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**Eric J. Holcomb**
*Governor*

**Brian C. Rockensuess**
*Commissioner*

| | |
|---|---|
| To: | Interested Parties |
| Date: | June 26, 2024 |
| From: | Jenny Acker, Chief<br>Permits Branch<br>Office of Air Quality |
| Source Name: | Archer Daniels Midland Company |
| Permit Level: | Title V Minor Source Modification |
| Permit Number: | 023-47831-00011 |
| Source Location: | 2191 West County Road 0 N/S, Frankfort, Indiana 46041 |
| Type of Action Taken: | Modification at an existing source |
| | Revisions to permit requirements |

# Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the matter referenced above.

The final decision is available on the IDEM website at: http://www.in.gov/apps/idem/caats/
To view the document, choose Search Option **by Permit Number**, then enter permit 47831.This search will also provide the application received date, **draft permit** public notice start and end date, and **final** permit issuance date.

The final decision is also available via IDEM's Virtual File Cabinet (VFC). Please go to: https://www.in.gov/idem and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

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If you would like to request a paper copy of the permit document, please contact IDEM's Office of Records Management:

IDEM - Office of Records Management
Indiana Government Center North, Room 1207
100 North Senate Avenue
Indianapolis, IN 46204
Phone: (317) 232-8667
Fax: (317) 233-6647
Email: IDEMFILEROOM@idem.in.gov

Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room N103, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

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*Commissioner*

June 26, 2024

Mr. Austin Jarvis
Archer Daniels Midland Company
2191 W County Road 0 N/S
Frankfort, IN 46041

Re: 023-47831-00011
Minor Source Modification

Dear Mr. Jarvis:

Archer Daniels Midland Company was issued Part 70 Operating Permit Renewal No. T023-41016-00011 on September 9, 2019 for a stationary soybean processing and vegetable refining operation located at 2191 West County Road 0 N/S, Frankfort, Indiana 46041. An application to modify the source was received on May 9, 2024. Pursuant to the provisions of 326 IAC 2-7-10.5, a Minor Source Modification is hereby approved as described in the attached Technical Support Document.

Pursuant to 326 IAC 2-7-10.5, the following emission unit is approved for construction at the source:

(1) One (1) rail soybean meal receiving station, identified as EU-51, approved in 2024 for construction, with a maximum capacity of 125 tons of soybean meal per hour, using baghouse (BH-2A) as control, and exhausting to stack (EP11).

The following construction conditions are applicable to the proposed modification:

General Construction Conditions

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

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

Effective Date of the Permit

3. Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

Commenced Construction

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

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

Approval to Construct

6. Pursuant to 326 IAC 2-7-10.5(f)(3), this Minor Source Modification authorizes the construction of the new emission unit(s) when the Minor Source Modification has been issued.

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

Pursuant to 326 IAC 2-7-12, operation of the new emission unit(s) is not approved until the Significant Permit Modification has been issued. Operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification in accordance with 326 IAC 2-7-10.5(m)(2) and 326 IAC 2-7-12 (Permit Modification).

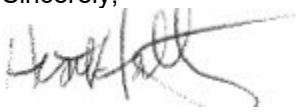
For the purposes of this permitting action, the Significant Permit Modification has been combined with the current Part 70 Operating Permit Renewal. Therefore, operation is not approved until the Part 70 Operating Permit Renewal has been issued.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. A copy of the application and permit is also available via IDEM's Virtual File Cabinet (VFC). To access VFC, please go to: https://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/public-participation/; and the Citizens' Guide to IDEM on the Internet at: https://www.in.gov/idem/resources/citizens-guide-to-idem/.

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

If you have any questions regarding this matter, please contact Tamera Wessel, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 234-8530 or (800) 451-6027, and ask for Tamera Wessel.

Sincerely,



Heath Hartley, Section Chief
Permits Branch
Office of Air Quality

Attachments: Minor Source Modification and Technical Support Document

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

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*Commissioner*

# Minor Source Modification to a Part 70 Source

# 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 construct subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for new and/or existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

| Minor Source Modification No.: 023-47831-00011<br>Master Agency Interest ID.: 14843 | |
|---|---|
| Issued by:<br>for:<br>Heath Hartley, Section Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date: June 26, 2024 |

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## SECTION A SOURCE SUMMARY

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

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

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

| | |
|---|---|
| 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<br>Major Source, under PSD Rules<br>Major Source, Section 112 of the Clean Air Act<br>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 modified in 2004 and approved in 2024 for modification, 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), approved in 2024 for modification;

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

(b) One (1) truck unloading operation, identified as EU02, constructed in 1946 and approved in 2024 for modification, 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) One (1) truck receiving pit, identified as EU50, approved in 2024 for construction, with a maximum capacity of 900 tons per hour, using baghouse (GR-1) as control, and exhausting to stack (EP01), including the following:

(1) One (1) drag conveyor, identified as EU50a, approved in 2024 for construction, with a maximum throughput capacity of 900 tons per hour.

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

(d) Two (2) elevator legs (S-3 and S-4), identified as EU03, constructed in 1946 and approved in 2024 for modification, 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);

(e) Conveying operations with particulate emissions controlled by existing baghouse (GR-1) and exhausting to stack (EP01):

(1) One (1) drag conveyor to grain storage (S-5), identified as EU04, constructed in 1946, modified in 2008 and approved in 2024 for modification, 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 and approved in 2024 for modification, 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);

(3) One (1) jump drag reclaim conveyor for (EU06), identified as EU06a, approved in 2024 for construction, with a maximum rated capacity of 10,000 bushels per hour.

(4) One (1) fill conveyor for concrete silos (EU05), identified as EU05a, approved in 2024 for construction, with a maximum rated capacity of 10,000 bushels per hour.

(5) Grain sweep conveyors for steel storage tanks (EU06), identified as EU06b, approved in 2024 for construction, with a maximum rated capacity of 10,000 bushels per hour.

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

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

(g) 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;

(h) Two (2) conveyors from grain storage (S-6 and S-7), identified as EU07, constructed in 1946, modified in 2008, and approved in 2024 for modification, 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) 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.

(j) 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

(k) 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;

(l) 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);

(m) 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);

(n) 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);

(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, modified in 2008, and approved in 2024 for modification, 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) One (1) natural gas-fired package boiler, identified as EU40, approved in 2022 for construction, with a maximum heat input capacity of 144 MBtu/hr, using no control, and exhausting to stack (EP15).

Under 40 CFR 60, Subpart Db, this is considered an affected facility.
Under 40 CFR 63, Subpart DDDDD, this is considered a new 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, 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, 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, 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.

(tt) One (1) Expander System identified as EU15, approved in 2024, for construction, consisting of: two feeder augers, Expander 1 and Expander 2, each with an eight hundred (800) ton per day capacity, and a Dryer/Cooler with a capacity of sixteen hundred (1,600) 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.

(uu) One (1) rail soybean meal receiving station, identified as EU-51, approved in 2024 for construction, with a maximum capacity of 125 tons of soybean meal per hour, using baghouse (BH-2A) as control, and exhausting to stack (EP11).

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

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

(a) 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 diesel emergency fire pump identified as EU49, constructed in 1985, with a 230 horsepower engine, using no controls, and exhausting to the atmosphere.

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

## 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, T023-41016-00011, 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.

(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 T023-41016-00011 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.

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]

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

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

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

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

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

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

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

(4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region 5
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.

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 317-233-8590 (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(c).

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

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(11)] [40 CFR 68]

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

C.13 Response to Excursions or Exceedances [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 Quality Improvement Plan (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)(c) 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 modified in 2004 and approved in 2024 for modification, 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), approved in 2024 for modification;

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

(b) One (1) truck unloading operation, identified as EU02, constructed in 1946 and approved in 2024 for modification, 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) One (1) truck receiving pit, identified as EU50, approved in 2024 for construction, with a maximum capacity of 900 tons per hour, using baghouse (GR-1) as control, and exhausting to stack (EP01), including the following:

(1) One (1) drag conveyor, identified as EU50a, approved in 2024 for construction, with a maximum throughput capacity of 900 tons per hour.

(d) Two (2) elevator legs (S-3 and S-4), identified as EU03, constructed in 1946 and approved in 2024 for modification, 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);

(e) Conveying operations with particulate emissions controlled by existing baghouse (GR-1) and exhausting to stack (EP01):

(1) One (1) drag conveyor to grain storage (S-5), identified as EU04, constructed in 1946, modified in 2008 and approved in 2024 for modification, 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 and approved in 2024 for modification, 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);

(3) One (1) jump drag reclaim conveyor for (EU06), identified as EU06a, approved in 2024 for construction, with a maximum rated capacity of 10,000 bushels per hour.

(4) One (1) fill conveyor for concrete silos (EU05), identified as EU05a, approved in 2024 for construction, with a maximum rated capacity of 10,000 bushels per hour.

(5) Grain sweep conveyors for steel storage tanks (EU06), identified as EU06b, approved in 2024 for construction, with a maximum rated capacity of 10,000 bushels per hour.

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

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

(g) 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;

(h) Two (2) conveyors from grain storage (S-6 and S-7), identified as EU07, constructed in 1946, modified in 2008, and approved in 2024 for modification, 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) 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.

(j) 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

(k) 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;

(l) 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);

(m) 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);

(n) 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);

(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, and approved in 2024 for modification, 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);

(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);

(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 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.

(tt) One (1) Expander System identified as EU15, approved in 2024, for construction, consisting of: two feeder augers, Expander 1 and Expander 2, each with an eight hundred (800) ton per day capacity, and a Dryer/Cooler with a capacity of sixteen hundred (1,600) 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.

(uu) One (1) rail soybean meal receiving station, identified as EU-51, approved in 2024 for construction, with a maximum capacity of 125 tons of soybean meal per hour, using baghouse (BH-2A) as control, and exhausting to stack (EP11).

Insignificant Activities

(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.

