and exhausting to one (1) stack (EP01), including one (1) discharge drag conveyor (S-2);

(c) Two (2) elevator legs (S-3 and S-4), identified as EU03, constructed in 1946, with a maximum throughput of 1,444,500 tons per year, controlled for particulate matter by one (1) baghouse (GR-1) and exhausting to one (1) stack (EP01);

(d) Conveying operation:

(1) One (1) drag conveyor to grain storage (S-5), identified as EU04, constructed in 1946 and modified in 2008, with a maximum throughput of 1,444,500 tons per year, controlled for particulate matter by one (1) baghouse (GR-1) and exhausting to one (1) stack (EP01);

(2) One (1) enclosed drag conveyor (S-5a), identified as EU-04a, constructed in 2011, with a maximum hourly rated capacity of 20,000 bushels and a limited yearly rated capacity of 1,444,500 tons, with particulate emissions controlled by one (1) existing baghouse (GR-1) and exhausting to one (1) stack (EP01);

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

(e) Concrete storage silos, identified as EU05, constructed in 1946, with a maximum throughput of 1,444,500 tons per year;

(f) Two (2) steel storage tank vents, identified as EU06, constructed in 1965, with a maximum throughput of 120,000 tons per year and each steel storage tank vent exhausting through two (2) exhaust fans (per tank) to the atmosphere;

(g) Two (2) conveyors from grain storage (S-6 and S-7), identified as EU07, constructed in 1946 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-18) and one (1) baghouse (CE-05) in series and exhausting to one (1) stack (EP03);

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

(h) One (1) grain cleaner (P-120), identified as EU09, constructed in June of 1990 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-18) and one (1) baghouse (CE-05) in series and exhausting to one (1) stack (EP03);

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

(i) One (1) E/W bean dryer, identified as EU10, constructed in February of 1986, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-06) and one (1) baghouse (BH-06A) in series and exhausting to one (1) stack (EP04);

Under 40 CFR 60, Subpart DD, this is considered an affected facility

(j) Cracking rolls, identified as EU11, constructed in February of 1986 and modified in 2008, with a maximum throughput of 1,314,000 tons per year;

(k) One (1) hull separator system, identified as EU12, constructed in February of 1986 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-06) and one (1) baghouse (BH-06A) in series and exhausting to one (1) stack (EP04);

(l) One (1) conditioner, identified as EU13, constructed in February of 1986 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-06) and one (1) baghouse (BH-06A) in series and exhausting to one (1) stack (EP04);

(m) One (1) flaking operation, identified as EU14, constructed in June of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-07) and exhausting to one (1) stack (EP05);

(n) One (1) Expander System identified as EU15, approved in 2016,for construction, consisting of: two feeder augers, Expander 1 and Expander 2, each with a eight hundred

(800) ton per day capacity, and a Dryer/Cooler with a capacity of sixteen hundred (1600) tons per day, two drag conveyors feeding the product back to the flaking operation; particulates from Expander 1, Expander 2, and the Dryer/Cooler are controlled by a cyclone, identified as CE-15, exhausting to stack EP-16.

(o) One (1) secondary hull screening operation, identified as EU16, constructed in August of 1994 and modified in 2008, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one baghouse (CE-05) and three (3) cyclones (CE-19, CE-19A and CE-19B) in parallel and exhausting to one (1) stack (EP03);

(p) Two (2) hull grinders (H-250 and H-251), identified as EU17, constructed in June of 1989 and modified in 2008, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-20) and one (1) baghouse (CE-20A) in series and exhausting to one (1) stack (EP20);

(q) Two (2) hull storage bins, identified as EU18, constructed in 1946, with a maximum throughput of 91,980 tons per year and exhausting to one (1) stack (EP03); including one (1) enclosed conveyor T-6, one (1) leg T-7, and one (1) enclosed conveyor T-8;

(r) One (1) hull conveyor, identified as EU19, constructed in 1946 and modified in 2008, with a maximum throughput of 91,980 tons per year;

(s) One (1) pellet mill, identified as EU20, constructed in June of 1992, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-08) and exhausting to one (1) stack (EP07);

(t) One (1) pellet cooler, identified as EU21, constructed in June of 1992, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-08) and exhausting to one (1) stack (EP07);

(u) One (1) pellet storage unit, identified as EU22, constructed in June of 1992, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-18) and one (1) baghouse (CE-05) in series and exhausting to one (1) stack (EP03);

(v) One (1) dryer deck, DTDC - Deck #1, identified as EU23, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-09) and exhausting to one (1) stack (EP08A);

(w) Two (2) DTDC dryer decks:

(1) DTDC - Deck #2, identified as EU24, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-10) and exhausting to one (1) stack (EP08A);

(2) DTDC - Deck #3, identified as EU24A, and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-10A) and exhausting to one (1) stack (EP09A);

(x) One (1) DTDC - cooler deck, identified as EU25, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-11) and exhausting to one (1) stack (EP10);

(y) One (1) meal conveyor (from DTDC to meal screens) (P-152), identified as EU26, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(z) One (1) meal sifting operation, identified as EU27, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(aa) One (1) meal grinding operation, identified as EU28, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(bb) One (1) meal storage elevator leg (P-512), identified as EU29, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(cc) One (1) meal storage unit (two tanks), identified as EU30, constructed in 1958 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, controlled for particulate matter by two (2) bin vent filters (BH-30A and BH-30B), one on each tank and each filter exhausting to individual stacks (EP30A and EP30B), including five (5) enclosed conveyors (T-01, T-02, T-03, T-04 and T-05);

Note: The transfer equipment does not allow the source to fill both tanks simultaneously. Meal is loaded into one tank at a time. When one tank becomes full, then the meal will flow into the other remaining tank.

(dd) Two (2) meal surge tanks, identified as EU31, constructed in 1986 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, a portion of emissions controlled for particulate matter by one (1) bin vent filter (BH-31) and exhausting to one (1) stack (EP31);

(ee) One (1) hull pellet surge tank, identified as EU32, constructed in 1986, with a maximum throughput of 91,980 tons per year, a portion of emissions controlled for particulate matter by one (1) bin vent filter (BH-31) and exhausting to one (1) stack (EP31);

(ff) One (1) enclosed conveying system, identified as EU33, constructed in 1988, comprised of five (5) enclosed conveyors (T-9, T-10, T-11, T-12, and T-13), modified in 2012 to replace conveyor T-11. Four (4) of which convey meal from the Middle and West Meal Tanks to truck and rail load out (T-9, T-10, T-12, and T-13) with a maximum throughput of 1,051,200 tons per year, and one (1) conveyor (T-11) which conveys hulls and hull pellets from the East tank to truck and rail loadout with a maximum throughput of 91,980 tons per year;

(gg) One (1) truck meal, hull and hull pellet loadout operation, identified as EU34, constructed in 1988, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (ML-1) and exhausting to one (1) stack (EP12);

(hh) One (1) rail meal, hull and hull pellet loadout operation, identified as EU35, constructed in 1988, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (ML-1) and exhausting to one (1) stack (EP12), including two (2) drag conveyors (T-14 and T-15);

(ii) One (1) meal clay storage unit, identified as EU36, constructed in 1986, with a maximum throughput of 6,570 tons per year, controlled for particulate matter by one (1) baghouse (MC-1) and exhausting to one (1) stack (EP13);

(jj) One (1) refinery clay storage unit, identified as EU37, constructed in 1992, with a maximum throughput of 4,500 tons per year, controlled for particulate matter by one (1) baghouse (RCB) and exhausting to one (1) stack (EP14);

(kk) One (1) oil extraction process using hexane solvent, identified as EU38, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year and emissions released through a number of exit streams in the process collectively called the “hexane bubble”. The process is equipped with one (1) mineral oil absorber/scrubber (CE-22), which exhausts through one (1) stack (EP25). This process is also equipped with a once-through cold water condenser located between the vent condenser and the mineral oil absorber/scrubber;

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

(ll) Boiler #1, identified as EU39, constructed in 1960, with a rated capacity of 62.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP15);

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

(mm) Boiler #3, identified as EU41, constructed in 1992, with a rated capacity of 82.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP17);

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

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

(nn) One (1) Refinery Boiler, identified as EU42, constructed in 2000, with a rated capacity of 13 MMBtu per hour and firing natural gas or No. 2 distillate fuel oil, exhausting to one (1) stack (EP18);

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

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

(oo) One (1) vertical seed conditioner, also referred to as a steam-heated soybean heater, identified as EU44, constructed in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (BH-44) and exhausting to one (1) stack (EP44);

(pp) Boiler #4, identified as EU46, constructed in 2008, with a rated capacity of 145 MMBtu per hour firing natural gas and 140 MMBtu firing vegetable oil, No. 2 distillate fuel oil or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP46);

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

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

(qq) Stockpiling of soybean meal in railcars and trucks at a limited throughput of 100,000

tons/year, combined with soybean hulls and hull pellets, utilizing existing grain receiving/unloading pits EU01 and EU02, elevator leg EU03, conveyor EU04, EU05 grain storage, conveyor EU28A, storage tanks EU30, surge tanks EU31, enclosed conveying system EU33, and rail and truck meal loadout EU34 and EU35, constructed in 2008;

(rr) Stockpiling soybean hulls in railcars and trucks at a limited throughput of 100,000 tons/year, combined with soybean meal and hull pellets, utilizing existing grain receiving/unloading pits EU01 and EU02, elevator leg EU03, conveyor EU04, EU05 grain storage, storage tanks EU18, surge tanks EU32, enclosed conveying system EU33, and rail and truck meal loadout EU34 and EU35, constructed in 2011;

(ss) Stockpiling soybean hull pellets in railcars and trucks at a limited throughput of100,000 tons/year, combined with soybean meal and hull pellets, utilizing existing grain receiving/unloading pits EU01 and EU02, elevator leg EU03, conveyor EU04, EU05 grain storage, storage tanks EU18, surge tanks EU32, enclosed conveying system EU33, and rail and truck meal loadout EU34 and EU35, constructed in 2011.

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

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

(a) Parts cleaning operation consisting of a non-VOC solution.

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment.

(c) Paved and unpaved roads with limited public access

(d) The following activities with emissions equal to or less than insignificant thresholds:

(1) One (1) cooling tower (CT#7), identified as EU45, with a design recirculation rate of 1,500 gal/min.

(2) Six (6) Cooling Towers (CT#1 thru CT#6), identified as EU48, constructed from 1985 through 1996, three (3) with a design recirculation rate of 2315 gal/min, one (1) with a design recirculation rate of 1925 gal/min and two (2) with a design recirculation rates 1500 gal/min.

(3) One (1) silica clay storage silo, identified as EU47, constructed in 2002, with a maximum throughput of 450 tons per year, particulate emissions controlled by a baghouse (RC-2) and exhausting through one (1) stack (EP19).

(e) One (1) stationary emergency fire pump with a 230 horsepower engine, identified as EU49, constructed in 1985.

Under 40 CFR 63, Subpart ZZZZ, the diesel-fired emergency fire pump is considered an affected facility.

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).

(c) It is an affected source under Title IV (Acid Deposition Control) of the Clean Air Act, as defined in 326 IAC 2-7-1(3);

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, T023-34003-00011, 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 or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A "responsible official" is defined at 326 IAC 2-7-1(35).

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

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

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

and

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

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

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

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

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

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

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

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

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

The Permittee shall implement the PMPs.

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

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

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

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

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

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

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

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

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

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

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

(A) A description of the emergency;

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

(C) Corrective actions taken.

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

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

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

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

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) All terms and conditions of permits established prior to T023-34003-00011 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, except for

permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

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

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

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

(1) That this permit contains a material mistake.

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

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

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

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

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

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

Indianapolis, Indiana 46204-2251

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

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

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]

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

(b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 operating permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]

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

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

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

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

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar

approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

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

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

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

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

(4) The Permittee notifies the:

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) and (c)(1). The Permittee shall make such records available, upon reasonable request, for public review.

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

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(37)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

(f) This condition does not apply to emission trades of SO_2 or NO_X under 326 IAC 21 or 326 IAC 10-4.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

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

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

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work

or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

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

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

C.7 Performance Testing [326 IAC 3-6]

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

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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

(a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:
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 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, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue

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

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

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

(c) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

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

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

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

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

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

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

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

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

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

C.12 Risk Management Plan [326 IAC 2-7-5(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.13 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]

(I) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

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

(1) monitoring results;

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

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

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

(e) The Permittee shall record the reasonable response steps taken.

(II)

(a) CAM *Response to excursions or exceedances.*

(1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal

without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(2) Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

(e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) *CAM recordkeeping requirements.*

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

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

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

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

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

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(33) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue

MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

Records of required monitoring information include the following, where applicable:

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

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

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

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

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

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

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

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3] [40 CFR 64][326 IAC 3-8]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

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

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

(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

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

(b) The address for report submittal is:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

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

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

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

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

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

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

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

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) rail unloading operation, identified as EU01, constructed in 1946 and modified in 2004, with a maximum throughput of 1,444,500 tons per year, controlled for particulate matter by one (1) baghouse (GR-1) and exhausting to one (1) stack (EP01), including the following:

(1) Two (2) discharge drag conveyors (S-1 and S-1A);

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

(b) One (1) truck unloading operation, identified as EU02, constructed in 1946, with a maximum throughput of 1,444,500 tons per year, controlled for particulate matter by one (1) baghouse (GR-1) and exhausting to one (1) stack (EP01), including one (1) discharge drag conveyor (S-2);

(c) Two (2) elevator legs (S-3 and S-4), identified as EU03, constructed in 1946, with a maximum throughput of 1,444,500 tons per year, controlled for particulate matter by one (1) baghouse (GR-1) and exhausting to one (1) stack (EP01);

(d) Conveying operation:

(1) One (1) drag conveyor to grain storage (S-5), identified as EU04, constructed in 1946 and modified in 2008, with a maximum throughput of 1,444,500 tons per year, controlled for particulate matter by one (1) baghouse (GR-1) and exhausting to one (1) stack (EP01);

(2) One (1) enclosed drag conveyor (S-5a), identified as EU-04a, constructed in 2011, with a maximum hourly rated capacity of 20,000 bushels and a limited yearly rated capacity of 1,444,500 tons, with particulate emissions controlled by one (1) existing baghouse (GR-1) and exhausting to one (1) stack (EP01);

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

(e) Concrete storage silos, identified as EU05, constructed in 1946, with a maximum throughput of 1,444,500 tons per year;

(f) Two (2) steel storage tank vents, identified as EU06, constructed in 1965, with a maximum throughput of 120,000 tons per year and each steel storage tank vent exhausting through two (2) exhaust fans (per tank) to the atmosphere;

(g) Two (2) conveyors from grain storage (S-6 and S-7), identified as EU07, constructed in 1946 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-18) and one (1) baghouse (CE-05) in series and exhausting to one (1) stack (EP03);

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

(h) One (1) grain cleaner (P-120), identified as EU09, constructed in June of 1990 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-18) and one (1) baghouse (CE-05) in series

and exhausting to one (1) stack (EP03);

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

(i) One (1) E/W bean dryer, identified as EU10, constructed in February of 1986, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-06) and one (1) baghouse (BH-06A) in series and exhausting to one (1) stack (EP04);

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

(j) Cracking rolls, identified as EU11, constructed in February of 1986 and modified in 2008, with a maximum throughput of 1,314,000 tons per year;

(k) One (1) hull separator system, identified as EU12, constructed in February of 1986 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-06) and one (1) baghouse (BH-06A) in series and exhausting to one (1) stack (EP04);

(l) One (1) conditioner, identified as EU13, constructed in February of 1986 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-06) and one (1) baghouse (BH-06A) in series and exhausting to one (1) stack (EP04);

(m) One (1) flaking operation, identified as EU14, constructed in June of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-07) and exhausting to one (1) stack (EP05);

(n) One (1) Expander System identified as EU15, approved in 2016 for construction, consisting of: two feeder augers, Expander 1 and Expander 2, each with a eight hundred (800) ton per day capacity, and a Dryer/Cooler with a capacity of sixteen hundred (1600) tons per day, two drag conveyors feeding the product back to the flaking operation; particulates from Expander 1, Expander 2, and the Dryer/Cooler are controlled by a cyclone, identified as CE-15, exhausting to stack EP-16.

(o) One (1) secondary hull screening operation, identified as EU16, constructed in August of 1994 and modified in 2008, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one baghouse (CE-05) and three (3) cyclones (CE-19, CE-19A and CE-19B) in parallel and exhausting to one (1) stack (EP03);

(p) Two (2) hull grinders (H-250 and H-251), identified as EU17, constructed in June of 1989 and modified in 2008, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-20) and one (1) baghouse (CE-20A) in series and exhausting to one (1) stack (EP20);

(q) Two (2) hull storage bins, identified as EU18, constructed in 1946, with a maximum throughput of 91,980 tons per year and exhausting to one (1) stack (EP03); including one (1) enclosed conveyor T-6, one (1) leg T-7, and one (1) enclosed conveyor T-8;

(r) One (1) hull conveyor, identified as EU19, constructed in 1946 and modified in 2008, with a maximum throughput of 91,980 tons per year;

(s) One (1) pellet mill, identified as EU20, constructed in June of 1992, with a maximum

throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-08) and exhausting to one (1) stack (EP07);

(t) One (1) pellet cooler, identified as EU21, constructed in June of 1992, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-08) and exhausting to one (1) stack (EP07);

(u) One (1) pellet storage unit, identified as EU22, constructed in June of 1992, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-18) and one (1) baghouse (CE-05) in series and exhausting to one (1) stack (EP03);

(v) One (1) dryer deck, DTDC - Deck #1, identified as EU23, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-09) and exhausting to one (1) stack (EP08A);

(w) Two (2) DTDC dryer decks:

(1) DTDC - Deck #2, identified as EU24, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-10) and exhausting to one (1) stack (EP08A);

(2) DTDC - Deck #3, identified as EU24A, and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-10A) and exhausting to one (1) stack (EP09A);

(x) One (1) DTDC - cooler deck, identified as EU25, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-11) and exhausting to one (1) stack (EP10);

(y) One (1) meal conveyor (from DTDC to meal screens) (P-152), identified as EU26, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(z) One (1) meal sifting operation, identified as EU27, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(aa) One (1) meal grinding operation, identified as EU28, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(bb) One (1) meal storage elevator leg (P-512), identified as EU29, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(cc) One (1) meal storage unit (two tanks), identified as EU30, constructed in 1958 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, controlled for particulate matter by two (2) bin vent filters (BH-30A and BH-30B), one on each tank and each filter exhausting to individual stacks (EP30A and EP30B), including five (5)

enclosed conveyors (T-01, T-02, T-03, T-04 and T-05);

Note: The transfer equipment does not allow the source to fill both tanks simultaneously. Meal is loaded into one tank at a time. When one tank becomes full, then the meal will flow into the other remaining tank.

(dd) Two (2) meal surge tanks, identified as EU31, constructed in 1986 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, a portion of emissions controlled for particulate matter by one (1) bin vent filter (BH-31) and exhausting to one (1) stack (EP31);

(ee) One (1) hull pellet surge tank, identified as EU32, constructed in 1986, with a maximum throughput of 91,980 tons per year, a portion of emissions controlled for particulate matter by one (1) bin vent filter (BH-31) and exhausting to one (1) stack (EP31);

(ff) One (1) enclosed conveying system, identified as EU33, constructed in 1988, comprised of five (5) enclosed conveyors (T-9, T-10, T-11, T-12, and T-13), modified in 2012 to replace conveyor T-11. Four (4) of which convey meal from the Middle and West Meal Tanks to truck and rail load out (T-9, T-10, T-12, and T-13) with a maximum throughput of 1,051,200 tons per year, and one (1) conveyor (T-11) which conveys hulls and hull pellets from the East tank to truck and rail loadout with a maximum throughput of 91,980 tons per year;

(gg) One (1) truck meal, hull and hull pellet loadout operation, identified as EU34, constructed in 1988, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (ML-1) and exhausting to one (1) stack (EP12);

(hh) One (1) rail meal, hull and hull pellet loadout operation, identified as EU35, constructed in 1988, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (ML-1) and exhausting to one (1) stack (EP12), including two (2) drag conveyors (T-14 and T-15);

(ii) One (1) meal clay storage unit, identified as EU36, constructed in 1986, with a maximum throughput of 6,570 tons per year, controlled for particulate matter by one (1) baghouse (MC-1) and exhausting to one (1) stack (EP13);

(jj) One (1) refinery clay storage unit, identified as EU37, constructed in 1992, with a maximum throughput of 4,500 tons per year, controlled for particulate matter by one (1) baghouse (RCB) and exhausting to one (1) stack (EP14);

(kk) One (1) oil extraction process using hexane solvent, identified as EU38, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year and emissions released through a number of exit streams in the process collectively called the “hexane bubble”. The process is equipped with one (1) mineral oil absorber/scrubber (CE-22), which exhausts through one (1) stack (EP25). This process is also equipped with a once-through cold water condenser located between the vent condenser and the mineral oil absorber/scrubber;

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

(ll) Boiler #1, identified as EU39, constructed in 1960, with a rated capacity of 62.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP15);

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

(mm) Boiler #3, identified as EU41, constructed in 1992, with a rated capacity of 82.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP17);

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

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

(nn) One (1) Refinery Boiler, identified as EU42, constructed in 2000, with a rated capacity of 13 MMBtu per hour and firing natural gas or No. 2 distillate fuel oil, exhausting to one (1) stack (EP18);

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

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

(oo) One (1) vertical seed conditioner, also referred to as a steam-heated soybean heater, identified as EU44, constructed in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (BH-44) and exhausting to one (1) stack (EP44);

(pp) Boiler #4, identified as EU46, constructed in 2008, with a rated capacity of 145 MMBtu per hour firing natural gas and 140 MMBtu firing vegetable oil, No. 2 distillate fuel oil or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP46);

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

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

(qq) Stockpiling of soybean meal in railcars and trucks at a limited throughput of 100,000 tons/year, combined with soybean hulls and hull pellets, utilizing existing grain receiving/unloading pits EU01 and EU02, elevator leg EU03, conveyor EU04, EU05 grain storage, conveyor EU28A, storage tanks EU30, surge tanks EU31, enclosed conveying system EU33, and rail and truck meal loadout EU34 and EU35, constructed in 2008;

(rr) Stockpiling soybean hulls in railcars and trucks at a limited throughput of 100,000 tons/year, combined with soybean meal and hull pellets, utilizing existing grain receiving/unloading pits EU01 and EU02, elevator leg EU03, conveyor EU04, EU05 grain storage, storage tanks EU18, surge tanks EU32, enclosed conveying system EU33, and rail and truck meal loadout EU34 and EU35, constructed in 2011;

(ss) Stockpiling soybean hull pellets in railcars and trucks at a limited throughput of100,000 tons/year, combined with soybean meal and hull pellets, utilizing existing grain receiving/unloading pits EU01 and EU02, elevator leg EU03, conveyor EU04, EU05 grain storage, storage tanks EU18, surge tanks EU32, enclosed conveying system EU33, and rail and truck meal loadout EU34 and EU35, constructed in 2011.