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

(a) Pursuant to SSM 023-24843-00011, SPM 023-29230-00011 and SSM 023-44842-00011, 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) | Control ID | PM Limit | PM10 Limit | Units for Limit |
|---|---|---|---|---|
| Vertical Seed Conditioner (EU44) | BH-44 | 0.0017 | 0.0017 | lb/ton beans processed |
| DTDC Meal Dryer Deck #1 and Deck #2 (EU23 and EU24) | CE-09, CE-10 | 0.00649 | 0.00649 | |
| DTDC Meal Dryer Deck #3 (EU24A) | CE10A | 0.0063 | 0.0063 | |
| DTDC Meal Cooler Deck (EU25) | CE-11 | 0.0018 | 0.0018 | |
| Bean Dryer, Cracking Rolls, Hull Separator and Conditioner (EU10/11/12/13) | CE-06 and BH-06A | 0.00161 | 0.00161 | lb/ton beans processed |
| Conveying to Processing (EU07/09/16/18/22) | CE-18 and CE-05, CE-19, CE- | 0.0018 | 0.0017 | lb/ton grain received |

| Unit (ID) | Control ID | PM Limit | PM10 Limit | Units for Limit |
|---|---|---|---|---|
| | 19A, CE19-B | | | |
| Hull Grinder (EU17) | CE-20, CE-20A | 0.00674 | 0.00674 | lb/ton hulls processed |
| Flaking Rolls (EU14) | CE-07 | 0.050 | 0.032 | lb/ton beans processed |
| Meal Conveyor (EU26/27/28/29) | BH-2A | 0.0040 | 0.0037 | lb/ton meal produced |
| Meal Surge Tanks (EU31) | BH-31 | 0.00013 | 0.00003 | lb/ton meal produced |
| Truck and Rail Receiving (EU01/02/03/04/05) | GR-1 | 0.0011 | 0.0004 | lb/ton grain received |
| Pellet Mill and Cooler (EU20/21) | CE-08 | 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) | ML-1 | 0.0013 | 0.0009 | |
| Rail Meal, Hull and Hull Pellet Loadout (EU35) | ML-1 | 0.0013 | 0.0009 | lb/ton beans processed |
| Hull Surge Tank (EU32) | BH-31 | 0.00013 | 0.00003 | lb/ton hulls processed |
| Meal Clay Storage Unit (EU36) | MC-1 | 0.00291 | 0.00204 | lb/ton clay received |
| Silica Clay Silo (EU47) | RC-2 | 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.

Compliance with these limits, shall limit the potential to emit of PM and PM10 to less than 25 and 15 tons, respectively, per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2008 Modification permitted under SSM No. 023-24843-00011.

(c) 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.

(d) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2024 Modifications permitted under SSM No. 023-47029-00011 and MSM No. 023-47831-00011, the Permittee shall comply with the following:

(1) 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.

| Unit (ID) | Control ID | PM Limit | $PM_{10}$ Limit | $PM_{2.5}$ Limit | Units for Limit |
|---|---|---|---|---|---|
| Truck and Rail Receiving, Conveying (EU01/EU02/EU03/EU04/EU04a/EU50/EU50a/EU05a/ EU06a/EU06b) | GR-1 | 0.0011 | 0.0004 | 0.0004 | lb/ton grain received |
| Conveying to Processing (EU07) | CE-18 and CE-05 | 0.0018 | 0.0017 | 0.0017 | lb/ton grain received |
| Expander (EU15) | CE-15 | 2.27 | 1.48 | 1.48 | lb/hr |

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

(3) The amount of soybean meal received by the rail soybean meal receiving station (EU51) shall not exceed 1,095,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

| Unit (ID) | Control ID | PM Limit | $PM_{10}$ Limit | $PM_{2.5}$ Limit | Units for Limit |
|---|---|---|---|---|---|
| Meal Conveyor (EU29) | BH-2A | 0.0040 | 0.0037 | 0.0037 | lb/ton meal produced |
| Rail soybean meal receiving (EU51) (non-fugitive) | BH-2A | 0.000033 | 0.000008 | 0.000008 | lb/ton meal received |
| Rail soybean meal receiving (EU51) (fugitive) | - | 0.0033 | 0.0008 | 0.0008 | lb/ton meal received |

Compliance with these limits, shall limit the potential to emit of PM, PM10, and PM2.5 to less than twenty-five (25) tons of PM, less than fifteen (15) tons of $PM_{10}$, and less than ten (10) tons of $PM_{2.5}$ per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2024 Modifications permitted under SSM No. 023-47029-00011 and MSM No. 023-47831-00011.

D.1.2 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 | 900 | 76.23 |
| Truck Unloading, EU02 | 900 | 76.23 |
| Truck Receiving pit, EU50 | 900 | 76.23 |
| Drag Conveyor, EU50a | 900 | 76.23 |
| Grain elevator, EU03 | 900 | 76.23 |
| Conveyor, EU-04 to grain storage, EU-05 | 900 | 76.23 |
| Conveyor, EU-04a to grain storage, EU-05 | 900 | 76.23 |
| Concrete silo top vents, EU05 | 900 | 76.23 |
| Fill conveyor for silo, EU05a | 300 | 63.00 |
| Steel storage tank vents, EU06 | 720 | 73.41 |
| Reclaim conveyor, EU06a | 300 | 63.00 |
| Sweep conveyor, EU06b | 300 | 63.00 |
| Conveyor from grain storage, EU07 | 900 | 76.23 |
| 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 |
| Expanders, 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 | 900 | 76.23 |
| Rail Soybean Meal Receiving Station, EU-51 | 125 | 53.55 |
| 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 truck receiving (EU50), the truck receiving conveyors (EU50a), the grain elevator (EU03), the conveyors to grain storage (EU04, EU04a), the concrete silos (EU05), the conveyors for concrete silos (EU05a), the jump drag reclaim conveyor (EU06a), the conveyors for steel storage tanks (EU06b) all exhausting through baghouse GR-1, which exhausts through stack EP01, the allowable particulate emission rate from baghouse GR-1 shall be limited to 796.0 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), the meal storage conveyor (EU29), and the rail soybean meal receiving station (EU51) all exhausting through baghouse BH-2A, which exhausts through stack EP11, the allowable particulate emission rate from baghouse BH-2A shall be limited to 293.04 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.1.3 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 determined 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 determined 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 these limits, shall limit the potential to emit of PM and PM10 to less than 25 and 15 tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2008 Modification permitted under SSM No. 023-26411-00011.

D.1.4 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.1.5 Testing Requirements [326 IAC 2-7-6(1)(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.1.1(a), 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.1.1(a), 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.1.1 and D.1.2, 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.1.1(d), not later than 180 days after start-up of the new units (EU50, EU50a, EU05a, EU06a, and EU06b) the Permittee shall perform PM, $PM_{10,}$ and $PM_{2.5}$ testing of the stack exhaust EP01 from EU50, EU50a, EU05a, EU06a, and EU06b utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(e) In order to demonstrate compliance with Condition D.1.1(d), not later than 180 days after the issuance date of this permit, 023-47029-00011, the Permittee shall perform PM, $PM_{10,}$ and $PM_{2.5}$ testing of the stack exhaust EP03 from EU07 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(f) In order to demonstrate compliance with Condition D.1.1(d), not later than 180 days after start-up of the expander system identified as EU15, the Permittee shall perform PM, $PM_{10,}$ and $PM_{2.5}$ testing of the stack exhaust from EP-16 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 includes filterable and condensable particulate matter.

D.1.6 Particulate Control

(a) In order to assure compliance with Conditions D.1.1, and D.1.2, the 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 emission units at all times the facilities are in operation.

(b) In order to assure compliance with Conditions D.1.1(a), D.1.1(d), and D.1.2, the baghouse GR-1 for particulate control shall be in operation and control emissions from the rail unloading (EU01), truck unloading (EU02), elevator legs (EU03) and the conveying operation (EU04) facility at all times these facilities are in operation.

(c) In order to assure compliance with Conditions D.1.1(d) and D.1.2, the baghouse GR-1 for particulate control shall be in operation and control emissions from the truck receiving (EU50), the truck receiving conveyors (EU50a), the conveyors for concrete silos (EU05a), the jump drag reclaim conveyor (EU06a), and the conveyors for steel storage tanks (EU06b) facility at all times these facilities are in operation.

(d) In order to assure compliance with Conditions D.1.1(d) and D.1.2, the cyclone CE-15 for particulate control shall be in operation and control emissions from the expander system at all times this facility is in operation.

(e) In the event that bag failure is observed in a multi-compartment baghouse, if operations

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

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

D.1.7 Visible Emissions Notations [40 CFR 64]

(a) Visible emission notations of the stack exhausts from baghouses GR-1, BH-06A, CE-05, BH-2A, ML-1, MC-1, CE-18, and CE-20A, the stack exhausts for cyclones CE-07, CE-08, CE-10, CE-10A**,** CE-11, and CE-15, 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) 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.1.8 Parametric Monitoring

The Permittee shall record the pressure drop across baghouse BH-44 at least once per day when the associated vertical seed conditioner unit is in operation. When, for any one reading, the pressure drop across a baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 0.3 and 8.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.9 Broken or Failed Bag Detection

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.1.10 Cyclone Inspections

(a) The Permittee shall perform quarterly inspections of all cyclones controlling the Expander System identified as EU15, when venting to the atmosphere to verify that they are being operated and maintained in accordance with the manufacturer's specifications. A cyclone inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections required by this condition shall not be performed in consecutive months. Inspections are optional when venting to the indoors.

(b) The Permittee shall perform quarterly inspections of the cyclone CE-20 controlling particulate from two (2) hull grinders (EU-17) to verify that it is being operated and maintained in accordance with the manufacturer's specifications. Inspections required by this condition shall not be performed in consecutive months.

D.1.11 Cyclone Failure Detection

In the event that cyclone failure has been observed:

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

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

D.1.12 Record Keeping Requirement

(a) To document the compliance status with Condition D.1.1(b) and D.1.1(d)(1), the Permittee shall maintain daily records of the amount of soybeans processed by the plant.

(b) To document the compliance status with Condition D.1.1(c)(3), the Permittee shall maintain records of the amount of soybeans processed by the enclosed drag conveyor S-5a and conveyor S-5.

(c) To document the compliance status with Condition D.1.3(a) and D.1.3(b), the Permittee shall maintain records of the source total soybean meal production and the soybean meal, hulls, and hull pellets stockpiled into the railcars.

(d) To document the compliance status with Condition D.1.7, the Permittee shall maintain records of daily visible emission notations of the baghouse(s) stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(e) To document the compliance status with D.1.8, the Permittee shall maintain daily records of pressure drop across the baghouse(s). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(f) To document the compliance status with Condition D.1.10, the Permittee shall maintain records of the dates and results of the inspections.

(g) To document the compliance status with Condition D.1.1(d)(2), the Permittee shall maintain daily records of the amount of soybean meal received by the rail soybean meal receiving station.

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

D.1.13 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.1.1(b), D.1.1(c)(3), D.1.1(d)(1), D.1.1(d)(2) and D.1.3 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the 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**

**Emissions Unit Description:**

(ll) One (1) natural gas-fired package boiler, identified as EU40, approved in 2022 for construction, with a maximum heat input capacity of 144 MBtu/hr, using no control, and exhausting to stack (EP15).

Under 40 CFR 60, Subpart Db, this is considered an affected facility.
Under 40 CFR 63, Subpart DDDDD, this is considered a new 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, 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, 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.

(pp) Boiler #4, identified as EU46, constructed in 2008, with a rated capacity of 145 MMBtu per hour firing natural gas, 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.)

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

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

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2022 Modification permitted under SSM No. 023-44842-00011, the Permittee shall comply with the following:

(a) The NOx emissions for Boiler EU40 shall not exceed 0.046 pounds per MMBtu heat input.

(b) The total input of natural gas to Boiler EU40 shall not exceed 1,237 million standard cubic feet of gas (MMcf) per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, shall limit the potential to emit of NOx to less than 40 tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and not applicable to the 2022 Modification permitted under SSM No. 023-44842-00011.

D.2.2 Particulate Emissions [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the following units shall be limited to Pt pounds per MMBtu heat input, as

follows:

| Emission Unit | Unit ID | Pt (lb/MMBtu) |
|---|---|---|
| Boiler #3 | EU41 | 0.30 |
| Refinery Boiler | EU42 | 0.29 |
| Boiler #4 | EU46 | 0.25 |
| Package Boiler | EU40 | 0.23 |

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

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

D.2.4 Continuous Emissions Monitoring [326 IAC 3-5][326 IAC 2-7-6(1), (6)][40 CFR 63]

(a) In order to demonstrate compliance with Condition D.2.1, the Permittee shall use the emissions data collected from the Boiler EU40 Continuous Emission Monitoring System.

(b) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) continuous emission monitoring systems for boiler #4 (EU46) and boiler (EU40) shall be calibrated, maintained, and operated for measuring NOx, which meet all applicable performance specifications of 326 IAC 3-5-2.

(c) All continuous emissions monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.

(d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 and 40 CFR 63.

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

D.2.5 NOx Continuous Emissions Monitoring (CEMS) Downtime

(a) In the event that a breakdown of a NOx continuous emissions monitoring system (CEMS) occurs, a record shall be made of the time and reason of the breakdown and efforts made to correct the problem.

(b) Whenever a NOx continuous emissions monitoring system (CEMS) is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup NOx CEMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary NOx CEMS, the Permittee shall comply with the following:

(1) 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.

(2) 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) Parametric monitoring shall begin not more than twenty-four (24) hours after the start of

the malfunction or down time at least twice per day during normal operations, with at least four (4) hours between each set of readings, until a NOx -CEMS is online.

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

D.2.6 Record Keeping Requirements for CEMS [326 IAC 2-7-5(3)(B)] [326 IAC 3-5]

(a) The Permittee shall record the output of the continuous monitoring system(s) boiler #4 EU46, boiler EU40 and shall perform the required record keeping pursuant to 326 IAC 3-5-6 and 326 IAC 3-5-7.

(b) In the event that a breakdown of the NOx continuous emission monitoring systems (CEMS) occurs, the Permittee shall maintain records of all CEMS malfunctions, out of control periods, calibration and adjustment activities, and repair or maintenance activities.

(c) Whenever a NOx continuous emissions monitoring system (CEMS) is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more, the Permittee shall maintain records of the natural gas flow rate.

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

D.2.7 Reporting Requirements for CEMS [326 IAC 2-7-5(3)(C)] [326 IAC 3-5]

The Permittee shall prepare and submit to IDEM, OAQ a written report of the results of the calibration gas audits and relative accuracy test audits for each calendar quarter within thirty (30) calendar days after the end of each quarter. The report must contain the information required by 326 IAC 3-5-5(f).

The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official,” as defined by 326 IAC 2-7-1 (35).

## SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

**Emissions Unit Description:**

(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.

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

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

D.3.1 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.3.2 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 ft2 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 = $\sum$(Seedi *SLRi ) / $\sum$(Seedi ) < 0.175 gal/ton

where: Seedi = Crush capacity of soybean plant i; and
SLRi = 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).

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

D.3.3 VOC Compliance - Consent Decree and PSD [326 IAC 2-2]

(a) Compliance with Conditions D.3.1(b) and D.3.2 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.3.4 Solvent Loss Ratio [326 IAC 2-2][40 CFR 64]

Compliance with Condition D.3.1 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.3.5 VOC Control

In order to assure compliance with Conditions D.3.1(b) and D.3.2, the condenser and mineral oil absorber/scrubber system (CE-22) for VOC control shall be in operation and control emissions from the hexane solvent oil extraction process (EU38) at all times the hexane solvent oil extraction process (EU38) is in operation.

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

D.3.6 Scrubber Flow Rate [40 CFR 64]

(a) The Permittee shall monitor and record the flow rate of the scrubber (CE-22) at least once per day when the associated processes are in operation.

(b) The Permittee shall determine the minimum flow rate from the latest valid stack test that demonstrates compliance with limits in Conditions D.3.1 and D.3.2.

(c) On and after the date the stack test results are available, the Permittee shall maintain a flow rate at or above the minimum rate as observed during the latest compliant stack test.

(d) When for any one reading, the flow rate is below the above mentioned minimum, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is below the above mentioned minimum flow rate is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.3.7 Parametric Monitoring - Pressure Drop [40 CFR 64]

The Permittee shall monitor and record the pressure drop across the scrubber (CE-22) at least once per day when the associated processes are in operation. When for any one reading, pressure drop across a scrubber is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a range between 0.2 and 10.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure drop reading that is outside the above mentioned range(s) is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.3.8 Parametric Monitoring - Inlet Gas Temperature [40 CFR 64]

The Permittee shall monitor and record the inlet gas temperature across the scrubber (CE-22) at least once per day when the associated processes are in operation. When for any one reading, the inlet gas temperature across a scrubber is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a range between 45 and 100 degrees F unless a different upper-bound or lower-bound value for this range is determined during the latest

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

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

D.3.9 Mineral Oil Flow Rate [40 CFR 64]

(a) The Permittee shall monitor and record the flow rate of the mineral oil at least once per day when the associated processes are in operation.

(b) The Permittee shall determine the minimum flow rate from the latest valid stack test that demonstrates compliance with limits in Conditions D.3.1 and D.3.2.

(c) On and after the date the stack test results are available, the Permittee shall maintain a flow rate at or above the minimum rate as observed during the latest compliant stack test.

(d) When for any one reading, the flow rate is below the above mentioned minimum, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is below the above mentioned minimum flow rate is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.3.10 Scrubber Failure Detection

In the event that a scrubber malfunction has been observed:

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

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

D.3.11 Record Keeping Requirement

(a) To document the compliance status with Condition D.3.1(b) and D.3.2, the Permittee 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.3.1(d), the Permittee shall maintain records required by the leak detection and correction program; included as Attachment A to this permit.

(c) To document the compliance status with Conditions D.3.1(e), the Permittee shall maintain daily records of the amount of soybeans processed by the plant.

(d) To document the compliance status with Condition D.3.6, the Permittee shall maintain daily records of the flow rate for the scrubber. The Permittee shall include in its daily record when the readings are not taken and the reason for the lack of the readings (e.g., the process did not operate that day).

(e) To document the compliance status with Condition D.3.7, the Permittee shall maintain daily records of the pressure drop for the scrubber. The Permittee shall include in its daily record when the readings are not taken and the reason for the lack of the readings (e.g., the process did not operate that day).

(f) To document the compliance status with Condition D.3.8, the Permittee shall maintain daily records of the inlet gas temperature for the scrubber. The Permittee shall include in its daily record when the readings are not taken and the reason for the lack of the readings (e.g., the process did not operate that day).

(g) To document the compliance status with D.3.9, the Permittee shall maintain daily records of the flow rate for the mineral oil. The Permittee shall include in its daily record when the readings are not taken and the reason for the lack of the readings (e.g., the process did not operate that day).

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

D.3.12 Reporting Requirements

A summary of the information to document the compliance status with Conditions D.3.1(b) and D.3.1(e) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition.

The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official,” as defined by 326 IAC 2-7-1(35).

**SECTION E.1 NSPS**

**Emissions Unit Description:**

(ll) One (1) natural gas-fired package boiler, identified as EU40, approved in 2022 for construction, with a maximum heat input capacity of 144 MBtu/hr, using no control, and exhausting to stack (EP15).

Under 40 CFR 60, Subpart Db, this is considered an affected facility.
Under 40 CFR 63, Subpart DDDDD, this is considered a new affected facility.

(pp) Boiler #4, identified as EU46, constructed in 2008, with a rated capacity of 145 MMBtu per hour firing natural gas, 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.)

**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 Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart Db.

(b) Pursuant to 40 CFR 60.4, 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 Industrial-Commercial-Institutional Steam Generating Units NSPS [326 IAC 12] [40 CFR Part 60, Subpart Db]

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

(1) 40 CFR 60.40b(a), (g), (j);
(2) 40 CFR 60.41b;
(3) 40 CFR 60.42b(k)(2)
(4) 40 CFR 60.44b(a)(1), (h), (i), (l)(1)
(5) 40 CFR 60.45b(j), (k)
(6) 40 CFR 60.46b(a), (c) and (e);
(7) 40 CFR 60.47b(f)
(5) 40 CFR 60.48b(b) through (g), (j)(2)
(6) 40 CFR 60.49b(a), (b), (c), (d), (f) through (i), (o), (v), (w)

**SECTION E.2 NSPS**

**Emissions Unit Description:**

(mm) Boiler #3, identified as EU41, constructed in 1992, with a rated capacity of 82.5 MMBtu per hour and firing natural gas, 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, 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 the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart Dc.

(b) Pursuant to 40 CFR 60.4, 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 Small Industrial-Commercial-Institutional Steam Generating Units NSPS [326 IAC 12] [40 CFR Part 60, Subpart Dc]

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

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

**SECTION E.3 NSPS**

**Emissions Unit Description:**

(a) One (1) rail unloading operation, identified as EU01, constructed in 1946 modified in 2004 and approved in 2024 for modification, 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), approved in 2024 for modification;

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

(c) One (1) truck receiving pit, identified as EU50, approved in 2024 for construction, with a maximum capacity of 900 tons per hour, using baghouse (GR-1) as control, and exhausting to stack (EP01), including the following:

(1) One (1) drag conveyor, identified as EU50a, approved in 2024 for construction, with a maximum throughput capacity of 900 tons per hour.

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

(e) Conveying operations with particulate emissions controlled by existing baghouse (GR-1) and exhausting to stack (EP01):

(1) One (1) drag conveyor to grain storage (S-5), identified as EU04, constructed in 1946 and modified in 2008 and approved in 2024 for modification, 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 and approved in 2024 for modification, 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);

(3) One (1) jump drag reclaim conveyor for (EU06), identified as EU06a, approved in 2024 for construction, with a maximum rated capacity of 10,000 bushels per hour.

(4) One (1) fill conveyor for concrete silos (EU05), identified as EU05a, approved in 2024 for construction, with a maximum rated capacity of 10,000 bushels per hour.

(5) Grain sweep conveyors for steel storage tanks (EU06), identified as EU06b, approved in 2024 for construction, with a maximum rated capacity of 10,000 bushels per hour.

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

(h) Two (2) conveyors from grain storage (S-6 and S-7), identified as EU07, constructed in 1946, modified in 2008, and approved in 2024 for modification, 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) 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.

(j) 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 Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart DD.

(b) Pursuant to 40 CFR 60.4, 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 Grain Elevators NSPS [326 IAC 12] [40 CFR Part 60, Subpart DD]

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

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

**SECTION E.4 NESHAP**

**Emissions Unit Description:**

(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.