(d) The following activities with emissions equal to or less than insignificant thresholds:

(1) One (1) cooling tower (CT#7), identified as EU45, with a design recirculation rate

of 1,500 gal/min.

(2) Six (6) Cooling Towers (CT#1 thru CT#6), identified as EU48, constructed from 1985 through 1996, three (3) with a design recirculation rate of 2315 gal/min, one (1) with a design recirculation rate of 1925 gal/min and two (2) with a design recirculation rates 1500 gal/min.

(3) One (1) silica clay storage silo, identified as EU47, constructed in 2002, with a maximum throughput of 450 tons per year, particulate emissions controlled by a baghouse (RC-2) and exhausting through one (1) stack (EP19).

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

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

D.1.1 Best Available Control Technology (BACT) for Volatile Organic Compounds (VOC) [326 IAC 2-2-3]

Pursuant to 326 IAC 2-2-3 (PSD - BACT) and PSD SSM 023-24843-00011:

(a) VOC emissions from the oil extraction and solvent recovery process (EU38) main vent shall be controlled by a condenser and mineral oil absorber/scrubber system (CE-22).

(b) The overall solvent loss ratio from the oil extraction process shall not exceed 0.179 gallons of hexane per ton of soybeans processed. Compliance with the solvent loss ratio limit shall be demonstrated using the average solvent loss ratio per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The Permittee shall optimize the design and operation of the Desolventizer-Toaster-Dryer-Cooler (DTDC) (consisting of EU23, EU24, EU24A and EU25) to mitigate VOC emissions.

(d) Within 60 days of achieving full production permitted by PSD SSM 023-24843-00011, but no later than 180 days after startup of the modified extraction process, the Permittee shall implement a leak detection and correction program to control VOC emissions. The program is included as Attachment A to this permit.

(e) The amount of soybeans processed by the source shall not exceed 1,314,000 tons per twelve consecutive month period with compliance determined at the end of each month.

D.1.2 PM/PM10/PM2.5 Minor Emission Limitations for PSD [326 IAC 2-2]

(a) Pursuant to SSM 023-24843-00011 and SPM 023-29230-00011 and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the PM and PM10 emissions from the following units are limited as follows:

Unit (ID)	PM Limit	PM10 Limit	Units for Limit
Vertical Seed Conditioner (EU44)	0.001	0.001	lb/ton beans processed
DTDC Meal Dryer Deck #1 and Deck #2 (EU23 and EU24)	0.00649	0.00649	
DTDC Meal Dryer Deck #3 (EU24A)	0.0063	0.0063	
DTDC Meal Cooler Deck (EU25)	0.0018	0.0018	
Bean Dryer, Cracking Rolls, Hull Separator and Conditioner (EU10/11/12/13)	0.00161	0.00161	lb/ton beans processed
Bean Dryer, Cracking Rolls, Hull Separator and	0.131	0.085	

Unit (ID)	PM Limit	PM10 Limit	Units for Limit
Conditioner (EU10/11/12/13) (baghouse BH-06A bypassed)			
Conveying to Processing (EU07/09/16/18/22)	0.0018	0.0017	lb/ton grain received
Hull Grinder (EU17)	0.00674	0.00674	lb/ton hulls processed
Flaking Rolls (EU14)	0.050	0.032	lb/ton beans processed
Meal Conveyor (EU26/27/28/29)	0.0040	0.0037	lb/ton meal produced
Meal Surge Tanks (EU31)	0.00013	0.00003	lb/ton meal produced
Truck and Rail Receiving (EU01/02/03/04/05)	0.0011	0.0004	lb/ton grain received
Pellet Mill and Cooler (EU20/21)	0.030	0.030	lb/ton hulls processed
Meal Storage Unit (EU30) (BH-30A)	0.00013	0.00003	lb/ton meal produced
Meal Storage Unit (EU30) (BH-30B)	0.00013	0.00003	
Truck Meal, Hull and Hull Pellet Loadout (EU34)	0.0013	0.0009	
Rail Meal, Hull and Hull Pellet Loadout (EU35)	0.0013	0.0009	lb/ton beans processed
Hull Surge Tank (EU32)	0.00013	0.00003	lb/ton hulls processed
Meal Clay Storage Unit (EU36)	0.00291	0.00204	lb/ton clay received
Silica Clay Silo (EU47)	0.00291	0.00204	lb/ton clay received
Cooling Tower (EU45)	0.030	0.030	lb/hr

(b) The amount of soybeans processed by the source shall not exceed 1,314,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(c) Units EU10, EU11, EU12 and EU13 may operate without the emissions control of baghouse BH-06A for no more than 200 hours per year.

Compliance with these limits will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable with respect to PM and PM10.

(d) Pursuant to SSM 023-30611-00011 and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the PM and PM10 emissions from the conveyor, identified as EU-04a shall be limited as follows:

(1) The PM emission rate from the one (1) enclosed drag conveyor (S-5a), identified as EU-04a, controlled by baghouse GR-1, shall not exceed 0.034 pound per ton.

(2) The PM10 emission rate from the one (1) enclosed drag conveyor (S-5a), identified as EU-04a, controlled by baghouse GR-1, shall not exceed 0.020 pound per ton.

(3) The combined grain throughput to the one (1) enclosed drag conveyor (S-5a), identified as EU-04a and conveyor (S-5), shall not exceed 1,444,500 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification

is less than twenty-five (25) tons of PM per year and less than fifteen (15) tons of PM_{10} per year and therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) are rendered not applicable.

(e) Pursuant to SSM 023-36542-00011 and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the PM, PM10, and PM2.5 emissions from the Expander System, identified as EU15, shall not exceed 2.27 pounds per hour.

Compliance with these limits shall limit the potential to emit from this modification of PM to less than twenty-five (25) tons per twelve (12) consecutive month period, PM_{10} to less than fifteen (15) tons per twelve (12) consecutive month period, $PM_{2.5}$ to less than ten (10) tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.1.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate from the emission units listed below shall be limited as shown in the tables below based on the following equations:

Interpolation of the data for the process weight rate up to 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

or

Interpolation and extrapolation of the data for the process weight rate in excess of 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

(a) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the facilities listed below during normal operation shall be limited as indicated in the table below.

Emission Unit	Process Weight Rate (tons/hr)	Allowable Particulate Emissions (lb/hr)
Rail Unloading, EU01	600	71.16
Truck Unloading, EU02	600	71.16
Grain elevator, EU03	1200	79.97
Conveyor, EU-04 to grain storage, EU-05	600	71.16
Conveyor, EU-04a to grain storage, EU-05	600	71.16
Concrete silo top vents, EU05	720	73.41
Steel storage tank vents, EU06	720	73.41
Conveyor from grain storage, EU07	225	59.79
Grain Cleaner, EU09	180	57.37
Bean Dryer, EU10	180	57.37
Cracking Rolls, EU11	180	57.37
Hull Separator, EU12	180	57.37
Conditioner, EU13	180	57.37
Flaking, EU14	172	56.89
Expander System, EU15	66.7	47.30
Hull Screen, EU16	14	24.03
Hull Grinder, EU17	14	24.03
Hull Storage Unit, EU18	14	24.03
Hull Conveyor, EU19	14	24.03
Pellet Mill, EU20	14	24.03
Pellet Cooler, EU21	14	24.03
Pellet Storage Unit, EU22	14	24.03
Dryer Deck #1, EU23	172	56.89
Dryer Deck #2, EU24	172	56.89
Dryer Deck #3, EU24A	172	56.89
Cooler Deck, EU25	172	56.89
Meal Conveyor, EU26	136	54.42
Meal sifter, EU27	136	54.42
Meal grinder, EU28	136	54.42
Meal storage conveyor, EU29	136	54.42
Meal Storage Tank, EU30, BH-30A	136	54.42
Meal Storage Tank, EU30, BH-30B	136	54.42
Meal surge tanks, EU31	300	63.00
Hull surge tank, EU32	100	51.28
Enclosed Conveying System, EU33	250	60.96
Truck Meal & Hull Pellet loadout, EU34	250	60.96
Rail Meal & Hull Pellet loadout, EU35	250	60.96
Meal clay storage, EU36	25	35.43
Refinery clay storage, EU37	25	35.43
Vertical Seed Conditioner, EU44	180	57.37

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

(1) For purposes of demonstrating compliance with the particulate emission limits for the rail unloading (EU01), the truck unloading (EU02), the grain elevator (EU03), the conveyors to grain storage (EU04), and the concrete silos (EU05) all exhausting through baghouse GR-1, which exhausts through stack EP01, the allowable particulate emission rate from baghouse GR-1 shall be limited to 437.7 pounds per hour.

(2) For purposes of demonstrating compliance with the particulate emission limits for the conveyor from grain storage (EU07), the grain cleaner (EU09), the hull screen (EU16), the hull storage unit (EU18) and the pellet storage unit (EU22) all exhausting through baghouse CE-05, which exhausts through stack EP03, the allowable particulate emission rate from baghouse CE-05 shall be limited to 189.2 pounds per hour.

(3) For purposes of demonstrating compliance with the particulate emission limits for the bean dryer (EU10), the cracking rolls (EU11), the hull separator (EU12) and the conditioner (EU13) all exhausting through cyclone CE-06, which exhausts through stack EP04, the allowable particulate emission rate from cyclone CE-06 and baghouse BH-06A shall be limited to 229.6 pounds per hour.

(4) For purposes of demonstrating compliance with the particulate emission limits for the pellet mill (EU20) and the pellet cooler (EU21) both exhausting through cyclone CE-08, which exhausts through stack EP07, the allowable particulate emission rate from cyclone CE-08 shall be limited to 48 pounds per hour.

(5) For purposes of demonstrating compliance with the particulate emission limits for the conveyor to meal screens (EU26), the meal sifter (EU27), the meal grinder (EU28) and the meal storage conveyor (EU29) all exhausting through baghouse BH-2A, which exhausts through stack EP11, the allowable particulate emission rate from baghouse BH-2A shall be limited to 217.6 pounds per hour.

(6) For purposes of demonstrating compliance with the particulate emission limits for the truck meal & hull pellet loadout (EU34), and the rail meal & hull pellet loadout (EU35) all exhausting through baghouse ML-1, which exhausts through stack EP12, the allowable particulate emission rate from baghouse ML-1 shall be limited to 122 pounds per hour.

(7) For purposes of demonstrating compliance with the particulate emission limits for the Meal Surge Tanks (2 Tanks) (EU31), and the Hull Surge Tank (EU32) all exhausting through baghouse BH-31, which exhausts through stack EP31, the allowable particulate emission rate from baghouse BH-31 shall be limited to 114.3 pounds per hour.

(c) Pursuant to 326 IAC 6-3-2, the allowable particulate emissions rate from the following processes when soybean meal is stockpiled in railcars during plant's shutdowns shall be limited as follows:

Emission Unit ID	**Process Weight Rate (ton/hr)**	**Allowable Particulate Emissions (lb/hr)**
Rail/Truck Receiving (EU01 and EU02)	400	66.31
Grain/Meal Elevator (EU03)	720	73.41
Conveyor to Meal Storage Tanks (EU28A)	136	54.42
Meal Storage Tanks (EU30)	136	54.42
Meal Surge Tanks (EU31)	300	63.00
Rail/Truck Meal Loadout (EU34 and EU35)	250	60.96

D.1.4 Consent Decree Requirements

Pursuant to the Consent Decree in United States v. Archer Daniels Midland Company, Civil Action No. 03-2066, that was lodged with the United States District Court for the Central District of Illinois, the following requirements apply to the Permittee:

(a) As part of the consent decree, an once-through cold water condenser shall be installed and will be located between the vent condenser and the mineral oil absorber/scrubber. The purpose of this condenser is to condense hexane vapors and reduce the vapor loading to the mineral oil absorber/scrubber. The Consent Decree requires that ADM's Frankfort, Indiana plant install only the once-through cold-water condenser prior to the mineral oil absorber/scrubber. ADM shall conduct a design and engineering review of each affected unit to size the condenser upgrade. The design criteria for the once-through cold-water condenser that will be the basis for sizing the required condenser upgrade is a minimum of 94 ft^2 surface area.

By no later than the dates set forth in section 6.0 of Attachment 9 of the Consent Decree, VOC Control Technology Plan for ADM's Oilseed Plants, ADM shall upgrade its oilseed plants so that all plants have condenser systems that include, at a minimum, a dedicated "extractor condenser" for the extractor and a once-through cold water condenser following the vent condenser. This shall be done at all ADM plants no later than April 1, 2006.

(b) By no later than December 31, 2007, ADM shall propose in writing to the U.S. EPA, the Department of Justice, and the OAQ, the Plaintiffs in the Consent Decree for this plant, final VOC Solvent Loss Ratio (SLR) limits for this facility that satisfy the requirements of Subsection 5.2 of Attachment 9 of the Consent Decree presented below.

Except for multi-seed plants, the capacity-weighted average of these final VOC SLR limits for the conventional soybean group shall not exceed the VOC SLR limit of 0.175 gal/ton for conventional soybean plants.

The capacity weighted average of the final VOC SLR limit for the conventional soybean group is to be calculated using the following equation:

Conventional Soybean = $\sum(Seed_i * SLR_i) / \sum(Seed_i) \leq 0.175$ gal/ton

where: $Seed_i$ = Crush capacity of soybean plant i; and
SLR_i = Final SLR Limit for soybean plant i.

The capacity-weighted averages shall be based on the design capacity for each plant that has been approved by the Plaintiffs under Paragraph 68 of the Consent Decree. For purposes of the Consent Decree, design capacity is the "maximum permitted crush capacity" that a plant is allowed to process in a given time period under its operating permit; or, if no limit is included in the operating permit, the plant 's maximum physical capacity. This number is expressed as "tons of crush per day."

Note the maximum crush capacity of the oil extraction process at this source is confidential trade secret information.

Compliance with these requirements satisfies the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 8-1-6 (New Facilities, General Reduction Requirements).

D.1.5 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

Pursuant to SSM 023-26411-00011 and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

(a) The source soybean meal production shall be limited to a total of 1,143,180 tons per twelve (12) consecutive month period, with compliance at the end of each month.

(b) The soybean meal, hulls, and hull pellets stockpiled into the railcars during plant's shutdown, shall be limited to 100,000 tons per twelve (12) consecutive month period, with compliance at the end of each month. The soybean meal, hulls, and hull pellets stockplied shall be counted toward the source total soybean meal production limit of 1,143,180 tons per twelve (12) consecutive month period.

Compliance with the above limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable with respect to PM and PM10.

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

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

D.1.7 Testing Requirements [326 IAC 2-7-6(1)(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.1.2, the Permittee shall perform PM and PM_{10} testing of the stack exhaust from all units (except for EU04, EU07, EU26, EU29, EU03, EU45, EU47, EU31, EU32, and EU36) limited by Condition D.1.2 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) In order to demonstrate compliance with Condition D.1.2, the Permittee shall perform PM and PM_{10} testing of the stack exhaust from EU30 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. The source will test the exhaust from EP30A or EP30B. The stack not tested, will be tested during the next compliance demonstration test in five years then testing will alternate between the two stacks every five years after.

(c) In order to demonstrate compliance with Conditions D.1.2 and D.1.3, the Permittee shall perform PM and PM_{10} testing of the stack exhaust from EU44 utilizing methods approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(d) In order to demonstrate compliance with Condition D.1.2(e) and D.1.3, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing, of the stack exhaust from EP-16, utilizing methods approved by the Commissioner, not later than one hundred eighty days (180) after start-up of the expander system identified as EU15. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

PM10 includes filterable and condensable particulate matter.

D.1.8 VOC Compliance - Consent Decree and PSD [326 IAC 2-2]

(a) Compliance with Conditions D.1.1(b) and D.1.4 shall be determined in accordance with 40 CFR Part 63, Subpart GGGG, with the following exceptions:

(1) provisions pertaining to HAP content shall not apply;

(2) monitoring and recordkeeping of solvent losses at the plant shall be conducted daily;

(3) solvent losses and quantities of oilseed processed during startup and shutdown periods shall not be excluded in determining solvent losses; and

(4) records shall be kept in the form of the table included in Section 8.0 of Attachment 9 of the Consent Decree and presented here that show total solvent losses, solvent losses during malfunction periods, adjusted solvent losses (i.e., total solvent losses minus malfunction losses) monthly and on a twelve-month rolling basis as follows:

Solvent Loss Record for ADM Oilseed Plant X

	Total Crush (tons)		Total Solvent Loss (gallons)		Malfunction Period Solvent Loss (gallons)		Adjusted Solvent Loss[a] (gallons)		SLR[b] (gal/ton)
Date	Monthly	12-Month Rolling	Monthly	12-Month Rolling	Monthly	12-Month Rolling	Monthly	12-Month Rolling	12-Month Rolling
Month, Year									

a -Adjusted Solvent Loss is equal to Total Solvent Loss minus Malfunction Period Loss.
b -Solvent Loss Ratio is equal to 12-month rolling Adjusted Solvent Loss divided by 12-Month Rolling Total Crush.
Compliance determination for each plant is based on 12-Month Rolling SLR value compared to Final VOC SLR Limit.

(b) For plants with interim or final solvent loss limits, ADM may apply the provisions of 40 CFR Part 63, Subpart GGGG pertaining to malfunction periods only when the conditions in both paragraphs (1) and (2) below are met:

(1) The malfunction results in a total plant shutdown. For purposes of the Consent Decree, a "total plant shutdown" means a shutdown of the solvent extraction system.

(2) Cumulative solvent losses during malfunction periods at a plant do not exceed 4,000 gallons in a 12-month rolling period.

At all other times, ADM must include all solvent losses when determining compliance with its interim or final VOC SLR limits at this plant.

During a malfunction period, ADM shall comply with the startup, shutdown and malfunction (SSM) plan as required under Subpart GGGG for the plant. The solvent loss corresponding to a malfunction period will be calculated as the difference in the total solvent inventories for the day before the malfunction period began and the day the plant resumes normal operation.

D.1.9 Solvent Loss Ratio [326 IAC 2-2][40 CFR 64]

Compliance with Condition D.1.1 shall be demonstrated within 30 days of the end of each month by determining the average of twelve (12) consecutive month period in the following manner:

Calculate a compliance ratio, which compares the actual VOC loss to the allowable VOC loss for the previous twelve (12) months. The equation to calculate a compliance ratio follows:

(a) Compliance Ratio = (Actual VOC loss)/(Allowable VOC loss) (Eq. 1)

(b) Equation 1 can also be expressed as a function of total solvent loss as shown in Equation 2.

(c) Compliance Ratio = [f* Actual Solvent Loss]/0.64 [$(\text{Soybean processed})_C$ * (SLF_C)] (Eq. 2)

f = The weighted average volume fraction of VOC in solvent received during the previous twelve (12) operating months, dimensionless

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

Actual Solvent Loss = Gallons of actual solvent loss during previous twelve (12) operating month

SLF_C = 0.2 gals/ton (for existing source, conventional soybean process)

D.1.10 Particulate Control

(a) In order to demonstrate compliance with Conditions D.1.2 and D.1.3, baghouses BH-06A, CE-05, ML-1, MC-1, BH-2A, BH-44, CE-20A, and CE-21, cyclones CE-06, CE-07, CE-08, CE-09, CE-10, CE-10A, CE-11, CE-18, CE-19, CE-19A, CE-19B, and CE-20, and bin filters BH-30A, BH-30B, and BH-31 for particulate control shall be in operation and control emissions from the associated units at all times that the associated units are in operation unless specified otherwise in Condition D.1.2.