(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 under 40 CFR Part 63 [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 unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart GGGG.

(b) Pursuant to 40 CFR 63.10, 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 Solvent Extraction for Vegetable Oil Production NESHAP [40 CFR Part 63, Subpart GGGG] [326 IAC 20-60]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart GGGG (included as Attachment E to the operating permit), which are incorporated by reference as 326 IAC 20-60, for the emission unit(s) listed above:

(1) 40 CFR 63.2830;
(2) 40 CFR 63.2831;
(3) 40 CFR 63.2832(a);
(4) 40 CFR 63.2833(a), (c), and (d), Table 1 Item 1 and 3;
(5) 40 CFR 63.2834 Table 1 Item (a);
(6) 40 CFR 63.2840(a), Table 1 Item (ix, x, xi), (b)(1-5), (e), and (f);
(7) 40 CFR 63.2850(a), (b), (d), (e), Table 1, Table 2 Item (b) and (c);
(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 Table 1;
(18) 40 CFR 63.2871;
(19) 40 CFR 63.2872.

**SECTION E.5 NESHAP**

**Emissions Unit Description:**

**Insignificant Activities:**

(e) One (1) stationary diesel emergency fire pump identified as EU49, constructed in 1985, with a 230 horsepower engine, using no controls, and exhausting to the atmosphere.

Under 40 CFR 63, Subpart ZZZZ, the diesel-fired emergency fire pump is considered an existing 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 under 40 CFR Part 63 [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 unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

(b) Pursuant to 40 CFR 63.10, 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 Stationary Reciprocating Internal Combustion Engines NESHAP [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 F to the operating permit), which are incorporated by reference as 326 IAC 20-82, for the emission unit(s) listed above:

(1) 40 CFR 63.6580;
(2) 40 CFR 63.6585(a) and (b);
(3) 40 CFR 63.6590(a)(1)(ii) and (iv);
(4) 40 CFR 63.6595(a)(1) and (c);
(5) 40 CFR 63.6602;
(6) 40 CFR 63.6605;
(7) 40 CFR 63.6612;
(8) 40 CFR 63.6625(f);
(9) 40 CFR 63.6630(c);
(10) 40 CFR 63.6640(f);
(11) 40 CFR 63.6645(a)(5);
(12) 40 CFR 63.6650(f);
(13) 40 CFR 63.6655(f)(1);
(14) 40 CFR 63.6660;
(15) 40 CFR 63.6665;

(16) 40 CFR 63.6670;
(17) 40 CFR 63.6675;
(18) Table 2c to Subpart ZZZZ of Part 63 (Item 1)
(19) Table 6 to Subpart ZZZZ of Part 63 (Item 9)
(20) Table 8 to Subpart ZZZZ of Part 63

**SECTION E.6 NESHAP**

**Emissions Unit Description:**

(ll) One (1) natural gas-fired package boiler, identified as EU40, approved in 2022 for construction, with a maximum heat input capacity of 144 MBtu/hr, using no control, and exhausting to stack (EP15).

Under 40 CFR 60, Subpart Db, this is considered an affected facility.
Under 40 CFR 63, Subpart DDDDD, this is considered a new 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, 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, 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.

(pp) Boiler #4, identified as EU46, constructed in 2008, with a rated capacity of 145 MMBtu per hour firing natural gas, 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.6.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 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 unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart DDDDD.

(b) Pursuant to 40 CFR 63.10, 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 Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP [40 CFR Part 63, Subpart DDDDD] [326 IAC 20-95]

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

(1) 40 CFR 63.7480;
(2) 40 CFR 63.7485;
(3) 40 CFR 63.7490(a), (b) and (d);
(4) 40 CFR 63.7495(a), (b) and (d);
(5) 40 CFR 63.7499(l),
(6) 40 CFR 63.7500(a)(1), (2), (3), (b), and (f);
(7) 40 CFR 63.7505(a) and (e);
(8) 40 CFR 63.75109a)(2), (e), (g);
(9) 40 CFR 63.7515;
(10) 40 CFR 63.7520;
(11) 40 CFR 63.7521;
(14) 40 CFR 63.7540(a)(10), (a)(12), (a)(13), (c), and (d);
(16) 40 CFR 63.7545;
(17) 40 CFR 63.7550(a), (b), (c)(1), (c)(2), (c)(5), (d), and (h);
(18) 40 CFR 63.7555(a),
(19) 40 CFR 63.7560;
(20) 40 CFR 63.7565;
(21) 40 CFR 63.7570;
(22) 40 CFR 63.7575;
(24) Table 3
(28) Table 9
(29) Table 10

# 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.: T023-41016-00011

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: |

# 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.: T023-41016-00011

**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 **Page 2 of 2**

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

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

OFFICE OF AIR QUALITY

COMPLIANCE AND ENFORCEMENT BRANCH

## Part 70 Quarterly Report

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-41016-00011
Facility: Enclosed Drag Conveyor (S-5a)
Parameter: Combined Grain Throughput
Limit: 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.

QUARTER : _____ YEAR: _____

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---|---|---|---|
| | Soybean Meal Production This Month (tons) | Soybean Meal Production Previous 11 Months (tons) | Soybean Meal Production 12 Month Total (tons) |
| | | | |
| | | | |
| | | | |

☐ No deviation occurred in this quarter.

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

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

OFFICE OF AIR QUALITY

COMPLIANCE AND ENFORCEMENT BRANCH

## Part 70 Quarterly Report

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-41016-00011
Facility: Entire Source
Parameter: VOC emissions
Limit: 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.

QUARTER : _____ YEAR: _____

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---|---|---|---|
| | Soybeans Processed This Month (tons) | Soybeans Processed Previous 11 Months (tons) | Soybeans Processed 12 Month Total (tons) |
| | | | |
| | | | |
| | | | |

☐ No deviation occurred in this quarter.

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

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

OFFICE OF AIR QUALITY

COMPLIANCE AND ENFORCEMENT BRANCH

## Part 70 Quarterly Report

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-41016-00011
Facility: Entire Source
Parameter: Soybean Meal Production
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.

QUARTER : _____ YEAR: _____

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---|---|---|---|
| | Soybean Meal Production This Month (tons) | Soybean Meal Production Previous 11 Months (tons) | Soybean Meal Production 12 Month Total (tons) |
| | | | |
| | | | |
| | | | |

☐ No deviation occurred in this quarter.

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

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

OFFICE OF AIR QUALITY

COMPLIANCE AND ENFORCEMENT BRANCH

## Part 70 Quarterly Report

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-41016-00011
Facility: Railcars
Parameter: Soybean Meal, Hulls, and Hull Pellets
Limit: 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 | Column 1 | Column 2 | Column 1 + Column 2 |
|---|---|---|---|
| | Soybean Meal, Hulls, and Hull Pellets This Month (tons) | Soybean Meal, Hulls, and Hull Pellets Previous 11 Months (tons) | Soybean Meal, Hulls, and Hull Pellets 12 Month Total (tons) |
| | | | |
| | | | |
| | | | |

☐ No deviation occurred in this quarter.

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

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

# OFFICE OF AIR QUALITY
# COMPLIANCE AND ENFORCEMENT BRANCH

## Part 70 Quarterly Report

| | |
|---|---|
| Source Name: | Archer Daniels Midland Company |
| Source Address: | 2191 West County Road 0 N/S, Frankfort, Indiana 46041 |
| Part 70 Permit No.: | T023-41016-00011 |
| Facility: | Oil extraction process using hexane solvent, identified as EU38 |
| Parameter: | VOC |
| Limit: | 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. |

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 months

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

QUARTER : _____ YEAR: _____

| Month | Column 1 | Column 2 |
|---|---|---|
| | Solvent Loss Ratio (gallons per ton) | Solvent Loss Ratio (gallons per ton) |
| | This Month | 12 Month Average |
| | | |
| | | |
| | | |

☐ No deviation occurred in this quarter.

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

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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

Source Name: Archer Daniels Midland Company
Source Address: 2191 West County Road 0 N/S, Frankfort, Indiana 46041
Part 70 Permit No.: T023-41016-00011

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 Minor Source Modification and Significant Permit Modification

## Source Description and Location

| | |
|---|---|
| **Source Name:** | **Archer Daniels Midland Company** |
| **Source Location:** | **2191 W County Road 0 N/S, Frankfort, IN 46041** |
| **County:** | **Clinton** |
| **SIC Code:** | **2075 (Soybean and Other Oilseed Processing)** |
| **Operation Permit No.:** | **T 023-41016-00011** |
| **Operation Permit Issuance Date:** | **September 9, 2019** |
| **Minor Source Modification No.:** | **023-47831-00011** |
| **Significant Permit Modification No.:** | **023-47941-00011** |
| **Permit Reviewer:** | **Tamera Wessel** |

## Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T023-41016-00011 on September 9, 2019. The source has since received the following approvals:

| Permit Type | Permit Number | Issuance Date |
|---|---|---|
| Significant Permit Modification | 023-44943-00011 | April 19, 2022 |
| Administrative Amendment | 023-45306-00011 | June 7, 2022 |
| Significant Permit Modification | 023-47159-00011 | March 7, 2024 |

The source submitted an application for a Part 70 Operating Permit Renewal on December 1, 2023. At this time, the application is under review.

## County Attainment Status

The source is located in Clinton County.

Pursuant to amendments to Indiana Code IC 13-17-3-14, effective July 1, 2023, a federal regulation that classifies or amends a designation of attainment, nonattainment, or unclassifiable for any area in Indiana under the federal Clean Air Act is effective and enforceable in Indiana on the effective date of the federal regulation.

| Pollutant | Designation |
|---|---|
| $SO_2$ | Unclassifiable or attainment effective April 9, 2018, for the 2010 primary 1-hour SO2 standard. Better than national secondary standards effective March 3, 1978. |
| CO | Unclassifiable or attainment effective November 15, 1990. |
| $O_3$ | Unclassifiable or attainment effective January 16, 2018, for the 2015 8-hour ozone standard. |
| $PM_{2.5}$ | Unclassifiable or attainment effective April 15, 2015, for the 2012 annual PM2.5 standard. |
| $PM_{2.5}$ | Unclassifiable or attainment effective December 13, 2009, for the 2006 24-hour PM2.5 standard. |
| $PM_{10}$ | Unclassifiable effective November 15, 1990. |
| $NO_2$ | Unclassifiable or attainment effective January 29, 2012, for the 2010 NO2 standard. |
| Pb | Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard. |

(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 of 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 of 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 all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

## Fugitive Emissions

(a) This type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B). However, there is an applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980 (NSPS Subpart DD for Grain Elevators); therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

(b) The boilers, with a total heat input rating of greater than 250 MMBtu/hr are considered one of the 28 listed source categories, based on the EPA guidance for “nesting activities”. Therefore, any fugitive emissions from these boilers are counted toward PSD, Emission Offset, and Part 70 Permit applicability.

| Emission Unit | Unit ID | Heat input capacity (MMBtu/hr) |
|---|---|---|
| package boiler | EU40 | 144 |
| Refinery Boiler | EU42 | 13 |
| Boiler #4 | EU46 | 145 |
| | Total MMBtu/hr | 302 |

The fugitive emissions of hazardous air pollutants (HAP) are counted toward the determination of Part 70 Permit applicability and source status under Section 112 of the Clean Air Act (CAA).