(b) In order to demonstrate compliance with Condition D.1.3, baghouse GR-1 for particulate control shall be in operation and control emissions from EU01, EU02, EU03 and EU04 at all times at least one of the respective units are in operation.

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

(d) In order to demonstrate compliance with Conditions D.1.2(e) and D.1.3, the cyclone, identified as EP-16, shall be in operation and control emissions from EU15 at all times the Expander System is in operation.

D.1.11 VOC Control

Pursuant to 326 IAC 2-2-3, and in order to comply with Conditions D.1.1(b) and D.1.4, the condenser and mineral oil absorber/scrubber system (CE-22) shall be operated at all times that the hexane solvent oil extraction process (EU38) is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)][40 CFR 64]

D.1.12 Visible Emissions Notations [40 CFR 64]

(a) Visible emission notations of the stack exhausts from baghouses GR-1, BH-06A, CE-05, BH-2A, BH-44, ML-1, MC-1, RCB, CE-20A and CE-21, the stack exhausts for cyclones CE-06, CE-07, CE-08, CE-09, CE-10 (CE-09 and CE-10) exhaust through a common stack), CE-10A and CE-11, and the stack exhausts for bin vent filters BH-30A and BH-30B, and BH-31 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) Visible emission notations of the stack exhaust from cyclone CE-06 shall be performed once per day during normal operations, while bypassing BH-06A, if the emissions from EU10, EU11, EU12 and EU13 bypassed baghouse BH-06A at any time during that day.

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

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

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

(f) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.13 Broken or Failed Bag Detection [40 CFR 64]

In the event that bag failure has been observed:

(a) For single compartment baghouses controlling emissions from a process operated continuously, failed units and the associated process shall 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).

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

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

D.1.14 Cyclone Inspections

An inspection shall be performed each calendar quarter of all cyclones controlling the Expander

System identified as EU15, when venting to the atmosphere. A cyclone inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting to the indoors.

D.1.15 Cyclone Failure Detection [40 CFR 64]

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.1.16 Parametric Monitoring [40 CFR 64]

(a) The Permittee shall record the following for the scrubber (CE-22) used in conjunction with the oil extraction process, identified as EU38, at least once per day when the oil extraction process is in operation:

(1) the total pressure drop across the scrubber;

(2) the inlet gas temperature of the scrubber;

(3) the outlet gas flow rate of the scrubber; and

(4) the mineral oil flow rate in the scrubber.

(b) When for any one reading:

(1) the pressure drop across the scrubber is outside the normal range of 0.2 and 10.0 inches of water or a range established during the latest stack test;

(2) the inlet gas temperature is outside the normal range of 45 and 100 degrees F or a range established during the latest stack test;

(3) the outlet gas flow rate is outside the normal range of 25 and 225 cubic feet per minute (cfm) or a range established during the latest stack test; or

(4) the mineral oil flow rate is outside the normal range of 10.0 and 75.0 gallons per minute (gpm) or a range established during the latest stack test;

the Permittee shall take reasonable response steps. A pressure reading, inlet gas temperature, outlet gas flow rate, or a mineral oil flow rate that is outside the above mentioned ranges, is not a deviation from this permit. 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.

(c) The instruments used for determining the pressure, temperature, and flow rates 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 Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.17 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.1(b) and D.1.4, ADM shall:

(1) maintain records of the amount of VOC (hexane) used per calendar month.

(2) maintain records of the amount of soybeans processed by the oil extraction process.

(3) keep monthly records in the form of the table included in Section 8.0 of Attachment 9 of the Consent Decree and presented in Section 1.8 (a)(4) that show total solvent losses, solvent losses during malfunction periods, adjusted solvent losses (i.e., total solvent losses minus malfunction losses) monthly and on a twelve-month rolling basis.

(b) To document the compliance status with Condition D.1.12, the Permittee shall maintain a daily record of visible emission notations required by that condition. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) To document the compliance status with Condition D.1.16, the Permittee shall maintain records of the scrubber operating parameters required by that condition. The Permittee shall include in its daily record when a reading is not taken and the reason for the lack of a reading (e.g. the process did not operate that day).

(d) To document the compliance status with Condition D.1.1(d), the Permittee shall maintain records required by the leak detection and correction program; included as Attachment A to this permit.

(e) To document the compliance status with Conditions D.1.1(e) and D.1.2(b), the Permittee shall maintain daily records of the amount of soybeans processed by the plant.

(f) To document the compliance status with Condition D.1.7, the Permittee shall maintain records of the results from tests required by that condition.

(g) To document the compliance status with Condition D.1.2(c), the Permittee shall maintain records of the number of hours in which the emissions from EU10, EU11, EU12 and EU13 are not controlled by baghouse BH-06A.

(h) To document the compliance status with Condition D.1.5, the Permittee shall maintain records of the source total soybean meal production and the soybean meal, hulls, and hull pellets stockpiled into the railcars.

(i) To document the compliance status with Condition D.1.2(d), the Permittee shall maintain records of the grain throughput to the one (1) enclosed drag conveyor (S-5a), identified as EU-04a and conveyor (S-5).

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

D.1.19 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.1.1(e), D.1.2(b), D.1.2(d) and D.1.5 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 reporting 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 an “authorized official” as defined by 326 IAC 2-7-1(34).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

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

(kk) Boiler #1, identified as EU39, constructed in 1960, with a rated capacity of 62.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP15);

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

(ll) Boiler #3, identified as EU41, constructed in 1992, with a rated capacity of 82.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP17);

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

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

(mm) One (1) Refinery Boiler, identified as EU42, constructed in 2000, with a rated capacity of 13 MMBtu per hour and firing natural gas or No. 2 distillate fuel oil, exhausting to one (1) stack (EP18);

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

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

(oo) Boiler #4, identified as EU46, constructed in 2008, with a rated capacity of 145 MMBtu per hour firing natural gas and 140 MMBtu firing vegetable oil, No. 2 distillate fuel oil or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP46);

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

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

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

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

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

Pursuant to PSD SSM 023-24843-00011 and 326 IAC 2-2-3 (BACT):

(a) VOC emissions from EU46 shall be minimized using good combustion practices;

(b) VOC emissions shall not exceed 0.0014 pounds per MMBtu when firing distillate oil; and

(c) VOC emissions shall not exceed 0.0054 pounds per MMBtu when firing natural gas or vegetable oil.

D.2.2 PM/PM10 and NOx Minor Emission Limitations for PSD [326 IAC 2-2]

Pursuant to SSM 023-24843-00011 and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, PM, PM10, and NOx emissions from EU46 (boiler #4) shall be limited as follows:

(a) The PM emissions shall not exceed 0.070 pounds per MMBtu heat input and 32.7 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The PM10 emissions shall not exceed 0.070 pounds per MMBtu heat input and 12.8 tons per twelve consecutive month period with compliance determined at the end of each month.

(c) The NOx emissions shall not exceed 37.0 tons per twelve consecutive month period with compliance determined at the end of each month.

Compliance with these limits will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable with respect to PM, PM10, and NOx.

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

Pursuant to 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating) the particulate emissions from the boiler, identified as EU39, shall be limited to 0.59 pounds per MMBtu heat input.

This limitation is based on the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where:

C = Maximum ground level concentration with respect to distance from the point source at the “critical” wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility’s permit application, except when some lower capacity is contained in the facility’s operation permit; in which case, the capacity specified in the operation permit shall be used.
Note: This information is a confidential trade secret.

N = Number of stacks in fuel burning operation = 1

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.

h = Stack height in feet = 39 ft.

D.2.4 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the particulate emissions from the boilers, identified as EU41, EU42 and EU46, shall be limited to 0.30, 0.29 and 0.25 pounds per MMBtu heat input, respectively.

These limitations are based on the following equation:

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

where: Pt = Pounds of particulate matter emitted per million Btu heat input

Q = Total source maximum operating capacity rating in million Btu per hour heat input.

D.2.5 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 12-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1, the Permittee shall comply with the following:

(a) The sulfur dioxide (SO_2) emissions from EU41 and EU42 shall each not exceed five tenths (0.5) pounds per million Btu heat input for distillate oil combustion; or

(b) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]

(c) Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.2.6 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO_2 Emissions Limitations) the SO_2 emissions from EU39 and EU46 shall not exceed five tenths (0.5) pound per MMBtu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.2.7 Distillate Fuel Oil / Vegetable Oil Usage Limitations [326 IAC 2-2]

Pursuant to SSM 023-21838-00011 and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable:

(a) The usage of vegetable oil in boiler #1 and boiler #3 (EU39 and EU41) shall not exceed a total of 4.10 million gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. 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.

(b) For boiler #1 and boiler #3 (EU39 and EU41), when burning vegetable oil or blends of vegetable oil and distillate fuel oil, PM_{10} emissions shall not exceed 0.07 pounds per million Btu heat input for each boiler.

Compliance with the above limits will render the requirements of 326 IAC 2-2 not applicable with respect to PM10.

D.2.8 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for EU39, EU41, EU42 and EU46. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.2.9 PM and PM10 Emissions Determination [326 IAC 2-2]

In order to demonstrate compliance with Condition D.2.2(a) and D.2.2(b), the Permittee shall be conduct stack testing pursuant to Condition D.2.12 and calculate the PM and PM10 emissions using the following equation:

$$PM/PM_{10} = [(EF_{\#2oil} \times FU_{\#2oil} \times HC_{\#2oil}) + (EF_{veg} \times FU_{vegl} \times HC_{veg}) + (EF_{gas} \times FU_{gas} \times HC_{gas})] \times 1/2000 \text{ (ton/lb)}$$

where:

PM/PM_{10} = The PM/PM10 emissions from EU46 for a calendar month.

$EF_{\#2oil}$ = PM or PM10 emission factor for distillate fuel oil combustion (lb/MMBtu). This value is equal to 0.0236 (PM) and 0.0164 (PM10) until the OAQ approves other emission factors.

$FU_{\#2oil}$ = The amount of distillate fuel oil combusted by the boiler in a calendar month (gal/month).

$HC_{\#2oil}$ = Heating value of distillate fuel oil (MMBtu/gal). This value is equal to 0.14 until the OAQ approves another.

EF_{veg} = PM/PM10 emission factor for vegetable oil combustion (lb/MMBtu). This value is equal to 0.07 until the OAQ approves another.

FU_{veg} = The amount of vegetable oil combusted by the boiler in a calendar month (gal/month).

HC_{veg} = Heating value of vegetable oil (MMBtu/gal).

EF_{gas} = PM/PM10 emission factor for natural gas combustion (lb/MMBtu). This value is equal to 0.0075 until the OAQ approves another.

FU_{gas} = The amount of natural gas combusted by the boiler in a calendar month (MMCF/month).

HC_{gas} = Heating value of natural gas (MMBtu/MMCF). This value is equal to 1020 until the OAQ approves another.

D.2.10 NOx Emissions Determination [326 IAC 2-2]

In order to determine compliance with Condition D.2.2(c) and to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall use a NOx CEMS.

D.2.11 Sulfur Dioxide Emissions and Sulfur Content

Compliance with the fuel limitations established in Conditions D.2.5 shall be determined for EU39 and EU46 utilizing one of the following options:

(a) The Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:

(1) Providing vendor analysis of fuel oil delivered, if accompanied by a vendor certification, or;

(2) Analyzing the fuel oil sample to determine the sulfur content of the fuel oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Fuel oil samples may be collected from the fuel oil tank immediately after the fuel oil tank is filled and before any fuel oil is combusted; and

(B) If a partially empty fuel oil tank is refilled, a new sample and analysis would be required upon filling.

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

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

In order to demonstrate compliance with Conditions D.2.2, and D.2.7(b), the Permittee shall perform PM and PM10 testing on EU39, EU41, or EU46 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. The boiler tested shall not be a boiler tested in the previous six (6) years.

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.

PM10 includes filterable and condensable particulate matter.

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

D.2.13 Visible Emissions Notations

(a) Visible emission notations of the stack exhausts from EU39, EU41, EU42 and EU46 shall be performed once per day, when combusting fuel oil and/or vegetable oil, during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.2.14 Continuous Emissions Monitoring

(a) Continuous emission monitoring systems (CEMS) for EU46 (boiler #4) shall be installed, calibrated, maintained, and operated for measuring NOx and O_2 which meet all applicable performance specifications of 326 IAC 3-5-2.

(b) The continuous emission monitoring systems must meet the certification requirements pursuant to 326 IAC 3-5-3.

(c) If revisions are made to the continuous monitoring standard operating procedures (SOP), the Permittee shall submit updates to the department biennially.

(d) Relative accuracy tests and routine quarterly audits shall be performed in accordance with the contents of the standard operating procedures (SOP) pursuant to 326 IAC 3-5-5.

(e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 40 CFR Part 60.

D.2.15 NOx Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the NOx continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the following method shall be used to provide information related to NOx emissions:

(a) The Permittee shall record the natural gas flow rate at least four (4) times per hour until the primary CEM or a backup CEM is brought online and functioning properly. When for any one reading, the natural gas flow rate is outside the normal range during downtime of the NOx CEMS, 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 instrument used for determining the natural gas flow rate 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 Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.16 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.2(c), the Permittee shall maintain records of the amount of fuels combusted by EU46 (boiler #4).

(b) To document the compliance status with Conditions D.2.5 and D.2.6, the Permittee shall maintain records in accordance with (1) through (3) below. Note that pursuant to 40 CFR Part 60, Subpart Dc (EU-41and EU-42) and 40 CFR 60, Subpart Db (EU46) the fuel oil sulfur limit for EU41, EU42 and EU46 applies at all times including periods of startup, shutdown, and malfunction.

(1) Calendar dates covered in the compliance determination period;

(2) Actual No. 2 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 distillate fuel oil or blends of distillate fuel oil and vegetable oil and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

(A) Fuel supplier certifications;

(B) The name of the fuel supplier;

(C) The percentage of distillate fuel oil in the fuel; and

(D) 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.

(c) To document the compliance status with Condition D.2.9, the Permittee shall maintain monthly records of the PM and PM10 emissions from EU46.

(d) The Permittee shall maintain records sufficient to verify the compliance status with the procedures specified in Conditions D.2.10 and D.2.11. Records shall be maintained for a period of five (5) years and shall be made available upon request by IDEM.

(e) To document the compliance status with Condition D.2.13, the Permittee shall maintain a record of the visible emission notations required by that condition. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(f) To document the compliance status with Condition D.2.15, the Permittee shall maintain a record of the natural gas flow rate readings during CEMS downtime.

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

D.2.17 Reporting Requirements

(a) The natural gas boiler certification shall be submitted 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 natural gas-fired boiler certification does require the certification by an “authorized official” as defined by 326 IAC 2-7-1(35).

(b) A quarterly summary of the information to document compliance with Conditions D.2.1, D.2.2 and D.2.7 shall be submitted 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 an “authorized official” as defined by 326 IAC 2-7-1(35).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

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

Insignificant Activities

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment.

(d) The following activities with emissions equal to or less than insignificant thresholds:

(3) One (1) silica clay storage silo, identified as EU47, constructed in 2002, with a maximum throughput of 450 tons per year, particulate emissions controlled by a baghouse (RC-2) and exhausting through one (1) stack (EP19).

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

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

D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e) the particulate matter (PM) from brazing equipment, cutting torches, soldering equipment, welding equipment and the silica clay storage silo, shall not exceed 0.551 pounds per hour, when operating at a process weight rate of less than 100 pounds per hour.

D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

SECTION E.1 **NSPS**

Emissions Unit Description:

(oo) Boiler #4, identified as EU46, constructed in 2008, with a rated capacity of 145 MMBtu per hour firing natural gas and 140 MMBtu firing vegetable oil, No. 2 distillate fuel oil or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP46);

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

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

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

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

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, for the emission units listed above, except when otherwise specified in 40 CFR 60, Subpart Db.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports 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

E.1.2 New Source Performance Standards (NSPS) for Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 60, Subpart Db] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Db (included as Attachment C of this permit), which are incorporated by reference as 326 IAC 12, for the emission units listed above:

(1) 40 CFR 60.40b (a)
(2) 40 CFR 60.41b
(3) 40 CFR 60.42b (a), (e), (g), and (j)
(4) 40 CFR 60.43b (f) and (g)
(5) 40 CFR 60.44b (a)(1)(ii), (b), (c), (e), (f), (h) and (i)
(6) 40 CFR 60.45b (b), (j) and (k)
(7) 40 CFR 60.46b (a), (c), (d)(7), and (e)
(8) 40 CFR 60.47b (f)
(9) 40 CFR 60.48b (a) through (g), (i), (j)(2), (j)(4) and (j)(5)
(10) 40 CFR 60.49b (b), (c), (d), (f) through (j), (o) and (r)

SECTION E.2 **NSPS**

Emissions Unit Description:

(ll) Boiler #3, identified as EU41, constructed in 1992, with a rated capacity of 82.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP17);

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

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

(mm) One (1) Refinery Boiler, identified as EU42, constructed in 2000, with a rated capacity of 13 MMBtu per hour and firing natural gas or No. 2 distillate fuel oil, exhausting to one (1) stack (EP18);

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

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

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

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

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for EU 41 and EU 42, except as otherwise specified in 40 CFR 60, Subpart Dc.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

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

E.2.2 New Source Performance Standards (NSPS) for Grain Elevators [40 CFR Part 60, Subpart DD] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart (included as Attachment D of this permit), which are incorporated by reference as 326 IAC 12, for the emission units listed above:

(1) 40 CFR 60.40c (a),(b),(c) and (d)
(2) 40 CFR 60.41c
(3) 40 CFR 60.42c (d), (e)(2)
(4) 40 CFR 60.48c (a), (f),(g),(h),(i),(j)

SECTION E.3 **NSPS**

Emissions Unit Description:

(a) One (1) rail unloading operation, identified as EU01, constructed in 1946 and modified in 2004, with a maximum throughput of 1,444,500 tons per year, controlled for particulate matter by one (1) baghouse (GR-1) and exhausting to one (1) stack (EP01), including the following:

(1) Two (2) discharge drag conveyors (S-1 and S-1A);

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

(d) Conveying operation:

(1) One (1) drag conveyor to grain storage (S-5), identified as EU04, constructed in 1946 and modified in 2008, with a maximum throughput of 1,444,500 tons per year, controlled for particulate matter by one (1) baghouse (GR-1) and exhausting to one (1) stack (EP01);

(2) One (1) enclosed drag conveyor (S-5a), identified as EU-04a, constructed in 2011, with a maximum hourly rated capacity of 20,000 bushels and a limited yearly rated capacity of 1,444,500 tons, with particulate emissions controlled by one (1) existing baghouse (GR-1) and exhausting to one (1) stack (EP01);

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

(g) Two (2) conveyors from grain storage (S-6 and S-7), identified as EU07, constructed in 1946 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-18) and one (1) baghouse (CE-05) in series and exhausting to one (1) stack (EP03);

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

(h) One (1) grain cleaner (P-120), identified as EU09, constructed in June of 1990 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-18) and one (1) baghouse (CE-05) in series and exhausting to one (1) stack (EP03);

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

(i) One (1) E/W bean dryer, identified as EU10, constructed in February of 1986, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-06) and one (1) baghouse (BH-06A) in series and exhausting to one (1) stack (EP04);

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

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

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

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, for the emission units listed above, except as otherwise specified in 40 CFR 60, Subpart DD.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

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

E.3.2 New Source Performance Standards (NSPS) for Grain Elevators [40 CFR Part 60, Subpart DD] [326 IAC 12]

(a) The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart DD (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, for the emission unit listed above:

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

(b) This NSPS, Subpart DD is not applicable to the affected truck unloading station and railcar unloading station when handling the stockpiled soybean meal, hulls and hull pellets. This rule is only applicable to these emission units, when handling soybeans.

SECTION E.4 **NESHAP**

Emissions Unit Description:

(jj) One (1) oil extraction process using hexane solvent, identified as EU38, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year and emissions released through a number of exit streams in the process collectively called the "hexane bubble". The process is equipped with one (1) mineral oil absorber/scrubber (CE-22), which exhausts through one (1) stack (EP25). This process is also equipped with a once-through cold water condenser located between the vent condenser and the mineral oil absorber/scrubber;

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

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

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

E.4.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A (General Provisions), which are incorporated by reference in 326 IAC 20-1, for the emission units listed above, except when otherwise specified in 40 CFR Part 63, Subpart GGGG.

(b) Pursuant to 40 CFR 63.9, the Permittee shall submit all required notifications and reports 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

E.4.2 National Emission Standards for Hazardous Air Pollutants (NESHAPs): Solvent Extraction for Vegetable Oil Production [40 CFR Part 63, Subpart GGGG] [326 IAC 20]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart GGGG (included as Attachment E of this permit), for the emission units listed above:

(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), (b)(1) through (b)(5), and (e) through (f)
(7) 40 CFR 63.2850 (a), (b), (d) (e)(1)(i), (e)(1)(iii) and (e)(2)
(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 (a), (c) and (d)
(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
(20) Table 1 of 63.2833
(21) Item (a) of Table 1 of 63.2834
(22) Item (ix) of Table 1 of 63.2840
(23) Table 1 of 63.2850
(24) Items (a) and (c) of Table 2 of 63.2850
(25) Table 1 of 63.2853
(26) Table 1 of 63.2870

SECTION E.5 **NESHAP**

Emissions Unit Description:

(kk) Boiler #1, identified as EU39, constructed in 1960, with a rated capacity of 62.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP15);

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

(ll) Boiler #3, identified as EU41, constructed in 1992, with a rated capacity of 82.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP17);

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

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

(mm) One (1) Refinery Boiler, identified as EU42, constructed in 2000, with a rated capacity of 13 MMBtu per hour and firing natural gas or No. 2 distillate fuel oil, exhausting to one (1) stack (EP18);

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

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

(oo) Boiler #4, identified as EU46, constructed in 2008, with a rated capacity of 145 MMBtu per hour firing natural gas and 140 MMBtu firing vegetable oil, No. 2 distillate fuel oil or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP46);

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

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

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

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

E.5.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuanat to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A (General Provisions), which are incorporated by reference in 326 IAC 20-1, for the emission units listed above, except when otherwise specified in 40 CFR Part 63, Subpart DDDDD.