## Greenhouse Gas (GHG) Emissions

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 GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

## 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. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

| | Source-Wide Emissions Prior to Modification (ton/year) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **PM[1]** | **$PM_{10}$[1]** | **$PM_{2.5}$[1, 2]** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** | **Total HAPs** |
| **Total PTE of Entire Source Excluding Fugitive Emissions*** | **141.53** | **90.71** | **82.01** | **1.10** | **92.74** | **>250** | **164.75** | **>25** |
| Title V Major Source Thresholds | NA | 100 | 100 | 100 | 100 | 100 | 100 | 25 |
| PSD Major Source Thresholds | 250 | 250 | 250 | 250 | 250 | 250 | 250 | NA |

[1]Under the Part 70 Permit program (40 CFR 70), $PM_{10}$ and $PM_{2.5}$, not particulate matter (PM), are each considered as a "regulated air pollutant."

[2]$PM_{2.5}$ listed is direct $PM_{2.5}$.

[3]Single highest source-wide HAP.

*Fugitive HAP emissions are always included in the source-wide emissions.

Appendix A of this TSD reflects the detailed potential to emit of the entire source after issuance.

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant, VOC, 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) This existing source is a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions are equal to or greater than ten (10) tons per year for a single HAP and equal to or greater than twenty-five (25) tons per year for a combination of HAPs.

(c) These emissions are based on the TSD of Significant Permit Modification No. 023-47159-00011, issued on March 7, 2024.

## Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Archer Daniels Midland Company on May 9, 2024, relating to the construction and operation of a new rail receiving station for soybean meal previously stockpiled in railcars. The soybean meal rail receiving station will be located within a two-sided enclosure and controlled by existing baghouse BH-2A.

The following is a list of the new emission units and pollution control device(s):

(a) One (1) rail soybean meal receiving station, identified as EU-51, approved in 2024 for construction, with a maximum capacity of 125 tons of soybean meal per hour, using baghouse (BH-2A) as control, and exhausting to stack (EP11).

## 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.

## Project Aggregation

Archer Daniels Midland Company was issued SSM 023-47029-00011 on February 15, 2024 authorizing the construction of a truck receiving pit and associated discharge drag conveyor, a new expander system, and modification to the internal grain handling system. The modification increased the short-term throughput for grain handling to storage to allow for faster soybean unloading. Additionally, emission units were modified to make improvements to conveyors. Hourly throughput rates of the individual modified units saw an increase, however, downstream bottlenecks prevented an increase to the pbysical maximum capacity of the processes.

The new rail soybean meal receiving station will connect with existing Meal Storage Conveyor (EU-29). EU-29 was modified as part of the project permitted under SSM 023-47029-00011. Therefore, these two projects have been determined to be related and this proposed modification is aggregated with SSM 023-47029-00011.

## Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-1.1-1(12), 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. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

| | PTE Before Controls of the New Emission Units (ton/year) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Process / Emission Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$[1]** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** | **Total HAPs** |
| Rail receiving station, EU-51 | 1.81 | 0.44 | 0.44 | - | - | - | - | - |
| **Total PTE Before Controls of the New Emission Units:** | **1.81** | **0.44** | **0.44** | - | - | - | - | - |

[1]$PM_{2.5}$ listed is direct $PM_{2.5}$.

Appendix A of this TSD reflects the detailed potential emissions of the modification.

(a) Approval to Construct

A Minor Source Modification is required because this modification is not considered an administrative amendment under 326 IAC 2-7-11(a), is not considered a Significant Source Modification under 326 IAC 2-7-10.5(g), and has the potential to emit less than ten (10) tons per year of a single HAP and less than twenty-five (25) tons per year of any combination of HAPs.

(b) Approval to Operate

Pursuant to 326 IAC 2-7-12(d)(1), this change to the permit is being made through a Significant Permit Modification because this modification does not qualify as a Minor Permit Modification or as an Administrative Amendment.

**Permit Level Determination – PSD Emissions Increase**

(a) "Hybrid" Applicability Test: ATP and ATPA
Since this project involves the construction of new emissions unit (and/or emissions units considered new for this evaluation) and existing emissions units, a Hybrid applicability test, specified in 326 IAC 2-2-2(d)(5), is used to determine if the project results in a Significant Emissions Increase. A Hybrid applicability test uses both the Actual to Potential (ATP) test for new emissions units and Actual to Projected Actual (ATPA) test for existing emissions units affected by the modification.

The source has provided information and emission calculations as part of the application for this Hybrid test. IDEM, OAQ reviewed the emission calculations provided by the source to verify the emissions factors and methodology used, but has not made any determination regarding the validity and accuracy of certain information such as actual throughput, actual usage and actual hours of operation.

(b) New Emissions Units and Existing Emissions Units Affected by the Modification
This project involves both new emissions units and existing emissions units affected by the modification.

(1) New Emissions Unit
Pursuant to 326 IAC 2-2-1(t)(1), a new emissions unit is any emissions unit that is, or will be, newly constructed and that has existed for less than two (2) years from the date the emissions unit first operated.

(2) Existing Emissions Unit Affected by the Modification
The following emissions units will be considered existing for the purpose of this ATPA test:
(A) Modified emissions units.

The following proposed emissions unit(s) are considered as new emissions units for this evaluation.

(1) One (1) rail receiving station, identified as EU-51, approved in 2024 for construction, with a maximum capacity of 1,095,000 tons per year, using baghouse (BH-2A) as control, and exhausting to stack (EP11).

Aggregated units

The following emissions unit(s) are considered as new emissions units for this evaluation as permitted under SSM 023-47029-00011 issued February 15, 2024.

(1) One (1) truck receiving pit, identified as EU48, approved in 2023 for construction, with a maximum capacity of 900 tons per hour, using baghouse (GR-1) as control, and exhausting to stack (EP01), including the following:

(A) One (1) drag conveyor, identified as EU48a, approved in 2023 for construction, with a maximum throughput capacity of 1,444,500 tons per year.

(2) Conveying operations with particulate emissions controlled by existing baghouse (GR-1) and exhausting to stack (EP01):

(A) One (1) jump drag reclaim conveyor for EU06, identified as EU06a, approved in 2023 for construction, with a maximum rated capacity of 10,000 bushels per hour.

(B) One (1) fill conveyor for concrete silos (EU05), identified as EU05a, approved in 2023 for construction, with a maximum rated capacity of 10,000 bushels per hour.

(C) Grain sweep conveyors for steel storage tanks (EU06), identified as EU06b, approved in 2023 for construction, with a maximum rated capacity of 10,000 bushels per hour.

(3) One (1) Expander System identified as EU15, approved in 2023 for construction, consisting of: two feeder augers, Expander 1 and Expander 2, each with an eight hundred (800) ton per day capacity, and a Dryer/Cooler with a capacity of sixteen hundred (1,600) 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.

The following emissions unit(s) will be considered as modified existing emissions units for this evaluation and as permitted under SSM 023-47029-00011 issued February 15, 2024.

(1) One (1) rail unloading operation, identified as EU01, constructed in 1946 modified in 2004 and approved in 2023 for modification, 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:

(A) Two (2) discharge drag conveyors (S-1 and S-1A), approved in 2023 for modification;

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

(2) One (1) truck unloading operation, identified as EU02, constructed in 1946 and approved in 2023 for modification, 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);

(3) Two (2) elevator legs (S-3 and S-4), identified as EU03, constructed in 1946 and approved in 2023 for modification, 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);

(4) Conveying operation:

(A) One (1) drag conveyor to grain storage (S-5), identified as EU04, constructed in 1946, modified in 2008 and approved in 2023 for modification, 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);

(B) One (1) enclosed drag conveyor (S-5a), identified as EU-04a, constructed in 2011 and approved in 2023 for modification, 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.

(5) Two (2) conveyors from grain storage (S-6 and S-7), identified as EU07, constructed in 1946, modified in 2008, and approved in 2023 for modification, 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.

(6) One (1) meal storage elevator leg (P-512), identified as EU29, constructed in June of 1991, modified in 2008, and approved in 2023 for modification, 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)

(c) Baseline Actual Emissions

(1) New Emissions Unit(s)
For a new emissions unit, the baseline actual emissions for purposes of determining the Emissions Increase that will result from the initial construction and operation of the unit shall equal zero (0) and thereafter, for all other purposes, shall equal the unit's potential to emit.

(2) Existing Emissions Unit(s)
The baseline actual emissions from the existing emissions units involved in this ATPA applicability test are based on their emissions from January 2021 through December 2022.

(d) Hybrid Test: ATP and ATPA Summary
The Emissions Increase of the project is the sum of the Emissions Increase for **each emissions unit**, calculated using the Actual to Potential (ATP) test for the new emissions units and the Actual to Projected Actual (ATPA) test for existing emissions units.

Hybrid Applicability Test = $ATP_{(new\ unit)}$ + $ATPA_{(existing\ unit)}$

(e) Actual to Potential (ATP) Summary
An Actual to Potential (ATP) applicability test has been conducted for the new emissions units and/or the emissions units considered new for this evaluation.

$ATP_{(new\ unit)}$ = $PTE_{(new\ unit)}$ – $Baseline\ Emissions_{(new\ unit)}$

(f) Actual to Projected Actual (ATPA) Summary
An Actual to Projected Actual (ATPA) applicability test has been conducted for the existing emissions units.

$ATPA_{(existing\ unit)}$ = Projected Actual Emissions - Baseline Emissions

Pursuant to 326 IAC 2-2-1(pp)(2)(B), in lieu of determining the Projected Actual Emissions, a source may elect to use the emissions unit's potential to emit (PTE). When using an emissions unit's PTE in lieu of using the Projected Actual Emissions, the source can NOT use Could Have Accomodated Emissions/Demand Growth Exclusions.

$ATP_{(existing\ unit)}$ = $PTE_{(existing\ unit)}$ - Baseline Emissions

See Appendix A of this Technical Support Document for detailed emission calculations.

| New Emissions Units ATP (tons/year) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Emissions Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** |
| New Rail Receiving Station (EU51) | 0.01 | 0.004 | 0.004 | - | - | - | - |

| New Emissions Units ATP (tons/year) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Emissions Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** |
| New Rail Receiving Station - Fugitive Emissions (EU51) | 0.36 | 0.09 | 0.09 | - | - | - | - |

Aggregated units

| New Emissions Units ATP (tons/year) (SSM 023-47029-00011, issued February 15, 2024) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Emissions Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** |
| Truck Receiving Pit (EU50) | 0.72 | 0.26 | 0.26 | - | - | - | - |
| Truck Receiving Pit - Fugitive Emissions (EU50) | 2.53 | 0.56 | 0.56 | - | - | - | - |
| Drag Conveyor for EU50 - Truck Receiving Pit (EU50a) | 0.72 | 0.26 | 0.26 | - | - | - | - |
| 100 Fill Conveyor for EU05 - Concrete Silos (EU05a) | 0.72 | 0.26 | 0.26 | - | - | - | - |
| Jump Drag Reclaim Conveyor for EU06 - Steel Storage Tanks (EU06a) | 0.72 | 0.26 | 0.26 | - | - | - | - |
| Grain Sweep Conveyors for EU06 - Steel Storage Tanks (EU06b) | 0.72 | 0.26 | 0.26 | - | - | - | - |
| Expander Re-Addition (EU15) | 9.96 | 6.47 | 6.47 | - | - | - | - |

| Existing Emissions Unit ATP (tons/year) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Emissions Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** |
| Discharge drag conveyors, S-1, S-1A (EU01) | | | | | | | |
| PTE | 0.79 | 0.29 | 0.29 | - | - | - | - |
| Baseline Actual Emissions* | 0.01 | 0.0037 | 0.0037 | - | - | - | - |
| **$ATP_{(existing\ unit)}$** | 0.78 | 0.29 | 0.29 | - | - | - | - |

| Existing Emissions Unit ATP (tons/year) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Emissions Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** |
| Drag conveyor, S-2 (EU02) | | | | | | | |
| PTE | 0.79 | 0.29 | 0.29 | - | - | - | - |
| Baseline Actual Emissions* | 0.0071 | 0.0026 | 0.0026 | - | - | - | - |
| **$ATP_{(existing\ unit)}$** | 0.78 | 0.29 | 0.29 | - | - | - | - |

| Existing Emissions Unit ATP (tons/year) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Emissions Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** |
| Elevator legs, S-3, S-4 (EU03) | | | | | | | |
| PTE | 0.79 | 0.29 | 0.29 | - | - | - | - |
| Baseline Actual Emissions* | 0.0184 | 0.0067 | 0.0067 | - | - | - | - |
| **$ATP_{(existing\ unit)}$** | 0.77 | 0.28 | 0.28 | - | - | - | - |

| Existing Emissions Unit ATP (tons/year) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Emissions Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** |
| Drag Conveyor, S-5, S-28 and B-2, B-3 Steel Tank Fills (EU04) | | | | | | | |
| PTE | 0.79 | 0.29 | 0.29 | - | - | - | - |
| Baseline Actual Emissions* | 0.0085 | 0.0031 | 0.0031 | - | - | - | - |
| **$ATP_{(existing\ unit)}$** | 0.78 | 0.29 | 0.29 | - | - | - | - |

| Existing Emissions Unit ATP (tons/year) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Emissions Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** |
| Drag Conveyor, S-5a (EU04a) | | | | | | | |
| PTE | 0.13 | 0.074 | 0.074 | - | - | - | - |
| Baseline Actual Emissions* | 0.0013 | 0.0008 | 0.0008 | - | - | - | - |
| **$ATP_{(existing\ unit)}$** | 0.13 | 0.07 | 0.07 | - | - | - | - |

| Existing Emissions Unit ATP (tons/year) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Emissions Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** |
| B-1 Tank Out Drag, B-5 West Tank Reclaim, B-6 East Tank Reclaim, S-6a and S-7a (EU07) | | | | | | | |
| PTE | 1.18 | 1.12 | 1.12 | - | - | - | - |
| Baseline Actual Emissions* | 0.95 | 0.89 | 0.89 | - | - | - | - |
| **$ATP_{(existing\ unit)}$** | 0.23 | 0.23 | 0.23 | - | - | - | - |

| Existing Emissions Unit ATP (tons/year) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Emissions Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** |
| T-27 Meal Reclaim Drag (EU29) | | | | | | | |
| PTE | 0.01 | 0.010 | 0.010 | - | - | - | - |
| Baseline Actual Emissions* | 0.008 | 0.007 | 0.007 | - | - | - | - |
| **$ATP_{(existing\ unit)}$** | 2.00E-03 | 3.00E-03 | 3.00E-03 | - | - | - | - |

*Baseline actual emissions are based on existing unit emissions from January 2021 through December 2022

| Project Emissions Increase (tons/year) "Hybrid Test" | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Emissions Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$*** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** |
| Total ATP of New Emissions Units | 16.47 | 8.42 | 8.42 | - | - | - | - |
| Discharge drag conveyors, S-1, S-1A (EU01) (ATP) | 0.78 | 0.29 | 0.29 | - | - | - | - |
| Drag conveyor, S-2 (EU02) (ATP) | 0.78 | 0.29 | 0.29 | - | - | - | - |
| Elevator legs, S-3, S-4 (EU03) (ATP) | 0.77 | 0.28 | 0.28 | - | - | - | - |
| Drag Conveyor, S-5, S-28 and B-2, B-3 Steel Tank Fills (EU04) (ATP) | 0.78 | 0.29 | 0.29 | - | - | - | - |
| Drag Conveyor, S-5a (EU04a) (ATP) | 0.13 | 0.07 | 0.07 | - | - | - | - |
| B-1 Tank Out Drag, B-5 West Tank Reclaim, B-6 East Tank Reclaim, S-6a and S-7a (EU07) (ATP) | 0.23 | 0.23 | 0.23 | - | - | - | - |
| T-27 Meal Reclaim Drag (EU29) (ATP) | 2.00E-03 | 3.00E-03 | 3.00E-03 | - | - | - | - |
| **Project Emissions Increase** | **19.94** | **9.87** | **9.87** | **-** | **-** | **-** | **-** |
| Significant Levels | 25 | 15 | 10 | 40 | 40 | 40 | 100 |

| Project Emissions Increase (tons/year) "Hybrid Test" | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Emissions Unit** | **PM** | **$PM_{10}$** | **$PM_{2.5}$*** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** |
| *PM2.5 listed is direct PM2.5. | | | | | | | |

The source will continue to comply with existing permitted limits associated with the existing baghouse controlling emissions from the rail soybean meal receiving station in order to render the requirements of 326 IAC 2-2 not applicable to this modification.

See Technical Support Document (TSD) State Rule Applicability - Entire Source section, 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) applicability determination for more information regarding the limits.

(g) Conclusion
The Permittee has provided information as part of the application for this approval that based on Hybrid test in 326 IAC 2-2-2 that this modification to an existing major PSD stationary source will not be major because the Emissions Increase of each PSD regulated pollutant is less than the PSD significant levels levels (i.e., the modification does not cause a Significant Emissions Increase). The applicant will be required to keep records and report in accordance with 326 IAC 2-2-8 (Prevention of Significant Deterioration (PSD) Requirements: Source Obligation).

**PTE of the Entire Source After Issuance of the Part 70 Modification**

The table below summarizes the after issuance source-wide potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the Part 70 source and permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

| | Source-Wide Emissions After Issuance (ton/year) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **PM[1]** | **$PM_{10}$[1]** | **$PM_{2.5}$[1, 2]** | **$SO_2$** | **$NO_X$** | **VOC** | **CO** | **Total HAPs** |
| **Total PTE of Entire Source Including Fugitives*** | **141.96** | **90.51** | **81.81** | **1.10** | **92.74** | **>250** | **164.75** | **>25** |
| Title V Major Source Thresholds | NA | 100 | 100 | 100 | 100 | 100 | 100 | 25 |
| PSD Major Source Thresholds | 250 | 250 | 250 | 250 | 250 | 250 | 250 | -- |

[1]Under the Part 70 Permit program (40 CFR 70), $PM_{10}$ and $PM_{2.5}$, not particulate matter (PM), are each considered as a "regulated air pollutant."
[2]$PM_{2.5}$ listed is direct $PM_{2.5}$.
[3]Single highest source-wide HAP
*Fugitive HAP emissions are always included in the source-wide emissions.

The source opted to take limit(s) in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to this source. See Technical Support Document (TSD) State Rule Applicability - Entire Source section for more information regarding the limit(s).

(a) This existing major PSD stationary source will continue to be major under 326 IAC 2-2 because at least one pollutant, VOC, has emissions equal to or greater than the PSD major source threshold.

(b) This existing major source of HAP will continue to be a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions will continue to be equal to or greater than ten (10) tons per

year for any single HAP and/or equal to or greater than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

**Federal Rule Applicability Determination**

Due to the modification at this source, federal rule applicability has been reviewed as follows:

**New Source Performance Standards (NSPS):**

(a) The requirements of the New Source Performance Standard for Grain Elevators 40 CFR 60, Subpart DD and 326 IAC 12, are not included in the permit for the rail soybean meal receiving station, because this rule applies to grain handling operations. The rail receiving station will only handle soybean meal, which is not considered a grain under this subpart.

(b) There are no New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included in the permit for this proposed modification.

**National Emission Standards for Hazardous Air Pollutants (NESHAP):**

(a) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR Part 63, 326 IAC 14, and 326 IAC 20) included in the permit for this proposed modification.

**Compliance Assurance Monitoring (CAM):**

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the regulated pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant (or a surrogate thereof); and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

(b) Pursuant to 40 CFR 64.2(b)(1)(i), emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act are exempt from the requirements of CAM. Therefore, an evaluation was not conducted for any emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act.

The following table is used to identify the applicability of CAM to new and modified emission unit and each emission limitation or standard for a specified pollutant based on the criteria specified under 40 CFR 64.2:

| Emission Unit/Pollutant | Control Device | Applicable Emission Limitation | Uncontrolled PTE (tons/year) | Controlled PTE (tons/year) | CAM Applicable (Y/N) | Large Unit (Y/N) |
|---|---|---|---|---|---|---|
| Rail soybean meal receiving station (EU51)/PM10 | BH (BH-2A) | 326 IAC 2-2 | <100 | - | N [1] | N |
| Rail soybean meal receiving station (EU51)/PM2.5 | BH (BH-2A) | 326 IAC 2-2 | <100 | - | N [1] | N |
| Rail soybean meal receiving station (EU51)/PM* | BH (BH-2A) | 326 IAC 6-3-2 | <100 | - | N [2] | N |

| Emission Unit/Pollutant | Control Device | Applicable Emission Limitation | Uncontrolled PTE (tons/year) | Controlled PTE (tons/year) | CAM Applicable (Y/N) | Large Unit (Y/N) |
|---|---|---|---|---|---|---|
| Rail soybean meal receiving station (EU51)/PM | BH (BH-2A) | 326 IAC 2-2 | <100 | - | N [1] | N |

Under the Part 70 Permit program (40 CFR 70), PM is not a regulated air pollutant.