(b) Pursuant to 40 CFR 63.9, the Permittee shall submit all required notifications and reports 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

E.5.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [326 IAC 20-95] [40 CFR Part 63, Subpart DDDDD]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DDDDD, (included as Attachment F of this permit), which are incorporated by reference as 326 IAC 20-95, for the emission units listed above:

(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490(a)(1) and (d)
(4) 40 CFR 63.7495(b) and (d)
(5) 40 CFR 63.7499(u)
(6) 40 CFR 63.7500(a),(b), and (f)
(7) 40 CFR 63.7501
(8) 40 CFR 63.7505
(9) 40 CFR 63.7510(a), (b), (c), (d), and (e)
(10) 40 CFR 63.7515
(11) 40 CFR 63.7520
(12) 40 CFR 63.7521
(13) 40 CFR 63.7522
(14) 40 CFR 63.7525
(15) 40 CFR 63.7530(a), (b), (c), (e), (f), (h)
(16) 40 CFR 63.7533
(17) 40 CFR 63.7535
(18) 40 CFR 63.7540
(19) 40 CFR 63.7541
(20) 40 CFR 63.7545(a), (b), (d), (e), (f), and (h)
(21) 40 CFR 63.7550
(22) 40 CFR 63.7555
(23) 40 CFR 63.7560
(24) 40 CFR 63.7565
(25) 40 CFR 63.7570
(26) 40 CFR 63.7575
(27) Tables 2, 3, 4, 5, 6, 7, 8, 9, and 10

SECTION E.6 **NESHAP**

Emissions Unit Description:

(e) One (1) stationary emergency fire pump with a 230 horsepower engine, identified as EU49, constructed in 1985.

Under 40 CFR 63, Subpart ZZZZ, the diesel-fired emergency fire pump is considered an affected facility.

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

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

E.6.1 General Provisions Relating to NESHAP ZZZZ [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1, 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, for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

(b) Pursuant to 40 CFR 63.9, the Permittee shall submit all required notifications and reports 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

E.6.2 National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment G of this permit), which are incorporated by reference as 326 IAC 20-82, for the emission units listed above:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585
(3) 40 CFR 63.6590(a)(1)(ii)
(4) 40 CFR 63.6595(a)(1) and (c)
(5) 40 CFR 63.6602
(6) 40 CFR 63.6603
(7) 40 CFR 63.6604(b)
(8) 40 CFR 63.6605
(9) 40 CFR 63.6611
(10) 40 CFR 63.6612
(11) 40 CFR 63.6615
(12) 40 CFR 63.6620(a)
(13) 40 CFR 63.6625(e)(2), (f), (h), and (i)
(14) 40 CFR 63.6635
(15) 40 CFR 63.6640
(16) 40 CFR 63.6645(a)(1), (d),

(17) 40 CFR 63.6650
(18) 40 CFR 63.6655
(19) 40 CFR 63.6660
(20) 40 CFR 63.6665
(21) 40 CFR 63.6670
(22) 40 CFR 63.6675
(23) Table 2c (item 1)
(24) Table 4
(25) Table 6 (item 9)
(26) Table 8

DRAFT

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

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-34003-00011

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:

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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: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-34003-00011

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**) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

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

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-34003-00011
Facility: Boiler #1(EU39) and Boiler #3 (EU41)
Parameter: PM_{10} emissions
Limit: The usage of vegetable oil in boiler #1 and boiler #3 shall not exceed a total of 4.10 million gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER : YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Vegetable Oil Usage This Month (gallons)	Vegetable Oil Usage Previous 11 Months (gallons)	Vegetable Oil Usage 12 Month Total Usage (gallons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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

Part 70 Quarterly Report

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-34003-00011
Facility: Entire source (for VOC emissions)
Limit: The amount of soybeans processed by the source shall not exceed 1,314,000 tons twelve consecutive month period with compliance determined at the end of each month.

QUARTER : YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Soybeans processed (tons)	Soybeans processed (tons)	Soybeans processed (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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

Part 70 Quarterly Report

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-34003-00011
Facility: EU46
Parameter: PM emissions
Limit: PM emissions shall not exceed 32.7 tons per twelve consecutive month period with compliance determined at the end of each month.

QUARTER : YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	PM Emissions	PM Emissions	PM Emissions
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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

Part 70 Quarterly Report

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-34003-00011
Facility: EU46
Parameter: PM_{10} emissions
Limit: PM_{10} emissions shall not exceed 12.8 tons per twelve consecutive month period with compliance determined at the end of each month.

QUARTER : YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	PM10 Emissions	PM10 Emissions	PM10 Emissions
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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

Part 70 Quarterly Report

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-34003-00011
Facility: EU46
Parameter: NOx emissions
Limit: NOx emissions shall not exceed 37.0 tons per twelve consecutive month period with compliance determined at the end of each month.

QUARTER : YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	NOx Emissions	NOx Emission	NOx Emission
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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

Part 70 Quarterly Report

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, IN 46041
Part 70 Permit No.: T023-34003-00011
Facility: Entire Source and Railcars
Parameter: PM and PM_{10} emissions
Limit: The source soybean meal production shall be limited to a total of 1,143,180 tons per twelve (12) consecutive month period, with compliance at the end of each month.

The soybean meal, hulls, and hull pellets stockpiled into the railcars, during plant's shutdown, shall be limited to 100,000 tons per twelve (12) consecutive month period, with compliance at the end of each month. The soybean meal, hulls, and hull pellets stockplied shall be counted toward the source total soybean meal production limit of 1,143,180 tons per twelve (12) consecutive month period.

Quarter: _____Year: _____

Month	1	2	Total Soybean Meal Produced (1 +2) This Month	1	2	Total Soybean Meal Produced (1 +2) Previous 11 Months	1	2	Total Soybean Meal Produced (1 +2) 12 months Total
	Soybean Meal, Hulls, and Hull Pellets Stockpiled (tons) This Month	Soybean Meal Produced (tons) This Month		Soybean Meal, Hulls, and Hull Pellets Stockpiled (tons) Previous 11 Months	Soybean Meal Produced (tons) Previous 11 Months		Soybean Meal, Hulls, and Hull Pellets Stockpiled (tons) 12 months Total	Soybean Meal Produced (tons) 12 months Total	

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature:_____
Date: _____
Phone: _____

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

Part 70 Quarterly Report

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, IN 46041
Part 70 Permit No.: T023-34003-00011
Facility: Oil Extraction Process
Pollutant: VOC
Limit: 0.179 gallons of hexane per ton of soybeans processed, according to either of the following equations:

Compliance Ratio = (Actual VOC loss)/(Allowable VOC loss) (Eq. 1)

Compliance Ratio = [f* Actual Solvent Loss]/0.64 [(Soybean processed)$_C$ * (SLF_C)] (Eq. 2)

f = The weighted average volume fraction of VOC in solvent received during the previous twelve (12) operating months, dimensionless

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

Actual Solvent Loss = Gallons of actual solvent loss during previous twelve (12) operating month

SLF_C = 0.2 gals/ton (for existing source, conventional soybean process)

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

Submitted by:_____
Title/Position:_____
Signature:_____
Date:_____
Phone:_____

DRAFT

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

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-34003-00011

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source and Significant Permit Modification

Source Description and Location

Source Name:	Archer Daniels Midland Company
Source Location:	2191 West County Road 0 N/S, Frankfort, IN 46041
County:	Clinton
SIC Code:	2075 (Soybean and Other Oilseed Processing)
Operation Permit No.:	T023-34003-00011
Operation Permit Issuance Date:	November 18, 2014
Significant Source Modification No.:	023-36542-00011
Significant Permit Modification No.:	023-36575-00011
Permit Reviewer:	Roger Osburn

Existing Approvals

The source was issued Part 70 Operating Permit No. T023-34003-00011 on November 18, 2014. There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Clinton County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.[1]
$PM_{2.5}$	Unclassifiable or attainment effective April 5, 2005, for the annual PM2.5 standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.	

(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. Clinton County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Clinton County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Clinton County has been classified as attainment or unclassifiable in Indiana for list the pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Source Status - Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	**Emissions** (ton/yr)
PM	211.85
PM_{10}	133.73
$PM_{2.5}$	151.99
SO_2	380.54
NO_X	159.71
VOC	669.41
CO	131.62
Total HAPs	426.09

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant, excluding GHGs, is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) These emissions are based upon Part 70 Operating Permit Renewal No. T023-34003-00011, issued November 18, 2014.

(c) This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Archer Daniels Midland Company on November 24, 2015, relating to the proposed construction of an expander system which will process a maximum of forty-four percent of the existing flaking operation, to remove moisture, making a more dense product that will be conveyed back to the flaking operation. The following is a list of the proposed emission units and pollution control devices:

(a) One (1) Expander System, identified as EU15, approved in 2016 for construction, consisting of: two feeder augers, Expander 1 and Expander 2, each with a eight hundred (800) ton per day capacity, and a Dryer/Cooler with a capacity of sixteen hundred (1600) tons per day, two drag conveyors feeding the product back to the flaking operation; particulates from Expander 1, Expander 2, and the Dryer/Cooler are controlled by a cyclone, identified as CE-15, exhausting to stack EP-16.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. If the control equipment has been determined to be integral, the table reflects the PTE after consideration of the integral control device.

Increase in PTE Before Controls of the Modification	
Pollutant	**Potential To Emit** (ton/yr)
PM	49.78
PM_{10}	49.78
$PM_{2.5}$	49.78
SO_2	0
VOC	0
CO	0
NO_X	0
Single HAPs	0
Total HAPs	0

Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

This source modification is subject to 326 IAC 2-7-10.5(g)(4) because the potential to emit PM, PM_{10} and $PM_{2.5}$ is greater than twenty-five (25) tons per year before control. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because the modification does not qualify as a minor permit modification or as an administrative amendment.

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule,

or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

Permit Level Determination – PSD

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Project Emissions (ton/yr)							
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$ ***	**SO_2**	**NO_X**	**VOC**	**CO**	**HAP**
Expander System (Expander 1 and Expander 2)	9.96	9.96	9.96	0	0	0	0	0
Total for Modification	9.96	9.96	9.96	0	0	0	0	0
Significant Thresholds	25	15	10	40	40	40	100	

*$PM_{2.5}$ listed is direct $PM_{2.5}$.

This modification to an existing major PSD stationary source is not major because:

(a) The emissions increase of each PSD regulated pollutant, are less than the PSD significant thresholds.

Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

NSPS:

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

NESHAP:

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.

Compliance Assurance Monitoring (CAM):

(c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

(1) has a potential to emit before controls equal to or greater than the Part 70 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.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new units as part of this modification.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-1.1-5 (Nonattainment New Source Review)
Nonattainment New Source Review applicability is discussed under the Permit Level Determination – PSD.

326 IAC 2-2 (PSD)
PSD applicability is discussed under the Permit Level Determination – PSD.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of Expander System does not emit HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-7-6(5) (Annual Compliance Cerification)
The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certification that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the Expander System shall not exceed 47.30 pounds per hour when operating at a process weight rate of 66.7 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

The cyclone shall be in operation at all times the Expander System is in operation, in order to comply with this limit.

Compliance Determination and Monitoring Requirements

There are no changes to the Compliance Determination and Compliance Monitoring Requirements as a result of this modification.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 023-34003-00011. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Modification No. 1: The Expander System has been incorporated into the Emission Unit Description in Section A and D.1 as follows:

A.2 Emission Units and Pollution Control Equipment Summary
[326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

***

(n) **One (1) Expander System identified as EU15, approved in 2016 for construction, consisting of: two feeder augers, Expander 1 and Expander 2, each with a eight hundred (800) ton per day capacity, and a Dryer/Cooler with a capacity of sixteen**

hundred (1600) tons per day, two drag conveyors feeding the product back to the flaking operation; particulates from Expander 1, Expander 2, and the Dryer/Cooler are controlled by a cyclone, identified as CE-15, exhausting to stack EP-16.

(~~n~~**o**) One (1) secondary hull screening operation, identified as EU16, constructed in August of 1994 and modified in 2008, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one baghouse (CE-05) and three (3) cyclones (CE-19, CE-19A and CE-19B) in parallel and exhausting to one (1) stack (EP03);

(~~o~~**p**) Two (2) hull grinders (H-250 and H-251), identified as EU17, constructed in June of 1989 and modified in 2008, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-20) and one (1) baghouse (CE-20A) in series and exhausting to one (1) stack (EP20);

(~~p~~**q**) Two (2) hull storage bins, identified as EU18, constructed in 1946, with a maximum throughput of 91,980 tons per year and exhausting to one (1) stack (EP03); including one (1) enclosed conveyor T-6, one (1) leg T-7, and one (1) enclosed conveyor T-8;

(~~q~~**r**) One (1) hull conveyor, identified as EU19, constructed in 1946 and modified in 2008, with a maximum throughput of 91,980 tons per year;

(~~r~~**s**) One (1) pellet mill, identified as EU20, constructed in June of 1992, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-08) and exhausting to one (1) stack (EP07);

(~~s~~**t**) One (1) pellet cooler, identified as EU21, constructed in June of 1992, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-08) and exhausting to one (1) stack (EP07);

(~~t~~**u**) One (1) pellet storage unit, identified as EU22, constructed in June of 1992, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-18) and one (1) baghouse (CE-05) in series and exhausting to one (1) stack (EP03);

(~~u~~**v**) One (1) dryer deck, DTDC - Deck #1, identified as EU23, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-09) and exhausting to one (1) stack (EP08A);

(~~v~~**w**) Two (2) DTDC dryer decks:

(1) DTDC - Deck #2, identified as EU24, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-10) and exhausting to one (1) stack (EP08A);

(2) DTDC - Deck #3, identified as EU24A, and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-10A) and exhausting to one (1) stack (EP09A);

(~~w~~**x**) One (1) DTDC - cooler deck, identified as EU25, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-11) and exhausting to one (1) stack (EP10);

(~~x~~**y**) One (1) meal conveyor (from DTDC to meal screens) (P-152), identified as EU26, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(~~y~~**z**) One (1) meal sifting operation, identified as EU27, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(~~z~~**aa**) One (1) meal grinding operation, identified as EU28, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(~~aa~~**bb**) One (1) meal storage elevator leg (P-512), identified as EU29, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(~~bb~~**cc**) One (1) meal storage unit (two tanks), identified as EU30, constructed in 1958 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, controlled for particulate matter by two (2) bin vent filters (BH-30A and BH-30B), one on each tank and each filter exhausting to individual stacks (EP30A and EP30B), including five (5) enclosed conveyors (T-01, T-02, T-03, T-04 and T-05);

Note: The transfer equipment does not allow the source to fill both tanks simultaneously. Meal is loaded into one tank at a time. When one tank becomes full, then the meal will flow into the other remaining tank.

(~~cc~~**dd**) Two (2) meal surge tanks, identified as EU31, constructed in 1986 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, a portion of emissions controlled for particulate matter by one (1) bin vent filter (BH-31) and exhausting to one (1) stack (EP31);

(~~dd~~**ee**) One (1) hull pellet surge tank, identified as EU32, constructed in 1986, with a maximum throughput of 91,980 tons per year, a portion of emissions controlled for particulate matter by one (1) bin vent filter (BH-31) and exhausting to one (1) stack (EP31);

(~~ee~~**ff**) One (1) enclosed conveying system, identified as EU33, constructed in 1988, comprised of five (5) enclosed conveyors (T-9, T-10, T-11, T-12, and T-13), modified in 2012 to replace conveyor T-11. Four (4) of which convey meal from the Middle and West Meal Tanks to truck and rail load out (T-9, T-10, T-12, and T-13) with a maximum throughput of 1,051,200 tons per year, and one (1) conveyor (T-11) which conveys hulls and hull pellets from the East tank to truck and rail loadout with a maximum throughput of 91,980 tons per year;

(~~ff~~**gg**) One (1) truck meal, hull and hull pellet loadout operation, identified as EU34, constructed in 1988, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (ML-1) and exhausting to one (1) stack (EP12);

(~~gg~~**hh**) One (1) rail meal, hull and hull pellet loadout operation, identified as EU35, constructed in 1988, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (ML-1) and exhausting to one (1) stack (EP12), including two (2) drag conveyors (T-14 and T-15);

(~~hh~~**ii**) One (1) meal clay storage unit, identified as EU36, constructed in 1986, with a maximum throughput of 6,570 tons per year, controlled for particulate matter by one (1) baghouse (MC-1) and exhausting to one (1) stack (EP13);

(~~ii~~**jj**) One (1) refinery clay storage unit, identified as EU37, constructed in 1992, with a maximum throughput of 4,500 tons per year, controlled for particulate matter by one (1) baghouse (RCB) and exhausting to one (1) stack (EP14);

(~~jj~~**kk**) One (1) oil extraction process using hexane solvent, identified as EU38, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per

year and emissions released through a number of exit streams in the process collectively called the "hexane bubble". The process is equipped with one (1) mineral oil absorber/scrubber (CE-22), which exhausts through one (1) stack (EP25). This process is also equipped with a once-through cold water condenser located between the vent condenser and the mineral oil absorber/scrubber;

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

(~~kk~~**ll**) Boiler #1, identified as EU39, constructed in 1960, with a rated capacity of 62.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP15);

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

(~~ll~~**mm**) Boiler #3, identified as EU41, constructed in 1992, with a rated capacity of 82.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP17);

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

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

(~~mm~~**nn**) One (1) Refinery Boiler, identified as EU42, constructed in 2000, with a rated capacity of 13 MMBtu per hour and firing natural gas or No. 2 distillate fuel oil, exhausting to one (1) stack (EP18);

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

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

(~~nn~~**oo**) One (1) vertical seed conditioner, also referred to as a steam-heated soybean heater, identified as EU44, constructed in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (BH-44) and exhausting to one (1) stack (EP44);

(~~oo~~**pp**) Boiler #4, identified as EU46, constructed in 2008, with a rated capacity of 145 MMBtu per hour firing natural gas and 140 MMBtu firing vegetable oil, No. 2 distillate fuel oil or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP46);

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

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

(~~pp~~**qq**) Stockpiling of soybean meal in railcars and trucks at a limited throughput of 100,000 tons/year, combined with soybean hulls and hull pellets, utilizing existing grain receiving/unloading pits EU01 and EU02, elevator leg EU03, conveyor EU04, EU05 grain storage, conveyor EU28A, storage tanks EU30, surge tanks EU31, enclosed conveying system EU33, and rail and truck meal loadout EU34 and EU35, constructed in 2008;

(~~qq~~**rr**) Stockpiling soybean hulls in railcars and trucks at a limited throughput of 100,000 tons/year, combined with soybean meal and hull pellets, utilizing existing grain receiving/unloading pits EU01 and EU02, elevator leg EU03, conveyor EU04, EU05 grain storage, storage tanks EU18, surge tanks EU32, enclosed conveying system EU33, and rail and truck meal loadout EU34 and EU35, constructed in 2011;

(~~rr~~**ss**) Stockpiling soybean hull pellets in railcars and trucks at a limited throughput of100,000 tons/year, combined with soybean meal and hull pellets, utilizing existing grain receiving/unloading pits EU01 and EU02, elevator leg EU03, conveyor EU04, EU05 grain

storage, storage tanks EU18, surge tanks EU32, enclosed conveying system EU33, and rail and truck meal loadout EU34 and EU35, constructed in 2011.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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(n) **One (1) Expander System identified as EU15, approved in 2016 for construction, consisting of: two feeder augers, Expander 1 and Expander 2, each with a eight hundred (800) ton per day capacity, and a Dryer/Cooler with a capacity of sixteen hundred (1600) tons per day, two drag conveyors feeding the product back to the flaking operation; particulates from Expander 1, Expander 2, and the Dryer/Cooler are controlled by a cyclone, identified as CE-15, exhausting to stack EP-16.**

(~~n~~**o**) One (1) secondary hull screening operation, identified as EU16, constructed in August of 1994 and modified in 2008, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one baghouse (CE-05) and three (3) cyclones (CE-19, CE-19A and CE-19B) in parallel and exhausting to one (1) stack (EP03);

(~~o~~**p**) Two (2) hull grinders (H-250 and H-251), identified as EU17, constructed in June of 1989 and modified in 2008, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-20) and one (1) baghouse (CE-20A) in series and exhausting to one (1) stack (EP20);

(~~p~~**q**) Two (2) hull storage bins, identified as EU18, constructed in 1946, with a maximum throughput of 91,980 tons per year and exhausting to one (1) stack (EP03); including one (1) enclosed conveyor T-6, one (1) leg T-7, and one (1) enclosed conveyor T-8;

(~~q~~**r**) One (1) hull conveyor, identified as EU19, constructed in 1946 and modified in 2008, with a maximum throughput of 91,980 tons per year;

(~~r~~**s**) One (1) pellet mill, identified as EU20, constructed in June of 1992, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-08) and exhausting to one (1) stack (EP07);

(~~s~~**t**) One (1) pellet cooler, identified as EU21, constructed in June of 1992, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-08) and exhausting to one (1) stack (EP07);

(~~t~~**u**) One (1) pellet storage unit, identified as EU22, constructed in June of 1992, with a maximum throughput of 91,980 tons per year, controlled for particulate matter by one (1) cyclone (CE-18) and one (1) baghouse (CE-05) in series and exhausting to one (1) stack (EP03);

(~~u~~**v**) One (1) dryer deck, DTDC - Deck #1, identified as EU23, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-09) and exhausting to one (1) stack (EP08A);

(~~v~~**w**) Two (2) DTDC dryer decks:

(1) DTDC - Deck #2, identified as EU24, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-10) and exhausting to one (1) stack (EP08A);

(2) DTDC - Deck #3, identified as EU24A, and modified in 2008, with a maximum

throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-10A) and exhausting to one (1) stack (EP09A);

(~~w~~**x**) One (1) DTDC - cooler deck, identified as EU25, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) cyclone (CE-11) and exhausting to one (1) stack (EP10);

(~~x~~**y**) One (1) meal conveyor (from DTDC to meal screens) (P-152), identified as EU26, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(~~y~~**z**) One (1) meal sifting operation, identified as EU27, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(~~z~~**aa**) One (1) meal grinding operation, identified as EU28, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(~~aa~~**bb**) One (1) meal storage elevator leg (P-512), identified as EU29, constructed in June of 1991 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, controlled for particulate matter by one (1) baghouse (BH-2A) and exhausting to one (1) stack (EP11);

(~~bb~~**cc**) One (1) meal storage unit (two tanks), identified as EU30, constructed in 1958 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, controlled for particulate matter by two (2) bin vent filters (BH-30A and BH-30B), one on each tank and each filter exhausting to individual stacks (EP30A and EP30B), including five (5) enclosed conveyors (T-01, T-02, T-03, T-04 and T-05);

Note: The transfer equipment does not allow the source to fill both tanks simultaneously. Meal is loaded into one tank at a time. When one tank becomes full, then the meal will flow into the other remaining tank.

(~~cc~~**dd**) Two (2) meal surge tanks, identified as EU31, constructed in 1986 and modified in 2008, with a maximum throughput of 1,051,200 tons per year, a portion of emissions controlled for particulate matter by one (1) bin vent filter (BH-31) and exhausting to one (1) stack (EP31);

(~~dd~~**ee**) One (1) hull pellet surge tank, identified as EU32, constructed in 1986, with a maximum throughput of 91,980 tons per year, a portion of emissions controlled for particulate matter by one (1) bin vent filter (BH-31) and exhausting to one (1) stack (EP31);

(~~ee~~**ff**) One (1) enclosed conveying system, identified as EU33, constructed in 1988, comprised of five (5) enclosed conveyors (T-9, T-10, T-11, T-12, and T-13), modified in 2012 to replace conveyor T-11. Four (4) of which convey meal from the Middle and West Meal Tanks to truck and rail load out (T-9, T-10, T-12, and T-13) with a maximum throughput of 1,051,200 tons per year, and one (1) conveyor (T-11) which conveys hulls and hull pellets from the East tank to truck and rail loadout with a maximum throughput of 91,980 tons per year;

(~~ff~~**gg**) One (1) truck meal, hull and hull pellet loadout operation, identified as EU34, constructed in 1988, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (ML-1) and exhausting to one (1) stack (EP12);

(~~gg~~**hh**) One (1) rail meal, hull and hull pellet loadout operation, identified as EU35, constructed in 1988, with a maximum throughput of 1,314,000 tons per year, controlled for particulate

matter by one (1) baghouse (ML-1) and exhausting to one (1) stack (EP12), including two (2) drag conveyors (T-14 and T-15);

(~~hh~~**ii**) One (1) meal clay storage unit, identified as EU36, constructed in 1986, with a maximum throughput of 6,570 tons per year, controlled for particulate matter by one (1) baghouse (MC-1) and exhausting to one (1) stack (EP13);

(~~ii~~**jj**) One (1) refinery clay storage unit, identified as EU37, constructed in 1992, with a maximum throughput of 4,500 tons per year, controlled for particulate matter by one (1) baghouse (RCB) and exhausting to one (1) stack (EP14);

(~~jj~~**kk**) One (1) oil extraction process using hexane solvent, identified as EU38, constructed in May of 1985 and modified in 2008, with a maximum throughput of 1,314,000 tons per year and emissions released through a number of exit streams in the process collectively called the "hexane bubble". The process is equipped with one (1) mineral oil absorber/scrubber (CE-22), which exhausts through one (1) stack (EP25). This process is also equipped with a once-through cold water condenser located between the vent condenser and the mineral oil absorber/scrubber;

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

(~~kk~~**ll**) Boiler #1, identified as EU39, constructed in 1960, with a rated capacity of 62.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP15);

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

(~~ll~~**mm**) Boiler #3, identified as EU41, constructed in 1992, with a rated capacity of 82.5 MMBtu per hour and firing natural gas, vegetable oil, No. 2 distillate fuel oil, or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP17);

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

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

(~~mm~~**nn**) One (1) Refinery Boiler, identified as EU42, constructed in 2000, with a rated capacity of 13 MMBtu per hour and firing natural gas or No. 2 distillate fuel oil, exhausting to one (1) stack (EP18);

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

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

(~~nn~~**oo**) One (1) vertical seed conditioner, also referred to as a steam-heated soybean heater, identified as EU44, constructed in 2008, with a maximum throughput of 1,314,000 tons per year, controlled for particulate matter by one (1) baghouse (BH-44) and exhausting to one (1) stack (EP44);

(~~oo~~**pp**) Boiler #4, identified as EU46, constructed in 2008, with a rated capacity of 145 MMBtu per hour firing natural gas and 140 MMBtu firing vegetable oil, No. 2 distillate fuel oil or blends of vegetable oil and No. 2 distillate fuel oil, exhausting to one (1) stack (EP46);

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

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

(~~pp~~**qq**) Stockpiling of soybean meal in railcars and trucks at a limited throughput of 100,000 tons/year, combined with soybean hulls and hull pellets, utilizing existing grain

receiving/unloading pits EU01 and EU02, elevator leg EU03, conveyor EU04, EU05 grain storage, conveyor EU28A, storage tanks EU30, surge tanks EU31, enclosed conveying system EU33, and rail and truck meal loadout EU34 and EU35, constructed in 2008;

(~~qq~~**rr**) Stockpiling soybean hulls in railcars and trucks at a limited throughput of 100,000 tons/year, combined with soybean meal and hull pellets, utilizing existing grain receiving/unloading pits EU01 and EU02, elevator leg EU03, conveyor EU04, EU05 grain storage, storage tanks EU18, surge tanks EU32, enclosed conveying system EU33, and rail and truck meal loadout EU34 and EU35, constructed in 2011;

(~~rr~~**ss**) Stockpiling soybean hull pellets in railcars and trucks at a limited throughput of100,000 tons/year, combined with soybean meal and hull pellets, utilizing existing grain receiving/unloading pits EU01 and EU02, elevator leg EU03, conveyor EU04, EU05 grain storage, storage tanks EU18, surge tanks EU32, enclosed conveying system EU33, and rail and truck meal loadout EU34 and EU35, constructed in 2011.

***

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

Modification No. 2: The Expander System has been incorporated into Section D.1.3 as follows:

D.1.3 Particulate [326 IAC 6-3-2]
Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate from the emission units listed below shall be limited as shown in the tables below based on the following equations:

***

Emission Unit	Process Weight Rate (tons/hr)	Allowable Particulate Emissions (lb/hr)
Rail Unloading, EU01	600	71.16
Truck Unloading, EU02	600	71.16
Grain elevator, EU03	1200	79.97
Conveyor, EU-04 to grain storage, EU-05	600	71.16
Conveyor, EU-04a to grain storage, EU-05	600	71.16
Concrete silo top vents, EU05	720	73.41
Steel storage tank vents, EU06	720	73.41
Conveyor from grain storage, EU07	225	59.79
Grain Cleaner, EU09	180	57.37
Bean Dryer, EU10	180	57.37
Cracking Rolls, EU11	180	57.37
Hull Separator, EU12	180	57.37
Conditioner, EU13	180	57.37
Flaking, EU14	172	56.89
Expander System, EU15	**66.7**	**47.30**
Hull Screen, EU16	14	24.03
Hull Grinder, EU17	14	24.03
Hull Storage Unit, EU18	14	24.03
Hull Conveyor, EU19	14	24.03
Pellet Mill, EU20	14	24.03
Pellet Cooler, EU21	14	24.03
Pellet Storage Unit, EU22	14	24.03
Dryer Deck #1, EU23	172	56.89
Dryer Deck #2, EU24	172	56.89
Dryer Deck #3, EU24A	172	56.89

Cooler Deck, EU25	172	56.89
Meal Conveyor, EU26	136	54.42
Meal sifter, EU27	136	54.42
Meal grinder, EU28	136	54.42
Meal storage conveyor, EU29	136	54.42
Meal Storage Tank, EU30, BH-30A	136	54.42
Meal Storage Tank, EU30, BH-30B	136	54.42
Meal surge tanks, EU31	300	63.00
Hull surge tank, EU32	100	51.28
Enclosed Conveying System, EU33	250	60.96
Truck Meal & Hull Pellet loadout, EU34	250	60.96
Rail Meal & Hull Pellet loadout, EU35	250	60.96
Meal clay storage, EU36	25	35.43
Refinery clay storage, EU37	25	35.43
Vertical Seed Conditioner, EU44	180	57.37

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Modification No.3: A condition to control particulates was added to Section D.1 to ensure the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) are not applicable as follows:

D.1.2 PM/PM10/**PM2.5** Minor Emission Limitations for PSD [326 IAC 2-2]

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(e) Pursuant to SSM 023-36542-00011 and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the PM, PM10, and PM2.5 emissions from the Expander System, identified as EU15, shall not exceed 2.27 pounds per hour.

Compliance with these limits shall limit the potential to emit from this modification of PM to less than twenty-five (25) tons per twelve (12) consecutive month period, PM_{10} to less than fifteen (15) tons per twelve (12) consecutive month period, $PM_{2.5}$ to less than ten (10) tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable.

Modification No.4: Testing requirements were added to Section D.1 to verify the emission factor submitted by the permittee as follows:

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

D.1.7 Testing Requirements [326 IAC 2-7-6(1)(6)] [326 IAC 2-1.1-11]

***

(d) In order to demonstrate compliance with Condition D.1.2(e) and D.1.3, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing, of the stack exhaust from EP-16, utilizing methods approved by the Commissioner, not later than one hundred eighty days (180) after the start-up of the expander system identified as EU15. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

***

Modification No.5: Compliance Determination language was added to Condition D.1.10 as follows:

D.1.10 Particulate Control

***

(d) In order to demonstrate compliance with Conditions D.1.2(e) and D.1.3, the cyclone, identified as EP-16, shall be in operation and control emissions from EU15 at all times the Expander System is in operation.

Modification No.6: Cyclone inspection language was added to Section D.1 as follows:

***

D.1.14 Cyclone Inspections

An inspection shall be performed each calendar quarter of all cyclones controlling the Expander System identified as EU15, when venting to the atmosphere. A cyclone inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting to the indoors.

***

IDEM OAQ Change: Upon further review, the following updates were made and citations added throughout the permit as follows:

SECTION D.1 EMISSION UNIT OPERATION CONDITIONS

Emission Limitations and Standards ~~[326 IAC 2-8-4(1)]~~**[326 IAC 2-7-5(1)]**

***

Compliance Determination Requirements **[326 IAC 2-7-5(1)]**

***

SECTION D.2 EMISSION UNIT OPERATION CONDITIONS

~~Facility~~ **Emission Unit** Description [326 IAC 2-7-5(~~14~~**15**)]:

***

***

Compliance Determination Requirements **[326 IAC 2-7-5(1)]**

***

SECTION D.3 EMISSION UNIT OPERATION CONDITIONS

~~Facility~~ **Emission Unit** Description [326 IAC 2-7-5(~~14~~**15**)]:

***

SECTION E.1 ~~FACILITY OPERATION CONDITIONS~~ **NSPS**

~~Facility~~ **Emissions Unit** Description ~~[326 IAC 2-7-5(15)~~**:**

***

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

New Source Performance Standards (NSPS) Requirements **[326 IAC 2-7-5(1)]**

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

(a) **Pursuant to 40 CFR 60.1, t**~~T~~he **Permittee shall comply with the** provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, **for the emission units listed above,** ~~apply to the facilities described in this Section E.1~~ except when otherwise specified in 40 CFR 60, Subpart Db.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports 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

E.1.2 New Source Performance Standards (NSPS) for Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 60, Subpart Db] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Db (included as Attachment C of this permit) ~~(New Source Performance Standards (NSPS) for Industrial-Commercial-Institutional Steam Generating Units)~~, which are incorporated by reference as 326 IAC 12, ~~except as otherwise specified in 40 CFR Part 60, Subpart Db~~**for the emission units listed above**:

SECTION E.2 ~~FACILITY OPERATION CONDITIONS~~ **NSPS**

~~Facility~~ **Emissions Unit** Description ~~[326 IAC 2-7-5(15)]~~:

***

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

New Source Performance Standards (NSPS) Requirements **[326 IAC 2-7-5(1)]**

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

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1**,** for EU41 and EU42, except as otherwise specified in 40 CFR 60, Subpart Dc.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

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

E.2.2 New Source Performance Standards (NSPS) for Grain Elevators [40 CFR Part 60, Subpart DD] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart DD ~~(New Source Performance Standards (NSPS) for Generating Unit)~~ (included as Attachment D of this permit), which are incorporated by reference as 326 IAC 12, ~~except as otherwise specified in 40 CFR Part 60, Subpart Dc~~**for the emission units listed above**:

***

SECTION E.3 ~~FACILITY OPERATION CONDITIONS~~ **NSPS**

~~Facility~~ **Emission Unit** Description [326 IAC 2-7-5(~~14~~**15**)]:

***

New Source Performance Standards (NSPS) Requirements **[326 IAC 2-7-5(1)]**

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

(a) **Pursuant to 40 CFR 60.1, t**~~T~~he **Permittee shall comply with the** provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, **for the emission units listed above,**~~apply to the facilities described in this Section E.3~~ except as otherwise specified in 40 CFR 60, Subpart DD.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

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

E.3.2 New Source Performance Standards (NSPS) for Grain Elevators [40 CFR Part 60, Subpart DD] [326 IAC 12]

(a) The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart DD (included as Attachment B of this permit) ~~(New Source Performance Standards (NSPS) for Grain Elevators)~~, which are incorporated by reference as 326 IAC 12, ~~except as otherwise specified in 40 CFR Part 60, Subpart DD~~**for the emission units listed above**:

***

SECTION E.4 ~~FACILITY OPERATION CONDITIONS~~ **NESHAP**

~~Facility~~ **Emissions Unit** Description ~~[326 IAC 2-7-5(15)]~~:

***

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

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

E.4.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) **Pursuant to 40 CFR 63.1 t**~~T~~he **Permittee shall comply with the** provisions of 40 CFR Part 63, Subpart A (General Provisions), which are incorporated by reference in 326 IAC 20-1, ~~apply to the facilities described in this Section E.4~~ **for the emission units listed above,** except when otherwise specified in 40 CFR Part 63, Subpart GGGG.

(b) Pursuant to 40 CFR 63.9, the Permittee shall submit all required notifications and reports to:

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

E.4.2 National Emission Standards for Hazardous Air Pollutants (NESHAPs): Solvent Extraction for Vegetable Oil Production [40 CFR Part 63, Subpart GGGG] [326 IAC 20]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart GGGG ~~(National Emission Standards for Hazardous Air Pollutants (NESHAPs): Solvent Extraction for Vegetable Oil Production~~(included as Attachment E of this permit), ~~which are incorporated by reference as 326 IAC 20-1~~**for the emission units listed above**:

***

SECTION E.5 ~~FACILITY OPERATION CONDITIONS~~ **NESHAP**

~~Facility~~ **Emissions Unit** Description ~~[326 IAC 2-7-5(**15**)]~~:

***

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

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

E.5.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) **Pursuant to 40 CFR 63.1 t**~~T~~he **Permittee shall comply with the** provisions of 40 CFR Part 63, Subpart A (General Provisions), which are incorporated by reference in 326 IAC 20-1, ~~apply to the facilities described in this Section E.5~~ **for the emission units listed above,** except when otherwise specified in 40 CFR Part 63, Subpart DDDDD.

(b) Pursuant to 40 CFR 63.9, the Permittee shall submit all required notifications and reports 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~~

E.5.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [326 IAC 20-95] [40 CFR Part 63, Subpart DDDDD]

The Permittee ~~which has industrial, commercial, and institutional boilers and process heaters~~ shall comply with the following provisions of 40 CFR Part 63, Subpart DDDDD, (included as Attachment F of this permit), which are incorporated by reference as 326 IAC 20-95**, for the emission units listed above**:

***

SECTION E.6 ~~FACILITY OPERATION CONDITIONS~~ **NESHAP**

~~Facility~~ **Emissions Unit** Description ~~[326 IAC 2-7-5(15)]~~:

***

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

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

E.6.1 General Provisions Relating to NESHAP ZZZZ [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.~~6580~~**1**, 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 40 CFR 63, Subpart ZZZZ in accordance with Table 8 in 40 CFR Part 63, Subpart ZZZZ~~**for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ**.

(b) Pursuant to 40 CFR 63.~~10~~**9**, the Permittee shall submit all required notifications and reports 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~~

E.6.2 National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee ~~which utilizes reciprocating internal combustion engines~~ shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment G of this permit), **which are incorporated by reference as 326 IAC 20-82, for the emission units listed above**:

~~For the diesel fired emergency fire pump:~~

***

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: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-34003-00011

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) **daytime** 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.

Testing Requirements

The Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing, of the stack exhaust from EP-16, utilizing methods approved by the Commissioner, not later than one hundred eighty days (180) after the issuance of this permit. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Conclusion and Recommendation

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 023-36542-00011 and Significant Permit Modification No. 023-36542-00011. The staff recommend to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Roger Osburn at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-0242 or toll free at 1-800-451-6027 extension 3-0242.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A: Emissions Calculations
Summary

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

Uncontrolled Potential to Emit (tons/yr)								
Emission Unit	**PM**	**PM10**	**PM2.5 ***	**SO_2**	**NOx**	**VOC**	**CO**	**Total HAPs**
Soybean Processing/ Railcarstock Piling	92.22	61.66	56.57	0	0	0	0	0
Hexane Solvent Oil Extraction Process	0.00	0.00	0.00	0	0	662.10	0	423.75
Boiler Combustion	78.50	58.19	88.76	380.42	157.93	7.16	131.23	2.46
Cooling Towers	5.33	5.33	5.33	0	0	0	0	0
Expander 1 and Expander 2 - New units	**49.78**	**49.78**	**49.78**	**0**	**0**	**0.00**	**0**	**0.00**
Insignificant Activities								
Stationary Emergency Fire Engine	0.13	0.13	0.13	0.12	1.78	0.14	0.38	0.00
Fugitive Emissions								
i.e. Paved Roads	13.51	2.70	0.66	0	0	0	0	0
i.e. Unpaved Roads	35.47	9.04	0.90	0	0	0	0	0
Total	**274.94**	**186.84**	**202.14**	**380.54**	**159.71**	**669.41**	**131.62**	**426.20**

** PM2.5 listed is direct PM2.5*

Potential to Emit after Issuance (tons/yr)								
Emission Unit	**PM**	**PM10**	**PM2.5 ***	**SO_2**	**NOx**	**VOC**	**CO**	**Total HAPs**
Soybean Processing/ Railcarstock Piling	92.22	61.66	56.57	0	0	0	0	0
Hexane Solvent Oil Extraction Process	0.00	0.00	0.00	0	0	662.10	0	423.75
Boiler Combustion	78.50	58.19	88.76	380.42	157.93	7.16	131.23	2.46
Cooling Towers	5.33	5.33	5.33	0	0	0	0	0
Expander 1 and Expander 2 - New units	**9.96**	**9.96**	**9.96**	**0**	**0**	**0**	**0**	**0**
Insignificant Activities								
Stationary Emergency Fire Engine	0.13	0.13	0.13	0.12	1.78	0.14	0.38	0.00
Fugitive Emissions								
i.e. Paved Roads	12.35	2.47	0.61	0.00	0.00	0.00	0.00	0.00
i.e. Unpaved Roads	23.32	5.94	0.59	0.00	0.00	0.00	0.00	0.00
Total	**221.81**	**143.69**	**161.95**	**380.54**	**159.71**	**669.41**	**131.62**	**426.20**

** PM2.5 listed is direct PM2.5*

Note: The shaded cells indicate where limits are included.