Uncontrolled PTE (tpy) and controlled PTE (tpy) are evaluated against the Major Source Threshold for each pollutant. Major Source Threshold for regulated air pollutants (PM10, PM2.5, SO2, NOx, VOC and CO) is 100 tpy, for a single HAP ten (10) tpy, and for total HAPs twenty-five (25) tpy.

PM* For limitations under 326 IAC 6-3-2, 326 IAC 6.5, and 326 IAC 6.8, IDEM OAQ uses PM as a surrogate for the regulated air pollutant PM10. Therefore, uncontrolled PTE and controlled PTE reflect the emissions of the regulated air pollutant PM10.

N [1] CAM does not apply for pollutant because the uncontrolled PTE of the pollutant is less than the major source threshold.

N [2] Under 326 IAC 2-2, PM is not a surrogate for a regulated air pollutant. Therefore, CAM does not apply to these emission units for the 326 IAC 2-2 PM limitation.

Controls: BH = Baghouse, C = Cyclone, DC = Dust Collection System, RTO = Regenerative or Recuperative Thermal Oxidizer, WS = Wet Scrubber, ESP = Electrostatic Precipitator

Emission units without air pollution controls are not subject to CAM. Therefore, they are not listed.

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 - Entire Source

Due to this modification, state rule applicability has been reviewed as follows:

**326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset)**
PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD section and the Permit Level Determination - PSD Emissions Increase and of this document.

2024 Modification

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2024 Modification permitted under SSM No. 023-47029-00011 and MSM No. 023-47831-00011, the Permittee shall comply with the following:

(1) 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.

| Unit (ID) | Control ID | PM Limit | $PM_{10}$ Limit | $PM_{2.5}$ Limit | Units for Limit |
|---|---|---|---|---|---|
| Truck and Rail Receiving, Conveying (EU01/EU02/EU03/EU04/EU04a/EU50/EU50a/ EU05a/EU06a/EU06b) | GR-1 | 0.0011 | 0.0004 | 0.0004 | lb/ton grain received |
| Conveying to Processing (EU07) | CE-18 and CE-05 | 0.0018 | 0.0017 | 0.0017 | lb/ton grain received |
| Expander (EU15) | CE-15 | 2.27 | 1.48 | 1.48 | lb/hr |

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

(3) The amount of soybean meal received by the rail soybean meal receiving station (EU51) shall not exceed 1,095,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

| Unit (ID) | Control ID | PM Limit | $PM_{10}$ Limit | $PM_{2.5}$ Limit | Units for Limit |
|---|---|---|---|---|---|
| Meal Conveyor (EU29) | BH-2A | 0.0040 | 0.0037 | 0.0037 | lb/ton meal produced |
| Rail soybean meal receiving (EU51) (non-fugitive) | BH-2A | 0.000033 | 0.000008 | 0.000008 | lb/ton meal received |
| Rail soybean meal receiving (EU51) (fugitive) | | 0.0033 | 0.0008 | 0.0008 | lb/ton meal received |

Compliance with these limits, shall limit the potential to emit of PM, PM10, and PM2.5 to less than twenty-five (25) tons of PM, less than fifteen (15) tons of $PM_{10}$, and less than ten (10) tons of $PM_{2.5}$ per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2024 Modifications permitted under SSM No. 023-47029-00011 and MSM 023-47831-00011.

**326 IAC 2-2-8 (Prevention of Significant Deterioration (PSD) Requirements: Source Obligation)**
This source will be required to keep records and report in accordance with 326 IAC 2-2-8 (Prevention of Significant Deterioration (PSD) Requirements: Source Obligation) to document that the project is not a part of a PSD major modification as defined by 326 IAC 2-2-1(dd).

**326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))**
The provisions of 326 IAC 2-4.1 apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41, after July 27, 1997, unless the major source has been specifically regulated under or exempted from regulation under a NESHAP that was issued pursuant to Section 112(d), 112(h), or 112(j) of the Clean Air Act (CAA) and incorporated under 40 CFR 63. On and after June 29, 1998, 326 IAC 2-4.1 is intended to implement the requirements of Section 112(g)(2)(B) of the Clean Air Act (CAA).

The operation of the new rail receiving station will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

**326 IAC 2-7-6(5) (Annual Compliance Certification)**
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 certifications 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 5-1 (Opacity Limitations)**
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).

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

**326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)**
This source is not subject to the requirements of 326 IAC 6-5, because it was constructed prior to December 13, 1985. The source received an operating permit (OP) 12-09-86-0113 issued on September 24, 1982.

**326 IAC 6.5 (Particulate Matter Limitations Except Lake County)**
Pursuant to 326 IAC 6.5-1-1(a), this source (located in Clinton County) is not subject to the requirements of 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

**326 IAC 6.8 (Particulate Matter Limitations for Lake County)**
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Clinton County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

## State Rule Applicability – Individual Facilities

Due to this modification, state rule applicability has been reviewed as follows:

**326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)**
Pursuant to 326 IAC 6-3-1(a), the requirements of 326 IAC 6-3-2 are applicable to the rail receiving station, since it is a manufacturing process not exempted from this rule under 326 IAC 6-3-1(b) and is not subject to a particulate matter limitation that is as stringent as or more stringent than the particulate limitation established in this rule as specified in 326 IAC 6-3-1(c).

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the rail soybean meal receiving station (EU51) shall not exceed 53.55 pounds per hour when operating at a process weight rate of 125 tons per hour. The pound per hour limitation was calculated with the following equation:

> Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:
>
> $E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
> P = process weight rate in tons per hour

| Summary of Process Weight Rate Limits | | |
|---|---|---|
| Process / Emission Unit | P (ton/hr) | E (lb/hr) |
| Rail soybean meal receiving station (EU51) | 125 | 53.55 |

> Based on calculations, the baghouse is not needed to comply with this limit.

## Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to assure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

(a) The Compliance Determination Requirements applicable to this modification are as follows:

In order to assure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration (PSD), the baghouse for particulate control, BH-2A, shall be in operation and control emissions from the rail soybean meal receiving station at all times that the rail soybean meal receiving station is in operation.

*Testing Requirements:*

IDEM OAQ has determined that testing of the rail soybean meal receiving station is not required at this time to determine compliance with the PM, PM10, and PM2.5 emission limits. IDEM has the authority to require testing at a later time if necessary to demonstrate compliance with any applicable requirement.

(b) The Compliance Monitoring Requirements applicable to this proposed modification are as follows:

| Control Device | Type of Parametric Monitoring | Frequency | Range or Specification |
|---|---|---|---|
| BH-2A, Baghouse | Visible emission notations | Daily | Verify whether emissions are normal or abnormal |

These monitoring conditions are necessary because the baghouse for the rail soybean meal receiving station must operate properly to assure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

**Proposed Changes**

As part of this permit approval, the permit may contain new or different permit conditions and some conditions from previously issued permits/approvals may have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes.

The following changes listed below are due to the proposed modification. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text (these changes may include Title I changes):

(1) Sections A and D of the permit have been modified to include the emission unit description of the new unit.

(2) Section D.1 has been updated to include the limits and compliance requirements of the new unit.

(3) Section D.1 has been updated to include emission unit descriptions of units with existing limits and compliance requirements that had unintentionally been omitted.

(4) Condition D.1.1 - Tables have been updated to include control unit IDs. Additionally, table groupings have been rearranged for clarity.

...

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:
...

**(uu) One (1) rail soybean meal receiving station, identified as EU-51, approved in 2024 for construction, with a maximum capacity of 125 tons of soybean meal per hour, using baghouse (BH-2A) as control, and exhausting to stack (EP11).**

...

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

...

**(uu) One (1) rail soybean meal receiving station, identified as EU-51, approved in 2024 for construction, with a maximum capacity of 125 tons of soybean meal per hour, using baghouse (BH-2A) as control, and exhausting to stack (EP11).**

**Insignificant Activities**

**(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.**

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

(a) Pursuant to SSM 023-24843-00011, SPM 023-29230-00011 and SSM 023-44842-00011, 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) | **Control ID** | PM Limit | PM10 Limit | Units for Limit |
|---|---|---|---|---|
| Vertical Seed Conditioner (EU44) | **BH-44** | 0.0017 | 0.0017 | lb/ton beans processed |
| DTDC Meal Dryer Deck #1 and Deck #2 (EU23 and EU24) | **CE-09, CE-10** | 0.00649 | 0.00649 | |
| DTDC Meal Dryer Deck #3 (EU24A) | **CE10A** | 0.0063 | 0.0063 | |
| DTDC Meal Cooler Deck (EU25) | **CE-11** | 0.0018 | 0.0018 | |
| Bean Dryer, Cracking Rolls, Hull Separator and Conditioner (EU10/11/12/13) | **CE-06 and BH-06A** | 0.00161 | 0.00161 | lb/ton beans processed |
| Conveying to Processing (EU07/09/16/18/22) | **CE-18 and CE-05, CE-19, CE-19A, CE19-B** | 0.0018 | 0.0017 | lb/ton grain received |
| Hull Grinder (EU17) | **CE-20, CE-20A** | 0.00674 | 0.00674 | lb/ton hulls processed |
| Flaking Rolls (EU14) | **CE-07** | 0.050 | 0.032 | lb/ton beans processed |
| Meal Conveyor (EU26/27/28/29) | **BH-2A** | 0.0040 | 0.0037 | lb/ton meal produced |
| Meal Surge Tanks (EU31) | **BH-31** | 0.00013 | 0.00003 | lb/ton meal produced |
| Truck and Rail Receiving (EU01/02/03/04/05) | **GR-1** | 0.0011 | 0.0004 | lb/ton grain received |
| Pellet Mill and Cooler (EU20/21) | **CE-08** | 0.030 | 0.030 | lb/ton hulls processed |
| Meal Storage Unit (EU30) ~~(BH-30A)~~ | **(BH-30A)** | 0.00013 | 0.00003 | |

| Unit (ID) | **Control ID** | PM Limit | PM10 Limit | Units for Limit |
|---|---|---|---|---|
| Meal Storage Unit (EU30) ~~(BH-30B)~~ | **(BH-30B)** | 0.00013 | 0.00003 | lb/ton meal produced |
| Truck Meal, Hull and Hull Pellet Loadout (EU34) | **ML-1** | 0.0013 | 0.0009 | |
| Rail Meal, Hull and Hull Pellet Loadout (EU35) | **ML-1** | 0.0013 | 0.0009 | lb/ton beans processed |
| Hull Surge Tank (EU32) | **BH-31** | 0.00013 | 0.00003 | lb/ton hulls processed |
| Meal Clay Storage Unit (EU36) | **MC-1** | 0.00291 | 0.00204 | lb/ton clay received |
| Silica Clay Silo (EU47) | **RC-2** | 0.00291 | 0.00204 | lb/ton clay received |
| Cooling Tower (EU45) | | 0.030 | 0.030 | lb/hr |

...