Appendix A: Emissions Calculations
Expander System
Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

Emission Unit	Descritpion	Expander CFM's from Fan	Emission Factor Stack Test from Decatur GDSCF/Min. [1,2]	Maximum Potential Throughput (tpy)[3]	Controlled Potential Emissions						Uncontrolled Potential Emissions			Control Efficiency (%)	Capture Efficiency (%)
					PM lb/hr	PM tons/Yr	PM 10 lb/hr	PM 10 tons/Yr	PM 2.5 lb/Hr	PM 2.5 (Tons/Yr)	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)		
EU-15	Expander system	34,000	0.0078	584,000	2.273	9.956	1.478	9.956	1.478	9.956	49.78	49.78	49.78	80.00%	100%

Notes: [1]The emission factor is from data collected at a stack test performed at the Decatur plant.
[2]Estimate 0.01 grains per DSCF/Min
[3]Max Throughput is based on 800 tons/day from each expander (2 x 800 = 1600 x 365 = 584,000 tons/yr)

Methodology
Controlled Potential to Emit PM/PM10/PM2.5 (lb/hr)=34,000 (cfm) * 0.0078 (GDSCF/Min) * 60 (min/hr)/7000 (gr/lb
Controlled Potential to Emit PM/PM10/PM2.5 (tons/yr)=PM/PM10/PM2.5 (lb/hr) * 8760 (hr/yr)/2000(lbs
Uncontrolled Potential to Emit PM/PM10/PM2.5 (tons/yr)=PM/PM10/PM2.5 (tons/yr)/0.20

Appendix A: Emission Calculations
Soybean Processing and Railcar Stockpiling - PM/PM10/PM2.5 Emissions - Potential to Emit After Issuance (Limited)

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

EP ID(s)	EU ID(s)	CE ID(s)	Descritpion	Maximum Throughput (tpy)	Emission Factors				Emission Factor Basis / Source	Controls	Potential Emissions (tpy)			Methodology	Comments
					PM	PM10	PM2.5	Units			PM	PM10	PM2.5		
EP01	**EU01, EU02, EU03, EU04 & EU05	GR-1 and GR-2	Rail - Point Source (EU01), Truck Point Source (EU02), Grain/Meal Elevator Leg Vents (EU03), and Conveyor to Meal Storage Tanks (EU04 and EU05)	1,143,180	0.0011	0.0004	0.0004	lb/ton grain received	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited Factor	0.629	0.229	0.229	a	Worst-case PM emissions are from 100% truck receiving. Total beans received (crush + storage capacity = max rate).
EP01F & EP02F	EU01 & EU02	Fugitive	Rail (EU01) & Truck (EU02)	1,143,180	0.0350	0.0078	0.0013	lb/ton grain received via rail & truck	AP-42; Table 9.9.1-1; Railcar; 3/2003 AP-42; Table 9.9.1-1; Hopper Truck; 3/2003 (PM)	Unlimited factor	2.00	6.13E-08	1.37E-08	b	Fugitive from grain/meal receiving is based on 10% escaping from the dump pit and not being captured by the baghouse.
EP01	EU04a	GR-2	Grain Conveying	1,444,500	0.034	0.020	0.0200	lb/ton grain received	PM and PM10 emission factors based on limits from SPM No. 023-30724-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited Factor	24.56	14.45	14.45	a	
EP02	EU06	N/A	Grain Storage (2 Steel Storage Tanks)	120,000	0.0250	0.0063	0.0011	lb/ton of grain to bin	AP-42; Table 9.9.1-1; Storage Bin (vent); 6/2014.	Unlimited factor	1.50	0.38	0.07	c	Use of these storage bins is based on market conditions. Tanks hold 1,000,000 bushels each or 30,000 tons each. Throughput is based on filling the tanks two times.
EP03	**EU07, EU09, EU16, EU18 & EU22	CE-18 & CE-05	Grain Conveyor from Storage (EU07), Grain Cleaner (EU09), Secondary Hull Screening Operation (EU16), Hull and Pellet Storage Bins (EU18 and EU22)	1,143,180	0.0018	0.0017	0.0017	lb/ton grain received	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	1.03	0.97	0.97	a	EU07,09,16:Throughput = total beans processed (Crush Rate). EU18,22:Throughput = total hulls produced; hulls produced = crush x hull factor (see "Constants" tab).
EP04	EU10, EU11, EU12 & EU13	CE-06, BH-06A	Esher Wyss Dryer, Cracking, Conditioning & Hull Separator (control bypassed)	30,000	0.1310	0.0850	0.0850	lb/ton of beans processed	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	1.97	1.28	1.28	a	Throughput = Hourly Crush Rate*200 hrs of bypass. Emissions from cyclone only control for 200 hr/yr of baghouse bypass.
EP04	EU10, EU11, EU12 & EU13	CE06, BH-06A	Esher Wyss Cracking Conditioning & Hull Separator	1,314,000	0.0016	0.0016	0.0016	lb/ton of beans processed	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	1.06	1.06	1.06	a	The bypass is approved for 200 hours: 1,314,000 (Throughput) * (200/8760) = 30000.
EP05	EU14	CE-07	Flaking Operation	1,314,000	0.0500	0.0320	0.0320	lb/ton beans processed	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	32.85	21.02	21.02	a	Throughput = total beans processed (Crush Rate).
EP20	EU17	CE-20 & 20A	Hull Grinders (2 units)	91,980	0.00674	0.00674	0.00674	lb/ton of hulls processed	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	0.31	0.31	0.31	a	Throughput = total hulls produced; hulls produced = crush x hull factor (see "Constants" tab). Control efficiency is for baghouse only. Cyclone efficiency is included in the emission factors.
EP07	EU20 & EU21	CE-08	Pellet Mill & Pellet Cooler	91,980	0.030	0.030	0.030	lb/ton hulls processed	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	1.38	1.38	1.38	a	Throughput = total pellets produced; pellets produced = crush x pellet factor (see "Constants" tab).
EP08A	EU23 and EU24	CE-09 and CE-10	Meal Dryer Deck #1 and Meal Dryer Deck #2	1,314,000	0.00649	0.00649	0.00649	lb/ton beans processed	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	4.26	4.26	4.26	a	Throughput = total beans processed (Crush Rate).
EP09A	EU24A	CE-10A	Meal Dryer Deck #3	1,314,000	0.0063	0.0063	0.0063	lb/ton beans processed	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	4.14	4.14	4.14	a	Throughput = total beans processed (Crush Rate).
EP10	EU25	CE-11	Meal Cooler Deck	1,314,000	0.0018	0.0018	0.0018	lb/ton beans processed	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	1.18	1.18	1.18	a	Throughput = total beans processed (Crush Rate).
EP11	EU26, EU27, EU28, and EU29	BH-2A	Meal Conveyor	1,051,200	0.0040	0.00370	0.00370	lb/ton of meal produced	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	2.10	1.94	1.94	a	Baseline Throughput from plant records; throughputs = Crush Rate x meal-to-crush ratio.
EP30A	**EU30	BH-30A	Meal Storage (2 Tanks)	1,143,180	0.00013	0.00003	0.00003	lb/ton of meal produced	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	0.07	0.02	0.02	a	Baseline Throughput from plant records; Throughput = Crush Rate x meal-to-crush ratio.
*EP30B	**EU30	BH-30B	Meal Storage (2 Tanks)	1,143,180	0.00013	0.00003	0.00003	lb/ton of meal produced	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	0.07	0.02	0.02	a	BaselineThroughput from plant records; Throughput = Crush Rate x meal-to-crush ratio.
EP31	**EU31	BH-31	Meal Surge Tanks (2 Tanks)	1,143,180	0.00013	0.00003	0.00003	lb/ton of meal produced	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	0.07	0.02	0.02	a	BaselineThroughput from plant records; Throughput = Crush Rate x meal-to-crush ratio.
EP31	**EU32	BH-31	Hull Pellet Surge Tank	1,143,180	0.00013	0.00003	0.00003	lb/ton hulls processed	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	0.07	0.02	0.02	a	Throughput = total hulls produced; hulls produced = crush x hull factor (see "Constants" tab).
EP12	EU34	ML-1	Truck (Meal/ Hull / Hull Pellet)	1,314,000	0.0013	0.0009	0.0009	lb/ton meal produced	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	0.85	0.59	0.59	a	Baseline thruput from plant records; for CHA and FA Throughput = Crush Rate x (meal-to-crush ratio + hull-to-crush ratio)
EP12	EU35	ML-1	Rail (Meal/ Hull / Hull Pellet) Loadout	1,314,000	0.0013	0.0009	0.0009	lb/ton beans processed	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	0.85	0.59	0.59	a	Baseline thruput from plant records; for CHA and FA Throughput = Crush Rate x (meal-to-crush ratio + hull-to-crush ratio)
Fugitive	EU34 & EU35	Fugitive	Truck Meal & Rail Meal Loadout	1,314,000	0.2700	0.1755	0.0298	lb/ton beans processed	PM - AP-42; Table 9.11.1-1; Meal loadout; 11/95; PM10 = 65% of PM (AP42; Table B.2.2; Category 7; 9/90).	Unlimited factor	8.87	5.77	0.98	b	PM10 Emission Factor for the Truck/Rail Meal Loadout was estimated by taking 65% of the PM Emission Factor. Fugitive from the Truck/Rail Meal Loadout is based on 5% escaping and not being captured by the baghouse.
EP13	EU36	MC-1	Meal Clay Storage	6,570	0.00291	0.00204	0.00204	lb/ton clay received	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	0.01	0.01	0.01	a	Throughput = total meal clay used; meal clay = crush x meal clay factor (see "Constants" tab).
EP14	EU37	RCB	Refinery Clay Storage	4,500	0.5714	0.4000	0.4000	lb/ton clay received	WebFIRE; SCC 3-05-009-05; Raw clay transfer. PM10 assumed to equal 70% of PM (minimum value from AP42; Table B.2.2; Category 4; 9/90). Assumed PM2.5 =	Unlimited factor	1.29	0.90	0.90	c	Throughput = total bleach clay used; bleach clay = oil processed x bleach clay factor (see "Constants" tab).
EP44	EU44	BH-44	Vertical Seed Conditioner (bean heater)	1,314,000	0.0010	0.0010	0.0010	lb/ton beans processed	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	0.66	0.66	0.66	a	Throughput = total beans processed (Crush Rate).
EP19	EU47	RC-2	Silica Clay Storage	450	0.00291	0.00204	0.0020	lb/ton clay received	PM and PM10 emission factors based on revised/ combined limits from SPM No. 023-29230-00011. Emission factors are limited in order 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10	Limited factor	6.55E-04	4.59E-04	4.59E-04	a	Throughput = total filter aid used; filter aid = oil processed x filter aid factor (see "Constants" tab).
			Other Insignificant Activities								0.50	0.50	0.50		Assume half a ton per year PM/PM10/PM2.5 emissions.
									Total		**92.22**	**61.66**	**56.57**		

*PM/PM10/PM2.5 emissions calculated in this table include Railcar Stockpiling.

Methodology

a. Limited Potential Emissions (tons/yr) = Limited Throughput (tons/yr) x Limited EF (lb/ton) x (1 ton/2000 lb)
b. Limited Potential Emissions (tons/yr) = Limited Throughput (tons/yr) x Unlimited EF (lb/ton) x (1 ton/2000 lb) x %Fugitive
c. Uncontrolled Potential Emissions (tons/yr) = Throughput (tons/yr) x EF (lb/ton) x (1 ton/2000 lb)

Notes

* The emissions from EP30B are shown seperatley in the table, The transfer equipment does not allow the source to fill both tanks simultaneously. Meal is loaded into one tank at a time. When one tank becomes full, then the meal will flow into the other remaining tank. However, these emissions are not counted towards the total twice.

Limits

**Pursuant to SSM 023-26411-00011 and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:
(a) The source soybean meal production shall be limited to a total of 1,143,180 tons per twelve (12) consecutive month period, with compliance at the end of each month.

(b) The soybean meal, hulls, and hull pellets stockpiled into the railcars during plant's shutdown, shall be limited to 100,000 tons per twelve (12) consecutive month period, with compliance at the end of each month. The soybean meal, hulls, and hull pellets stockplied shall be counted toward the source total soybean meal production limit of 1,143,180 tons per twelve (12) consecutive month period.

Appendix A: Emissions Calculations
326 IAC 6-3 PM Limit Calculations

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

(a) Pursuant to 326 IAC 6-3-2, the particulate emissions from the emission units listed below, during normal operation, shall be limited as follows:

Emission Unit	Process Weight Rate (tons/hr)	Allowable Particulate Emissions (lb/hr)
Rail Unloading, EU01	600	71.16
Truck Unloading, EU02	600	71.16
Grain elevator, EU03	1200	79.97
Conveyor, EU-04 to grain storage, EU-05	600	71.16
Conveyor, EU-04a to grain storage, EU-05	600	71.16
Concrete silo top vents, EU05	720	73.41
Steel storage tank vents, EU06	720	73.41
Conveyor from grain storage, EU07	225	59.79
Grain Cleaner, EU09	180	57.37
Bean Dryer, EU10	180	57.37
Cracking Rolls, EU11	180	57.37
Hull Separator, EU12	180	57.37
Conditioner, EU13	180	57.37
Flaking, EU14	172	56.89
Expander System, EU15	**66.7**	**47.30**
Hull Screen, EU16	14	24.03
Hull Grinder, EU17	14	24.03
Hull Storage Unit, EU18	14	24.03
Hull Storage Unit, EU19	14	24.03
Pellet Mill, EU20	14	24.03
Pellet Cooler, EU21	14	24.03
Pellet Storage Unit, EU22	14	24.03
Dryer Deck #1, EU23	172	56.89
Dryer Deck #2, EU24	172	56.89
Dryer Deck #3, EU24A	172	56.89
Cooler Deck, EU25	172	56.89
Meal Conveyor, EU26	136	54.42
Meal sifter, EU27	136	54.42
Meal grinder, EU28	136	54.42
Meal storage conveyor, EU29	136	54.42
Meal Storage Tank, EU30, BH-30A	136	54.42
Meal Storage Tank, EU30, BH-30B	136	54.42
Meal surge tanks, EU31	300	63.00
Hull surge tank, EU32	100	51.28
Enclosed Conveying System, EU33	250	60.96
Truck Meal & Hull Pellet loadout, EU34	250	60.96
Rail Meal & Hull Pellet loadout, EU35	250	60.96
Meal clay storage, EU36	25	35.43
Refinery clay storage, EU37	25	35.43
Vertical Seed Conditioner, EU44	180	57.37

(b) Pursuant to 326 IAC 6-3-2, the particulate emissions from the following processes, when soybean meal is stockpiled in railcars during the plant's shutdowns, shall be limited as follows:

Emission Unit	Process Weight Rate (tons/hr)	Allowable Particulate Emissions (lb/hr)
Rail/Truck Receiving (EU01 and EU02)	400	66.31
Grain/Meal Elevator (EU03)	720	73.41
Conveyor to Meal Storage Tanks (EU28A)	136	54.42
Meal Storage Tanks (EU30)	136	54.42
Meal Surge Tanks (EU31)	300	63.00
Rail/Truck Meal Loadout (EU34 and EU35)	250	60.96

Methodology

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the following equation.

E = 4.10 X (P^0.67) or

Interpolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the following equation.

E = 55.0 X (P^0.11) - 40

P = process weight rate in tons per hour

E = rate of emission in pounds per hour

Appendix A: Emissions Calculations
Hexane Emissions from Hexane Bubble

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

Parameter		Value	Units	Basis
Maximum Throughput	=	1,314,000	tpy	120,000 bu/day @ 60 lb/bu
Hexane Density	=	5.63	lb/gal	Industry standard factor.
Solvent Loss Ratio	=	0.179	gal/ton	BACT Limit
Solvent Loss Rate	=	662.10	tpy	Solvent Loss Ratio * Hexane Density * Maximum Throughput/(2,000 lbs/ton)
HAP Fraction (n-Hexane)	=	64%	wt. %	Industry standard factor (for example, see 40 CFR 63, Subpart GGGG)
HAP Potential Emissions	=	423.75	tpy	Solvent Loss Rate * HAP Fraction

HAP Emissions

Main Vent Ctrl. Eff.	=	99%	%	Mineral Oil Scrubber w/Condenser Efficiency
Main Vent Fxn. (uncontrolled)	=	73.84	%	Percent Emissions from Main Vent
Dryer/Cooler Vent Fxn.	=	6.88	%	Percent Emissions from Dryer/Cooler
Fugitives Fxn.	=	19.28	%	Percent Emissions from Fugitive
Main Vent Fxn. (controlled)	=	0.74	%	Main Vent Fxn. (uncontrolled) x 1 - Main Vent Ctrl. Eff.
Dryer/Cooler Emissions	=	108.4	tpy	HAP Potential Emissions x Dryer/Cooler Vent Function / (Dryer/Cooler Vent Fxn + Fugitive Fxn + Main Vent Fxn)
Fugitive Emissions	=	303.7	tpy	HAP Potential Emissions x Fugitive Fxn / (Dryer/Cooler Vent Fxn + Fugitive Fxn + Main Vent Fxn)
Main Vent Emissions	=	11.6	tpy	HAP Potential Emissions x Main Vent Function (controlled / (Dryer/Cooler Vent Fxn + Fugitive Fxn + Main Vent Fxn)

The HAP information above was obtained from the calculations from SSM 023-24843-00011/SPM 023-25870-00011
and Appendix B to the TSD BACT Determination, Table 1.

VOC Emissions

Main Vent Ctrl. Eff.	=	99%	%	Mineral Oil Scrubber w/Condenser Efficiency
Main Vent Fxn. (uncontrolled)	=	73.84	%	Percent Emissions from Main Vent
Dryer/Cooler Vent Fxn.	=	6.88	%	Percent Emissions from Dryer/Cooler
Fugitives Fxn.	=	19.28	%	Percent Emissions from Fugitive
Main Vent Fxn. (controlled)	=	0.74	%	Main Vent Fxn. (uncontrolled) x 1 - Main Vent Ctrl. Eff.
Dryer/Cooler Emissions	=	169.4	tpy	VOC Potential Emissions x Dryer/Cooler Vent Function / (Dryer/Cooler Vent Fxn + Fugitive Fxn + Main Vent Fxn)
Fugitive Emissions	=	474.6	tpy	VOC Potential Emissions x Fugitive Fxn / (Dryer/Cooler Vent Fxn + Fugitive Fxn + Main Vent Fxn)
Main Vent Emissions	=	18.2	tpy	VOC Potential Emissions x Main Vent Function (controlled / (Dryer/Cooler Vent Fxn + Fugitive Fxn + Main Vent Fxn)

The VOC information above was obtained using the main vent, fugitive and dryer/cooler functions for the HAP information
obtained from the calculations from SSM 023-24843-00011/SPM 023-25870-00011and Appendix B to the TSD BACT Determination, Table 1.

Appendix A: Emissions Calculations
Natural Gas, Vegetable Oil and Distillate Oil Combustion, Only
(Total of Worst Case Emissions for All Boilers EU39, EU41, EU42, EU46 (Potential to Emit After Issuance, Limited))

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

	Total Worst Case Limited Emissions						
	Pollutant						
	PM	PM10	direct PM2.5	SO2	Nox	VOC	CO
Limited Emission in tons/yr	**78.50**	**58.19**	**88.76**	**380.42**	**157.93**	**7.16**	**131.23**

Notes For All Fuel Types
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Methadology
Limited Emissions (tons/yr) = Boiler EU39 Total Worst Emissions (tons/yr) + Boiler EU41 Total Worst Emissions (tons/yr) + Boiler EU42 Total Worst Emissions (tons/yr) + Boiler EU46 Total Worst Emissions (tons/yr)

HAPS Calculations

	HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	**Total - Organics**
Potential Emission in tons/yr	2.73E-03	1.56E-03	9.76E-02	2.342	4.42E-03	2.448

	HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	**Total - Metals**
Potential Emission in tons/yr	6.506E-04	1.431E-03	1.822E-03	4.944E-04	2.732E-03	7.130E-03
				Total HAPs from NG		**2.46**
				Worst HAP from NG		**2.34**

Methodology is the same as above.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

	Additional HAPs - Metals from Distillate Fuel Oil				
Emission Factor in lb/MMcf	Arsenic 4.0E-06	Beryllium 3.0E-06	Mercury 3.0E-06	Selenium 1.5E-05	**Total - Metals**
Potential Emission in tons/yr	5.204E-06	3.903E-06	3.903E-06	1.952E-05	3.253E-05
					Total HAPs 2.46
					Worst HAP 2.34
					Hexane

Methodology is the same as above.

Greenhouse Gas Calculations

	Greenhouse Gas
CO2e Total in tons/yr	**232,901**

Methodology
Methodology is the same as above.

Appendix A: Emissions Calculations
Natural Gas, Vegetable Oil and Distillate Oil Combustion, Only (Boiler EU39)
Potential to Emit After Issuance (Limited)
MM BTU/HR <100

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr	Potential Throughput kgals/year
62.5	1020	536.8	3910.71

	Emissions from Natural Gas (NG)						
	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	Nox**	VOC	CO
Emission Factor	0.0019 lb/MMBtu	0.0075 lb/MMBtu	0.0075 lb/MMBtu	0.0006 lb/MMBtu	0.0980 lb/MMBtu	0.0054 lb/MMBtu	0.0824 lb/MMBtu
Potential Emission in tons/yr	0.51	2.04	2.04	0.16	26.84	1.48	22.54

NG Notes / References:
All EF = AP-42, Table 1.4-2; 7/98
*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32
All emission factors are based on normal firing.

NG Metholdology:
EF (lb/MMBtu) = EF (lb/MMcf) / 1000 (mmcf/MMBtu)
Potential Emissions (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 (hrs/yr) /2,000 (lb/ton)

	Emissions from Vegetable Oil (VO)						
	Pollutant						
	PM	PM10*	direct PM2.5	SO2	Nox	VOC	CO
Emission Factor	0.0700 lb/MMBtu	0.0700 lb/MMBtu	0.0700 lb/MMBtu	0.0010 lb/MMBtu	0.1776 lb/MMBtu	0.0016 lb/MMBtu	0.0047 lb/MMBtu
Potential Emission in tons/yr	19.16	19.16	19.16	0.27	48.62	0.44	1.29

VO Notes / References:
PM/PM2.5/SO2/Nox/VOC/CO EF = Based on source testing data + compliance margin
*Limit for PM10: Pursuant to SSM 023-21838-00011 and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, For boiler #1 and boiler #3 (EU39 and EU41), when burning vegetable oil or blends of vegetable oil and distillate fuel oil, PM10 emissions shall not exceed 0.07 pounds per million Btu heat input for each boiler.

VO Metholdology:
Potential Emissions (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 (hrs/yr) /2,000 (lb/ton)

	Emissions from Distillate Fuel Oil (DF)						
	Pollutant						
	PM	PM10*	direct PM2.5	SO2**	Nox	VOC	CO
Emission Factor	0.0236 lb/MMBtu	0.0164 lb/MMBtu	0.0243 lb/MMBtu	0.5000 lb/MMBtu	0.1429 lb/MMBtu	0.0014 lb/MMBtu	0.0357 lb/MMBtu
Potential Emission in tons/yr	6.45	4.50	6.65	136.88	39.11	0.39	9.78

DF Notes / References:
PM/PM2.5 = AP-42; (sum of filterable and condensable PM (1.3)); Tables 1.3-1 and 1.3-2; 9/98.
**SO2 = Used 0.5 lb/mmbtu even though unit is permitted to combust 0.5 wt. % S which would be =157*0.5/140 = 0.5607 lb/mmbtu
*Limit for PM10: Pursuant to SSM 023-21838-00011 and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, For boiler #1 and boiler #3 (EU39 and EU41), when burning vegetable oil or blends of vegetable oil and distillate fuel oil, PM10 emissions shall not exceed 0.07 pounds per million Btu heat input for each boiler.
**Limit for SO2: Pursuant to 326 IAC 7-1.1 (SO2 Emissions Limitations) the SO2 emissions from EU39 and EU46 shall not exceed five tenths (0.5) pound per MMBtu heat input.
Nox/VOC/CO = AP-42, Table 1.3-3; 9/98

DF Metholdology:
PM/PM10/PM2.5 EF (lb/MMBtu) = EF (lb/kgal) + 1.3 (lb/kgal)/ 140 (MMBtu/kgal)
Nox/VOC/CO EF (lb/MMBtu) = EF (lb/kgal) / 140 (MMBtu/kgal)
Potential Emissions (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 (hrs/yr) /2,000 (lb/ton)

	Worst Case Potential to Emit						
	Pollutant						
	PM	PM10	direct PM2.5	SO2	Nox**	VOC	CO
Limited Emission in tons/yr	**19.16**	**19.16**	**19.16**	**136.88**	**48.62**	**1.48**	**22.54**

Notes For All Fuel Types
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Appendix A: Emissions Calculations
Natural Gas, Vegetable Oil and Distillate Oil Combustion, Only (Boiler EU39)
MM BTU/HR <100

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Operation Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	5.636E-04	3.221E-04	2.013E-02	4.831E-01	9.125E-04	**5.050E-01**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.342E-04	2.952E-04	3.757E-04	1.020E-04	5.636E-04	**1.471E-03**
				Total HAPs from NG		**5.065E-01**
				Worst HAP from NG		**4.831E-01**

Methodology is the same as above.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

	Additional HAPs - Metals from Distillate Fuel Oil				
	Arsenic	Beryllium	Mercury	Selenium	**Total - Metals**
Emission Factor in lb/MMcf	4.0E-06	3.0E-06	3.0E-06	1.5E-05	
Potential Emission in tons/yr	1.074E-06	8.051E-07	8.051E-07	4.026E-06	**6.710E-06**
				Total HAPs	**5.065E-01**
				Worst HAP	**4.831E-01**
					Hexane

Methodology is the same as above.

Greenhouse Gas Calculations

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in			
Natural Gas (lb/MMcf)	120,000	2.3	2.2
Vegetable Oil (kg/MMbtu)	81.55	1.10E-03	1.10E-04
No. 2 Distillate Fuel Oil (lb/kgal)	21,500	0.216	0.26
Potential Emission in tons/yr			
Natural Gas	32,206	1	1
Vegetable Oil	49,113.5	0.7	0.1
No. 2 Distillate Fuel Oil	42,040	0.4	0.5
Summed Potential Emissions in tons/yr			
Natural Gas		32,207	
Vegetable Oil		49,114	
No. 2 Distillate Fuel Oil		42,041	
CO2e Total in tons/yr			
Natural Gas		32,397	
Vegetable Oil		49,150	
No. 2 Distillate Fuel Oil		42,202	
Worst Case		**49,150**	

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
The CO2 Emission Factor for #1 Fuel Oil is 21500. The CO2 Emission Factor for #2 Fuel Oil is 22300.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Natural Gas Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Vegetable Oil Emission Factors are from 40 CF* 98, Subpart C, Table C-2 (for CO2) and Table C-1 (for CH4 and N2O)
No. 2 Distillate Fuel oil Emission Factors are from AP 42, Tables 1.3-3, 1.3-8, and 1.3-12 (SCC 1-03-005-01/02/03) Supplement E 9/99 (see erata file)
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
NG Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
DF Emission (tons/yr) = Throughput (kgal/yr) x Emission Factor (lb/kgal)/2,000 lb/ton
Vegetbale Oil Emission (tons/yr) = Throughput (MMBtu/yr) x Veg Oil Emission Factor (kg/MMbtu)*2.2 (lb/kg)*8760(hrs/yr)/2,000 (lb/ton)
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

Appendix A: Emissions Calculations
Natural Gas, Vegetable Oil and Distillate Oil Combustion, Only (Boiler EU41)
Potential to Emit After Issuance (Limited)
MM BTU/HR <100

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr	Potential Throughput kgals/year
82.5	1020	708.5	5162.14

	Emissions from Natural Gas (NG)						
	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	Nox**	VOC	CO
Emission Factor	0.0019 lb/MMBtu	0.0075 lb/MMBtu	0.0075 lb/MMBtu	0.0006 lb/MMBtu	0.0980 lb/MMBtu	0.0054 lb/MMBtu	0.0824 lb/MMBtu
Potential Emission in tons/yr	0.67	2.69	2.69	0.21	35.43	1.95	29.76

NG Notes / References:
All EF = AP-42, Table 1.4-2; 7/98
*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32
All emission factors are based on normal firing.

NG Metholdology:
EF (lb/MMBtu) = EF (lb/MMcf) / 1000 (mmcf/MMBtu)
Potential Emissions (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 (hrs/yr) /2,000 (lb/ton)

	Emissions from Vegetable Oil (VO)						
	Pollutant						
	PM	PM10	direct PM2.5	SO2	Nox	VOC	CO
Emission Factor	0.0700 lb/MMBtu	0.0700 lb/MMBtu	0.0700 lb/MMBtu	0.0010 lb/MMBtu	0.1776 lb/MMBtu	0.0016 lb/MMBtu	0.0047 lb/MMBtu
Potential Emission in tons/yr	25.29	25.29	25.29	0.36	64.18	0.58	1.70

VO Notes / References:
All EF = Based on source testing data + compliance margin

VO Metholdology:
Potential Emissions (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 (hrs/yr) /2,000 (lb/ton)

	Emissions from Distillate Fuel Oil (DF)						
	Pollutant						
	PM	PM10*	direct PM2.5	SO2**	Nox	VOC	CO
Emission Factor	0.0236 lb/MMBtu	0.0164 lb/MMBtu	0.0243 lb/MMBtu	0.5000 lb/MMBtu	0.1429 lb/MMBtu	0.0014 lb/MMBtu	0.0357 lb/MMBtu
Potential Emission in tons/yr	8.52	5.94	8.78	180.68	51.62	0.52	12.91

DF Notes / References:
PM/PM10/PM2.5 = AP-42; (sum of filterable and condensable PM (1.3)); Tables 1.3-1 and 1.3-2; 9/98.
NOx/VOC/CO = AP-42, Table 1.3-3; 9/98

*Limit for PM10: Pursuant to SSM 023-21838-00011 and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, For boiler #1 and boiler #3 (EU39 and EU41), when burning vegetable oil or blends of vegetable oil and distillate fuel oil, PM10 emissions shall not exceed 0.07 pounds per million Btu heat input for each boiler.

**SO2 = Used 0.5 lb/mmbtu even though unit is permitted to combust 0.5 wt. % S which would be =157*0.5/140 = 0.5607 lb/mmbtu

**Limits for SO2:
Pursuant to 326 IAC 7-1.1, The sulfur dioxide (SO2) emissions from EU41 and EU42 shall each not exceed five tenths (0.5) pounds per million Btu heat input for distillate oil combustion; or The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]

DF Metholdology:
PM/PM10/PM2.5/Nox/VOC/CO EF EF (lb/kgal) + 1.3 (lb/kgal)/ 140 (MMBtu/kgal)
(lb/MMBtu) =
Potential Emissions (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 (hrs/yr) /2,000 (lb/ton)

	Worst Case Potential to Emit						
	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	Nox**	VOC	CO
Limited Emission in tons/yr	**25.29**	**25.29**	**25.29**	**180.68**	**64.18**	**1.95**	**29.76**

Notes For All Fuel Types
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Appendix A: Emissions Calculations
Natural Gas, Vegetable Oil and Distillate Oil Combustion, Only (Boiler EU41)
MM BTU/HR <100

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Operation Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	7.440E-04	4.251E-04	2.657E-02	6.377E-01	1.205E-03	**6.666E-01**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.771E-04	3.897E-04	4.960E-04	1.346E-04	7.440E-04	**1.941E-03**

Total HAPs from NG	**6.686E-01**
Worst HAP from NG	**6.377E-01**

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

	Additional HAPs - Metals from Distillate Fuel Oil				
	Arsenic	Beryllium	Mercury	Selenium	**Total - Metals**
Emission Factor in lb/MMcf	4.0E-06	3.0E-06	3.0E-06	1.5E-05	
Potential Emission in tons/yr	1.417E-06	1.063E-06	1.063E-06	5.314E-06	**8.857E-06**

Total HAPs	**6.686E-01**
Worst HAP	**6.377E-01**
	Hexane

Methodology is the same as above.

Greenhouse Gas Calculations

		Greenhouse Gas		
		CO2	CH4	N2O
Emission Factor in				
	Natural Gas (lb/MMcf)	120,000	2.3	2.2
	Vegetable Oil (kg/MMbtu)	81.55	1.10E-03	1.10E-04
	No. 2 Distillate Fuel Oil (lb/kgal)	21,500	0.216	0.26
Potential Emission in tons/yr				
	Natural Gas	42,512	1	1
	Vegetable Oil	64,829.8	0.9	0.1
	No. 2 Distillate Fuel Oil	55,493	0.6	0.7
Summed Potential Emissions in tons/yr				
	Natural Gas		42,513	
	Vegetable Oil		64,831	
	No. 2 Distillate Fuel Oil		55,494	
CO2e Total in tons/yr				
	Natural Gas		42,764	
	Vegetable Oil		64,878	
	No. 2 Distillate Fuel Oil		55,707	
	Worst Case		**64,878**	

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
The CO2 Emission Factor for #1 Fuel Oil is 21500. The CO2 Emission Factor for #2 Fuel Oil is 22300.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Natural Gas Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Vegetable Oil Emission Factors are from 40 CF* 98, Subpart C, Table C-2 (for CO2) and Table C-1 (for CH4 and N2O)
No. 2 Distillate Fuel oil Emission Factors are from AP 42, Tables 1.3-3, 1.3-8, and 1.3-12 (SCC 1-03-005-01/02/03) Supplement E 9/99 (see erata file)
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
NG Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
DF Emission (tons/yr) = Throughput (kgal/yr) x Emission Factor (lb/kgal)/2,000 lb/ton
Vegetbale Oil Emission (tons/yr) = Throughput (MMBtu/yr) x Veg Oil Emission Factor (kg/MMbtu)*2.2 (lb/kg)*8760(hrs/yr)/2,000 (lb/ton)
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

Appendix A: Emissions Calculations
Natural Gas and Distillate Oil Combustion, Only (Boiler EU42)
Potential to Emit After Issuance (Limited)
MM BTU/HR <100

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr	Potential Throughput kgals/year
13.0	1020	111.6	813.43

	Emissions from Natural Gas (NG)						
	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	Nox**	VOC	CO
Emission Factor	0.0019 lb/MMBtu	0.0075 lb/MMBtu	0.0075 lb/MMBtu	0.0006 lb/MMBtu	0.0980 lb/MMBtu	0.0054 lb/MMBtu	0.0824 lb/MMBtu
Potential Emission in tons/yr	0.11	0.42	0.42	0.03	5.58	0.31	4.69

NG Notes / References:
All EF = AP-42, Table 1.4-2; 7/98
*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32
All emission factors are based on normal firing.

NG Metholdology:
EF (lb/MMBtu) = EF (lb/MMcf) /1000 (mmcf/MMBtu)
Potential Emissions (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 (hrs/yr) /2,000 (lb/ton)

	Emissions from Distillate Fuel Oil (DF)						
	Pollutant						
	PM	PM10	direct PM2.5	SO2*	Nox	VOC	CO
Emission Factor	0.0236 lb/MMBtu	0.0164 lb/MMBtu	0.0243 lb/MMBtu	0.5000 lb/MMBtu	0.1429 lb/MMBtu	0.0014 lb/MMBtu	0.0357 lb/MMBtu
Potential Emission in tons/yr	1.34	0.94	1.38	28.47	8.13	0.08	2.03

DF Notes / References:
PM/PM10/PM2.5 = AP-42; (sum of filterable and condensable PM (1.3)); Tables 1.3-1 and 1.3-2; 9/98.
Nox/VOC/CO = AP-42, Table 1.3-3; 9/98
*SO2 = Used 0.5 lb/mmbtu even though unit is permitted to combust 0.5 wt. % S which would be =157*0.5/140 = 0.5607 lb/mmbtu
*Limit for SO2: Pursuant to 326 IAC 7-1.1, The sulfur dioxide (SO2) emissions from EU41 and EU42 shall each not exceed five tenths (0.5) pounds per million Btu heat input fo distillate oil combustion; or The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]

DF Metholdology:
PM/PM10/PM2.5 EF (lb/MMBtu) = EF (lb/kgal) + 1.3 (lb/kgal)/ 140 (MMBtu/kgal)
Nox/VOC/CO EF (lb/MMBtu) EF (lb/kgal) / 140 (MMBtu/kgal)
Potential Emissions (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 (hrs/yr) /2,000 (lb/ton)

	Worst Case Potential to Emit						
	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	Nox**	VOC	CO
Limited Emission in tons/yr	**1.34**	**0.94**	**1.38**	**28.47**	**8.13**	**0.31**	**4.69**

Notes For All Fuel Types
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Appendix A: Emissions Calculations
Natural Gas and Distillate Oil Combustion, Only (Boiler EU42)
MM BTU/HR <100

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Operation Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.172E-04	6.699E-05	4.187E-03	1.005E-01	1.898E-04	**1.050E-01**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	2.791E-05	6.141E-05	7.815E-05	2.121E-05	1.172E-04	**3.059E-04**
				Total HAPs from NG		**1.053E-01**
				Worst HAP from NG		**1.005E-01**

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

	Additional HAPs - Metals from Distillate Fuel Oil				
	Arsenic	Beryllium	Mercury	Selenium	**Total - Metals**
Emission Factor in lb/MMcf	4.0E-06	3.0E-06	3.0E-06	1.5E-05	
Potential Emission in tons/yr	2.233E-07	1.675E-07	1.675E-07	8.374E-07	**1.396E-06**
					Total HAPs	**1.054E-01**
					Worst HAP	**1.005E-01**
						Hexane

Methodology is the same as above.

Greenhouse Gas Calculations

		Greenhouse Gas		
		CO2	CH4	N2O
Emission Factor in				
	Natural Gas (lb/MMcf)	120,000	2.3	2.2
	No. 2 Distillate Fuel Oil (lb/kgal)	21,500	0.216	0.26
Potential Emission in tons/yr				
	Natural Gas	6,699	0	0
	No. 2 Distillate Fuel Oil	8,744	0.1	0.1
Summed Potential Emissions in tons/yr				
	Natural Gas		6,699	
	No. 2 Distillate Fuel Oil		8,745	
CO2e Total in tons/yr				
	Natural Gas		6,739	
	No. 2 Distillate Fuel Oil		8,778	
	Worst Case		**8,778**	

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
The CO2 Emission Factor for #1 Fuel Oil is 21500. The CO2 Emission Factor for #2 Fuel Oil is 22300.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Natural Gas Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
No. 2 Distillate Fuel oil Emission Factors are from AP 42, Tables 1.3-3, 1.3-8, and 1.3-12 (SCC 1-03-005-01/02/03) Supplement E 9/99 (see erata file)
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
NG Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
DF Emission (tons/yr) = Throughput (kgal/yr) x Emission Factor (lb/kgal)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

Appendix A: Emissions Calculations
Natural Gas, Vegetable Oil and Distillate Oil Combustion, Only (Boiler EU46)
Potential to Emit After Issuance (Limited)
MM BTU/HR >100

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr	Potential Throughput kgals/year
145.0	1020	1245.3	9072.86
140.0		1202.4	8760.00

	Emissions from Natural Gas (NG)						
	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	Nox**	VOC***	CO
Emission Factor	0.0019	0.0075	0.0075	0.0006	0.0350	0.0054	0.1169
	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu
Potential Emission in tons/yr	1.18	4.73	4.73	0.37	22.23	3.43	74.24

NG Notes / References:
Boiler EU46 is only permitted to burn natural gas at 145 MMBtu per hour firing
PM/PM10/PM2.5/SO2 = AP-42, Table 1.4-2; 7/98
CO = Burner spec is 150 ppmvd @ 3% O2; converted using Fd = 9190 dscf/mmbtu
*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Based on design data from SSM 023-2483-00011.
All emission factors are based on normal firing.
***Limit for VOC: Pursuant to PSD SSM 023-24843-00011 and 326 IAC 2-2-3 (BACT), VOC emissions shall not exceed 0.0054 pounds per MMBtu when firing natural gas or vegetable oil.

NG Metholdology:
PM/PM10/PM2.5/SO2/Nox/VOC EF (lb/MMBtu) = EF (lb/MMcf) * 1000 (mmcf/MMBtu)
Potential Emissions (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 (hrs/yr) /2,000 (lb/ton)

	Emissions from Vegetable Oil (VO)						
	Pollutant						
	PM	PM10	direct PM2.5	SO2	Nox	VOC*	CO
Emission Factor	0.0700	0.0700	0.0700	0.0010	0.1776	0.0054	0.0047
	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu
Potential Emission in tons/yr	42.92	42.92	42.92	0.61	108.90	3.31	2.88

VO Notes / References:
Boiler EU46 is only permitted to burn vegetable oil, No. 2 distillate fuel oil or blends of vegetable oil and No. 2 distillate fuel oil at 140 MMBtu per hour firing
PM2.5/SO2 = Based on source testing data + compliance margin
*Limit for VOC: Pursuant to PSD SSM 023-24843-00011 and 326 IAC 2-2-3 (BACT), VOC emissions shall not exceed 0.0054 pounds per MMBtu when firing natural gas or vegetable oil.

VO Metholdology:
Potential Emissions (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 (hrs/yr) /2,000 (lb/ton)

	Emissions from Distillate Fuel Oil (DF)						
	Pollutant						
	PM	PM10	direct PM2.5	SO2	Nox	VOC*	CO
Emission Factor	0.0236	0.0164	0.0111	0.0561	0.0900	0.0014	0.1108
	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu
Potential Emission in tons/yr	14.45	10.07	6.79	34.40	55.19	0.88	67.94

DF Notes / References:
Boiler EU46 is only permitted to burn vegetable oil, No. 2 distillate fuel oil or blends of vegetable oil and No. 2 distillate fuel oil at 140 MMBtu per hour firing
PM/PM10/PM2.5 = AP-42; (sum of filterable and condensable PM (1.3)); Tables 1.3-1 and 1.3-2; 9/98.
SO2 = 0.05 wt. % S.
NOx = Based on design data from the source
VOC = AP-42, Table 1.3-3; 9/98
CO = Burner spec is 150 ppmvd @ 3% O2; Converted using Fd = 8,710 dscf/MMBtu.
*Limit for VOC: Pursuant to PSD SSM 023-24843-00011 and 326 IAC 2-2-3 (BACT), VOC emissions shall not exceed 0.0014 pounds per MMBtu when firing distillate oil.

DF Metholdology:
PM/PM10/PM2.5 EF (lb/MMBtu) = EF (lb/kgal) + 1.3 (lb/kgal)/ 140 (MMBtu/kgal)
VOC EF (lb/MMBtu) = EF (lb/kgal) / 140 (MMBtu/kgal)

Potential Emissions (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 (hrs/yr) /2,000 (lb/ton)

	Worst Case Potential to Emit						
	Pollutant						
	PM*	PM10*	direct PM2.5	SO2	Nox*	VOC	CO
Limited Emission in tons/yr	**32.70**	**12.80**	**42.92**	**34.40**	**37.00**	**3.43**	**74.24**

*Limits for EU 46: Pursuant to SSM 023-24843-00011 and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, PM, PM10, and NOx emissions from EU46 (boiler #4) shall be limited as follows:
(a) The PM emissions shall not exceed 0.070 pounds per MMBtu heat input and 32.7 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The PM10 emissions shall not exceed 0.070 pounds per MMBtu heat input and 12.8 tons per twelve consecutive month period with compliance determined at the end of each month.

(c) The NOx emissions shall not exceed 37.0 tons per twelve consecutive month period with compliance determined at the end of each month.

Compliance with these limits will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable with respect to PM, PM10, and NOx.

Notes For All Fuel Types
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Appendix A: Emissions Calculations
Natural Gas, Vegetable Oil and Distillate Oil Combustion, Only (Boiler EU46)
MM BTU/HR >100

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Operation Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.308E-03	7.472E-04	4.670E-02	1.121E+00	2.117E-03	**1.172E+00**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	3.113E-04	6.849E-04	8.717E-04	2.366E-04	1.308E-03	**3.412E-03**
				Total HAPs from NG		**1.175E+00**
				Worst HAP from NG		**1.121E+00**

Methodology is the same as above.
The worst case heat input capacity of 145 MMBtu/hr was used
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

	Additional HAPs - Metals from Distillate Fuel Oil				
	Arsenic	Beryllium	Mercury	Selenium	**Total - Metals**
Emission Factor in lb/MMcf	4.0E-06	3.0E-06	3.0E-06	1.5E-05	
Potential Emission in tons/yr	2.491E-06	1.868E-06	1.868E-06	9.340E-06	**1.557E-05**

Total HAPs	**1.175E+00**
Worst HAP	**1.121E+00**
	Hexane

Methodology is the same as above.

Greenhouse Gas Calculations

		Greenhouse Gas		
		CO2	CH4	N2O
Emission Factor in				
	Natural Gas (lb/MMcf)	120,000	2.3	2.2
	Vegetable Oil (kg/MMbtu)	81.55	1.10E-03	1.10E-04
	No. 2 Distillate Fuel Oil (lb/	21,500	0.216	0.26
Potential Emission in tons/yr				
	Natural Gas	74,718	1	1
	Vegetable Oil	110,014.2	1.5	0.1
	No. 2 Distillate Fuel Oil	94,170	1	1
Summed Potential Emissions in tons/yr				
	Natural Gas		74,720	
	Vegetable Oil		110,016	
	No. 2 Distillate Fuel Oil		94,172	
CO2e Total in tons/yr				
	Natural Gas		75,162	
	Vegetable Oil		110,096	
	No. 2 Distillate Fuel Oil		94,533	
	Worst Case		**110,096**	

Methodology
Boiler EU46 is only permitted to burn natural gas at 145 MMBtu per hour firing
Boiler EU46 is only permitted to burn vegetable oil, No. 2 distillate fuel oil or blends of vegetable oil and No. 2 distillate fuel oil at 140 MMBtu per hour firing
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
The CO2 Emission Factor for #1 Fuel Oil is 21500. The CO2 Emission Factor for #2 Fuel Oil is 22300.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Natural Gas Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Vegetable Oil Emission Factors are from 40 CF* 98, Subpart C, Table C-2 (for CO2) and Table C-1 (for CH4 and N2O)
No. 2 Distillate Fuel oil Emission Factors are from AP 42, Tables 1.3-3, 1.3-8, and 1.3-12 (SCC 1-03-005-01/02/03) Supplement E 9/99 (see erata file)
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
NG Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
DF Emission (tons/yr) = Throughput (kgal/yr) x Emission Factor (lb/kgal)/2,000 lb/ton
Vegetbale Oil Emission (tons/yr) = Throughput (MMBtu/yr) x Veg Oil Emission Factor (kg/MMbtu)*2.2 (lb/kg)*8760(hrs/yr)/2,000 (lb/ton)
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

Appendix A: Emissions Calculations
Cooling Towers

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

							Potential to Emit After Issuance	
Unit ID	**Description**		**Water Flow Rate (gpm)**	**Total Dissolved Solids (ppmw)**	**Drift Factor (%)**	**Hours of Operation (hrs/yr)**	**PM/PM10/ PM2.5 (lb/hr)**	**PM/PM10/ PM2.5 (tons/yr)**
***EU45	Cooling Tower	Cooling Tower	1500	4000	0.001%	8760	0.030	0.132
EU48	6 Cooling Towers (existing)	Marley NC 9161	2315	4000	0.005%	8760	0.232	1.015
		Marley NC 9161	2315	4000	0.005%	8760	0.232	1.015
		Marley NC 9161	2315	4000	0.005%	8760	0.232	1.015
		Marley 8619	1925	4000	0.005%	8760	0.193	0.844
		Marley NC 722	1500	4000	0.005%	8760	0.150	0.658
		Marley NC 722	1500	4000	0.005%	8760	0.150	0.658
						Total Emissions from Cooling Towers (tons/yr)	**1.22**	**5.33**

*PM2.5 = PM_{10} = PM (worse case)

**Cooling tower drift factors were obtained from the cooling tower manufacturer (Marley).

*** EU45 is limited to a PM/PM10/PM2.5 PTE of 0.03 (lb/hr), pursuant to SSM 023-24843-00011 and SPM 023-29230-00011 and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Methodology

Throughput (lbs/hr) = Cooling Water Flow Rate x 60 min/hr x 8.34 x Drift Factor x Total Dissolved Solids parts/million by weight / 1000000

Potential Emissions (tons/yr) = Throughput (lbs/hr) x Hours of Operation (hrs/yr) / 2000 lbs/ton

***EU45 Limited Emissions (tons/yr) = PTE (lb/hr) x 8760 (hours/yr) x 2000 (lb/ton)

ATSD Appendix A: Emissions Calculations
Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (<=600 HP)

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

Output Horsepower Rating (hp)	230.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	115,000

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	0.13	0.13	0.13	0.12	1.78	0.14	0.38

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Hazardous Air Pollutants (HAPs)

	Pollutant							
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	3.76E-04	1.65E-04	1.15E-04	1.57E-05	4.75E-04	3.09E-04	3.72E-05	6.76E-05

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

Potential Emission of Total HAPs (tons/yr)	**1.56E-03**
Worst Case TPY	**4.75E-04**
	Formaldehyde

Green House Gas Emissions (GHG)

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/hp-hr	1.15E+00	4.63E-05	9.26E-06
Potential Emission in tons/yr	6.61E+01	2.66E-03	5.32E-04

Summed Potential Emissions in tons/yr	66
CO2e Total in tons/yr	**66**

Methodology

Emission Factors are from AP42 (Supplement B 10/96), Tables 3.3-1 and 3.3-2

CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]

Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded / Unloaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Oil Truck Transportation (entering plant) (one-way trip)	15.0	1.0	15.0	40.0	600.0	478	0.091	1.4	495.7
Oil Truck Transportation (leaving) (one-way trip)	15.0	1.0	15.0	15.0	225.0	1162	0.220	3.3	1204.9
Meal Transportation (entering plant) (one-way trip)	50.0	1.0	50.0	40.0	2000.0	1467	0.278	13.9	5070.6
Meal Transportation (leaving plant) (one-way trip)	50.0	1.0	50.0	15.0	750.0	678	0.128	6.4	2343.5
Raw Material Transportation - Beans (entering plant) (one-way trip)	250.0	1.0	250.0	40.0	10000.0	2783	0.527	131.8	48096.4
Raw Material Transportation - Beans (leaving plant) (one-way trip)	250.0	1.0	250.0	15.0	3750.0	1125	0.213	53.3	19442.5
		Totals	**630.0**		**17325.0**			**210.0**	**76653.5**

Average Vehicle Weight Per Trip = 27.5 tons/trip
Average Miles Per Trip = 0.33 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	27.5	27.5	27.5	tons = average vehicle weight (provided by source)
sL =	1.1	1.1	1.1	g/m^2 = silt loading value for paved roads at corn wet mills facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	0.353	0.071	0.0173	lb/mile
Mitigated Emission Factor, Eext =	0.322	0.064	0.0158	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Oil Truck Transportation (entering plant) (one-way trip)	0.09	0.02	0.00	0.08	0.02	0.00
Oil Truck Transportation (leaving) (one-way trip)	0.21	0.04	0.01	0.19	0.04	0.01
Meal Transportation (entering plant) (one-way trip)	0.89	0.18	0.04	0.82	0.16	0.04
Meal Transportation (leaving plant) (one-way trip)	0.41	0.08	0.02	0.38	0.08	0.02
Raw Material Transportation - Beans (entering plant) (one-way trip)	8.48	1.70	0.42	7.75	1.55	0.38
Raw Material Transportation - Beans (leaving plant) (one-way trip)	3.43	0.69	0.17	3.13	0.63	0.15
Totals	**13.51**	**2.70**	**0.66**	**12.35**	**2.47**	**0.61**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved Roads

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Part 70 Operating Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

Unpaved Roads at Industrial Site
The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Type	250.0	1.0	250.0	40.0	10000.0	387	0.073	18.3	6688.2
Raw Material Transportation - Beans (entering plant) (one-way trip)	250.0	1.0	250.0	15.0	3750.0	200	0.038	9.5	3456.4
Raw Material Transportation - Beans (leaving plant) (one-way trip)		**Totals**	**500.0**		**13750.0**			**27.8**	**10144.6**

Average Vehicle Weight Per Trip =	27.5	tons/trip
Average Miles Per Trip =	0.06	miles/trip

Unmitigated Emission Factor, Ef = k*[(s/12)^a]*[(W/3)^b] (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
where k =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Sand/Gravel Processing Plant)
s =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
a =	27.5	27.5	27.5	tons = average vehicle weight (provided by source)
W =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
b =				

Taking natural mitigation due to precipitation into consideration, Mit E * [(365 - P)/365]

Mitigated Emission Factor, Eext =	125	days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

where P =

	PM	PM10	PM2.5	
	6.99	1.78	0.18	lb/mile
Unmitigated Emission Factor, Ef =	4.60	1.17	0.12	lb/mile
Mitigated Emission Factor, Eext =				

	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Process	23.38	5.96	0.60	15.38	3.92	0.39
Raw Material Transportation - Beans (entering plant) (one-way trip)	12.08	3.08	0.31	7.95	2.03	0.20
Raw Material Transportation - Beans (leaving plant) (one-way trip)	**35.47**	**9.04**	**0.90**	**23.32**	**5.94**	**0.59**
Totals						

Methodology

Total Weight driven per day (ton/day)	= [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip)	= [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day)	= [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip)	= SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip)	= SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr)	= (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Mitigated PTE (tons/yr)	= (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Controlled PTE (tons/yr)	= (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PTE = Potential to Emit

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Emissions Calculations
Stack Test Data

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Operation Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

Description	Stack ID	Location	Test Date	Pollutant	Method	Measured Emission Rate	Units	Allowable Emission Rate	Units	Applicable Regulation	Comp. Status
DTDC Cooler Deck (EU25)	EP10	Frankfort, IN	3/21/2014	PM10	202	0.0015	lb/ton	0.0018	lb/ton	326 IAC 2-2	In
				PM	5	0.11	lb/hr	55.987	lb/hr	327 IAC 6-3-2	In
				PM	5	0.0007	lb/ton	0.0018	lb/ton	326 IAC 2-2	In
				Opacity	9	0	%	0	%	40 CFR 60 Subpart DD	In
DTDC - Deck #3 (EU24A)	EP09A	Frankfort, IN	1/23/2014	PM10	202	0.0022	lb/ton	0.0063	lb/ton	326 IAC 2-2	In
				PM	5	0.0009	lb/ton	0.0063	lb/ton	326 IAC 2-2	In
				PM	5	0.15	lb/hr	55.99	lb/hr	327 IAC 6-3-2	In
				Opacity	9	0	%	40	%	328 IAC 5-1	In
Meal Storage Unit (two tanks) (EU30)	EP30A and EP30B	Frankfort, IN	11/29/2012	Opacity	9	0	%	40	%	328 IAC 5-1	In
				PM	Modified 4	0.003	lb/hr	52.4	lb/hr	327 IAC 6-3-2	No Determination
				PM	Modified 5	0.000025	lb/ton meal produced	NA	lb/ton meal produced	NA	No Determination
				PM	Modified 5	0.00005	lb/ton meal produced	0.00013	lb/ton meal produced	326 IAC 2-2	In
				PM	Modified 5	0.006	lb/hr	52.4	lb/hr	327 IAC 6-3-2	In
				PM10	Modified 5	0.000025	lb/ton meal	NA	lb/ton	NA	No Determination
				PM10	Modified 5	0.00005	lb/ton meal produced	0.00003	lb/ton meal produced	326 IAC 2-2	Cannot be determined
Vertical Seed Conditioner (EU44)	EP44	Frankfort, IN	11/3/2010	PM10	5/202	0.00006	lb/ton	0.001	lb/ton beans processed	326 IAC 2-2	In
				Opacity	9	0	%	40.00	%	327 IAC5-1	In
				PM	M5	0.00006	lb/ton	0.001	lb/ton	326 IAC 2-2	In
				PM	M6	0.008	lb/hr	55%	lb/hr	327 IAC 6-3-2	In
E/W Bean Dryer EU10/Cracking Rolls EU11/ Conditioner EU13	EP04	Frankfort, IN	8/27/2010	PM10	5	0.00033	lb/ton	0.00161	lb/ton	326 IAC 2-2	In
				PM	5	0.05	lb/hr	53.30	lb/hr	327 IAC 6-3-2	In
				PM	5/OTM-28	0.00053	lb/ton	0.00	lb/ton	326 IAC 2-2	In
				Opacity	9	0	%	40.00	%	326 IAC 5-1	Not Applicable
				Condensible PM10	OTM-28	0.0002	lb/ton	NA	lb/ton	NA	Not Applicable
Hull Grinders (H-250 and H-251) - EU17	EP20	Frankfort, IN	8/27/2010	PM	5	0.013	lb/hr	24.00	lb/hr	326 IAC 6-3-2	In
				PM	5	0.00137	lb/ton	0.0067	lb/ton	325 IAC 2-2	In
				Opacity	9	0.00%		40.00	%	325 IAC 5-1	In
				PM10		0.00137	lb/ton	0.00674	lb/ton	326 IAC 2-2	In
Grain Conveying EU7/Grain Cleaning EU9/Hull Screening EU16/Pellet Storage EU22	EP03	Frankfort, IN	6/30/2010	PM	5	0.00141	lb/ton	0.00102	lb/ton	326 IAC 2-2	Cannot be determined
				PM	5	0.2	lb/hr	57.40	lb/hr	325 IAC 6-3-2	In
				Opacity	9	0	%	40%	%		In
				PM10		0.00141	lb/ton	0.00102	lb/ton	326 IAC 2-2	Cannot be determined
Meal Loadout EU34, EU35	EP12	Frankfort, IN	6/30/2010	PM	5	0.0008	lb/ton	0.00674	lb/ton	326 IAC 2-2	In
				PM	5	0.08	lb/hr	24.00	lb/hr	325 IAC 6-3-2	In
				Opacity	9	0	%	40	%		In
				PM10		0.0008	lb/ton	0.17550	lb/ton	326 IAC 2-2	In
Meal Conveying EU26/Sifting EU27/Grinding EU28	EP11	Frankfort, IN	6/30/2010	PM	5	0.0008	lb/ton	0.00347	lb/ton	326 IAC 2-2	In
				PM	5	0.11	lb/hr	54.40	lb/hr	325 IAC 6-3-2	In
				Opacity	9	0	%	40	%		In
				PM10		0.00238	lb/ton	0.00347	lb/ton	326 IAC 2-2	In
Pellet Mill/Pellet Cooler	EP07	Frankfort, IN	11/17/2009	Condensible PM10	202	0.0042	lb/ton	NA	lb/ton	NA	Not Applicable
				PM	5	0.0049	lb/ton	0.03	lb/ton	325 IAC 2-2	In
				PM	5	0.05	lb/hr	0.24	lb/hr	326 IAC 6-3-2	In
				PM10	5	0.0049	lb/ton	0.03	lb/ton	325 IAC 2-2	In
				Opacity	9	0	%	40	%	326 IAC 5-1-2	In

Appendix A: Emissions Calculations
Constants

Company Name: Archer Daniels Midland Company
Address City IN Zip: 2191 West County Road, O N/S, Frankfort, IN 46041
Operation Permit Renewal No.: T023-34003-00011
Significant Source Modification No.: 023-36542-00011
Significant Permit Modification No.: 023-36575-00011
Reviewer: Roger Osburn

Parameter	Value	Units	Basis
Bean Density	60	lb/bu	Industry Standard Factor
Crush Capacity	120,000	bu/day	Proposed Permit Limit (12-month avg.)
Operating Days	365	days/yr	
Plant Storage Capacity	130,500	tons	Equipment capacity
Hull-to-Crush Ratio	7.0%	wt. %	Industry Standard Factor
Pellet-to-Crush Ratio	7.0%	wt. %	Industry Standard Factor
Meal-to-Crush Ratio	80.0%	wt. %	Frankfort factor.
Meal Clay-to-Crush Ratio	0.50%	wt. %	Based on allowable
Refinery Clay-to-Oil Ratio	1.50%	wt. %	
Vegetable Oil-to-Crush Ratio	11.5	lb/bu	Industry Standard Factor
Grain Dryer Burner Ratiing	17.5	mmbtu/hr	
MMBTU to MMCF Conversion	0.001		
Refinery Throughput	300,000	tons/yr	
Silica Clay to Oil Ratio	0.15%	wt. %	

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

February 26, 2016
Archer Daniels Midland Company - Frankfort
023-36542-00011 & 023-36575-00011

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice 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. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover.dot 2/17/2016

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Commissioner

AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

February 26, 2016

A 30-day public comment period has been initiated for:

Permit Number: **023-36542-00011 & 023-36575-00011**
Applicant Name: **Archer Daniels Midland Company - Frankfort**
Location: **Frankfort, Clinton County, Indiana**

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at:
http://www.in.gov/ai/appfiles/idem-caats/

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

Indiana Department of Environmental Management
Office of Air Quality, Permits Branch
100 North Senate Avenue
Indianapolis, IN 46204

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at chammack@idem.IN.gov or (317) 233-2414.

Affected States Notification.dot 2/17/2016

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Commissioner

February 26, 2016

Mr. Denis Oberg
Archer Daniels Midland Company - Frankfort
2191 W CR 0 NS
Frankfort, IN 46041

Re: Public Notice
Archer Daniels Midland Company - Frankfort
Permit Level: Significant Source Modification &
Significant Permit Modification
Permit Number: 023-36542-00011 &
023-36575-00011

Dear Mr. Oberg:

Enclosed is a copy of your draft Significant Source Modification, Significant Permit Modification, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Times in Frankfort, Indiana publish the abbreviated version of the public notice no later than March 1, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Frankfort – Clinton County Contractual Public Library, 208 West Clinton in Frankfort, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Roger Osburn, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-0242 or dial (317) 233-0242.

Sincerely,

Greg Hotopp

Greg Hotopp
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 2/17/2016

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Carol S. Comer
Commissioner

February 26, 2016

To: Frankfort – Clinton County Contractual Public Library

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

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Archer Daniels Midland Company - Frankfort
Permit Number: 023-36542-00011 & 023-36575-00011

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

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. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 2/17/2016

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

February 26, 2016

The Times
251 East Clinton Street
PO Box 9
Frankfort, IN 46041

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Archer Daniels Midland Company - Frankfort, Clinton County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than March 1, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Greg Hotopp at 800-451-6027 and ask for extension 4-3493 or dial 317-234-3493.

Sincerely,

Greg Hotopp

Greg Hotopp
Permit Branch
Office of Air Quality

Permit Level: Significant Source Modification & Significant Permit Modification
Permit Number: 023-36542-00011 & 023-36575-00011

Enclosure

PN Newspaper.dot 2/17/2016

Mail Code 61-53

IDEM Staff	GHOTOPP 2/26/2016 Archer Daniels Midland Co-Frankfort 023-36542/36575-00011 Draft			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Denis Oberg Archer Daniels Midland Co-Frankfort 2191 S CR 0 N/S Frankfort IN 46041 (Source CAATS)									
2		Frankfort City Council and Mayors Office 301 E. Clinton Street Frankfort IN 46041 *(Local Official)*									
3		Frankfort Community Public 208 W Clinton Frankfort IN 46041-1811 *(Library)*									
4		Clinton County Health Department 400 E Clinton Street Frankfort IN 46041 *(Health Department)*									
5		Clinton County Board of Commissioners 125 Courthouse Square Frankfort IN 46041-1942 *(Local Official)*									
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