(d) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2024 Modification**s** permitted under SSM No. 023-47029-00011 **and MSM No. 023-47831-00011**, the Permittee shall comply with the following:

**(1) 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.**

| Unit (ID) | **Control ID** | PM Limit | $PM_{10}$ Limit | $PM_{2.5}$ Limit | Units for Limit |
|---|---|---|---|---|---|
| Truck and Rail Receiving, Conveying (EU01/EU02/EU03/EU04/EU04a/EU50/EU50a/EU05a/ EU06a/EU06b) | **GR-1** | 0.0011 | 0.0004 | 0.0004 | lb/ton grain received |
| Conveying to Processing (EU07) | **CE-18 and CE-05** | 0.0018 | 0.0017 | 0.0017 | lb/ton grain received |
| ~~Meal Conveyor (EU29)~~ | | ~~0.0040~~ | ~~0.0037~~ | ~~0.0037~~ | ~~lb/ton meal produced~~ |
| Expander (EU15) | **CE-15** | 2.27 | 1.48 | 1.48 | lb/hr |

~~(1) 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.~~

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

**(3) The amount of soybean meal received by the rail soybean meal receiving station (EU51) shall not exceed 1,095,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.**

| **Unit (ID)** | **Control ID** | **PM Limit** | **$PM_{10}$ Limit** | **$PM_{2.5}$ Limit** | **Units for Limit** |
|---|---|---|---|---|---|
| **Meal Conveyor (EU29)** | **BH-2A** | **0.0040** | **0.0037** | **0.0037** | **lb/ton meal produced** |
| **Rail soybean meal receiving (EU51)** | **BH-2A** | **0.000033** | **0.000008** | **0.000008** | **lb/ton meal received** |

| Unit (ID) | Control ID | PM Limit | $PM_{10}$ Limit | $PM_{2.5}$ Limit | Units for Limit |
|---|---|---|---|---|---|
| **Rail soybean meal receiving (EU51) (fugitive)** | | **0.0033** | **0.0008** | **0.0008** | **lb/ton meal received** |

Compliance with these limits, shall limit the potential to emit of PM, PM10, and PM2.5 to less than twenty-five (25) tons of PM, less than fifteen (15) tons of $PM_{10}$, and less than ten (10) tons of $PM_{2.5}$ per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2024 Modification**s** permitted under SSM No. 023-47029-00011 **and MSM No. 023-47831-00011**.

D.1.2 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) |
|---|---|---|
| ... | ... | ... |
| Meal storage conveyor, EU29 | 900 | 76.23 |
| **Rail Soybean Meal Receiving Station, EU-51** | **125** | **53.55** |
| Meal Storage Tank, EU30, BH-30A | 136 | 54.42 |
| ... | ... | ... |

...

(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.

...

(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)**, and the rail soybean meal receiving station (EU51)** all exhausting through baghouse BH-2A, which exhausts through stack EP11, the allowable particulate emission rate from baghouse BH-2A shall be limited to 2~~17.6~~**93.04** pounds per hour.

...

D.1.12 Record Keeping Requirement

(a) To document the compliance status with Condition D.1.1(b) and D.1.1(d)**(1)**, the Permittee shall maintain daily records of the amount of soybeans processed by the plant.

...

**(g) To document the compliance status with Condition D.1.1(d)(2), the Permittee shall maintain daily records of the amount of soybean meal received by the rail soybean meal receiving station.**

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

D.1.13 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.1.1(b), D.1.1(c)(3), D.1.1(d)**(1), D.1.1(d)(2)** and D.1.3 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the 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).
...

## Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on May 9, 2024.

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 023-47831-00011. The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Operating Permit Renewal No. T023-47279-00011.

The staff recommends to the Commissioner that the Part 70 Minor Source Modification and Significant Permit Modification be approved.

## IDEM Contact

(a) If you have any questions regarding this permit, please contact Tamera Wessel, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 234-8530 or (800) 451-6027, and ask for Tamera Wessel.

(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 Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/public-participation/; and the Citizens' Guide to IDEM on the Internet at: https://www.in.gov/idem/resources/citizens-guide-to-idem/.

**Appendix A: Emission Calculations Summary**

**Soybean Processing**

**Company Name:** Archer Daniels Midland Company
**Source Address:** 2191 West County Road 0 N/S, Frankfort, Indiana 46041
**Permit #:** 023-47831-00011
**Reviewer:** Tamera Wessel

| | | Emissions Change (tpy) | | | | | |
|---|---|---|---|---|---|---|---|
| **Process/Unit (ID)** | **stack ID(s)** | **PM** | **PM10** | **NOx** | **SO2** | **CO** | **VOC** |
| ***New Emissions Units [Emissions Change = Potential to Emit]*** | | | | | | | |
| Vertical Seed Conditioner (EU44) | EP44 | 1.12 | 1.12 | - | - | - | - |
| DTDC (EU23/24/24A/25) | EP08/09/09A/10 | 6.29 | 6.29 | - | - | - | - |
| Cooling Tower (insignificant activity) | EU45 | 0.13 | 0.13 | - | - | - | - |
| Boiler (EU46) [(a)] | EP46 | 32.70 | 12.80 | 37.00 | 34.38 | 74.25 | 3.42 |
| ***Modified Emissions Units [Emission Change = Projected Actual - Baseline Actual]*** | | | | | | | |
| Grain Conveying (EU04) | EP01 | 0.100 | 0.056 | - | - | - | - |
| Cracking & Conditioning (EU10, EU11 and EU13) | EP04 | -50.91 | -32.67 | - | - | - | - |
| Soybean Conveying to Processing (EU07) | EP03 | 0.081 | 0.045 | - | - | - | - |
| Grain Cleaner (EU09) | EP03 | 0.266 | 0.266 | - | - | - | - |
| Hull Screening (EU16) | EP03 | 0.153 | 0.153 | - | - | - | - |
| Hull Grinder (EU17) | EP20 | 0.153 | 0.153 | - | - | - | - |
| Hull Conveyor (EU19) | EP03 | 0.014 | 0.008 | - | - | - | - |
| Hull Separator & Flaking (EU12 and EU14) | EP05 | 13.028 | 8.468 | - | - | - | - |
| Meal Conveyor (EU26) | EP11 | 0.073 | 0.041 | - | - | - | - |
| Meal Sifter and Grinder (EU27 and EU28) | EP11 | 1.272 | 1.272 | - | - | - | - |
| Meal Storage Conveyor (EU29) | EP11 | 0.073 | 0.041 | - | - | - | - |
| Extractor / Hexane Bubble (EU38) | Various | - | - | - | - | - | 321.7 |
| Meal Surge Tank (EU31) | EP12 | 0.030 | 0.008 | - | - | - | - |
| ***Existing Units Experiencing Increased Utilization [Emissions Change = Change in Utilization x Emission Factor]*** | | | | | | | |
| Truck and Rail Receiving (EU01/02) [(c)] | EP01/01F | 1.256 | 0.274 | - | - | - | - |
| Elevator leg vents (EU03) | EP01 | 0.100 | 0.056 | - | - | - | - |
| Grain Storage (EU05) | EP01 | 0.041 | 0.010 | - | - | - | - |
| Hull Storage Unit (EU18) | EP03 | 0.003 | 0.001 | - | - | - | - |
| Pellet Storage Unit (EU22) | EP03 | 0.003 | 0.001 | - | - | - | - |
| Pellet Mill and Cooler (EU20 and EU21) | EP07 | 0.682 | 0.682 | - | - | - | - |
| Meal Storage Unit (EU30) | EP11 | 0.030 | 0.008 | - | - | - | - |
| Truck Meal and Hull Pellet Loadout (EU34) | EP12 | 0.080 | 0.045 | - | - | - | - |
| Rail Meal and Hull Pellet Loadout (EU35) and Storage (EU3 | EP12 | 3.858 | 2.508 | - | - | - | - |
| Hull Surge Tank (EU32) | EP12 | 0.003 | 0.001 | - | - | - | - |
| Meal Clay Storage Unit (EU36) | EP13 | 0.005 | 0.004 | - | - | - | - |
| Plant Roads (fugitive) | - | 1.93 | 0.38 | - | - | - | - |
| ***Contemporaneous Increases [Emissions Change = Increase in Actual Emissions from modifications during the period]*** [(b)] | | | | | | | |
| Vegetable Oil Firing in Boilers #1 & #3 (EU39 and EU41) (20 | EP15/17 | 14.68 | 14.68 | 1.63 | - | - | 0 |
| Rail Unloading Drag Conveyor (EU01) (2004) | EP01/01F | 0.00 | 0.00 | 0 | 0 | 0 | 0 |
| Silica Clay Silo (EU47) (2002) | EP19 | 0.26 | 0.18 | 0 | 0 | 0 | 0 |
| ***Project Emissions Summary*** | | | | | | | |
| Projected Actual Emissions Increase (tpy) | | 12.6 | 2.1 | 37.0 | 34.4 | 74.3 | 325.1 |
| Excluded From Projected Actual (tpy) | | 4.5 | 3.1 | 0.0 | 0.0 | 0.0 | 152.7 |
| Project Related Emissions Increase (tpy) | | 8.1 | -1.0 | 37.0 | 34.4 | 74.3 | 172.4 |
| Contemporaneous Increases & Decreases | | 14.9 | 14.9 | 1.6 | 0.0 | 0.0 | 0.0 |
| Net Emissions Increase | | 23.0 | 13.9 | 38.6 | 34.4 | 74.3 | 172.4 |
| PSD Significant Threshold | | 25 | 15 | 40 | 40 | 100 | 40 |
| Project Increase Significant? | | NO | NO | NO | NO | NO | **YES** |

(a) The listed PM, PM10 and NOx emissions change represents limited emissions.
(b) There are no creditable decreases within the contemporaneous period.
(c) Includes fugitives.

**Appendix A: Emission Calculations**
**PTE Summary**

**Company Name:** Archer Daniels Midland Company
**Address City IN Zip:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit No./Pit ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| Emission Point (stack) ID(s) | Emission Unit ID(s) | Control Device ID(s) | Process/Unit Name | Baseline Actual Throughput (tpy) | Baseline "Could Have Accomodated" Throughput (tpy) | Projected Actual / Potential Throughput (tpy) | Emission Factors | | | Emission Factor Basis / Source | Controls | Control Efficiency (%) | | Capture Efficiency (%) | Baseline Actual (BA) Emissions (tpy) | | Baseline "Could Have Accomodated" (CHA) Emissions (tpy) | | Projected Actual (PA) Emissions (tpy) | | PA-BA Increase | | PA-CHA Increase | | Notes | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | PM | PM10 | Units | | | PM | PM10 | | PM | PM10 | PM | PM10 | PM | PM10 | PM | PM10 | PM | PM10 | | |
| | | | **Grain Receiving** | | | | | | | | | | | | | | | | | | | | | | | |
| EP01 | EU02 | GR-1 | Truck - Point Source | 643,102 | 1,006,500 | 1,444,500 | 0.0350 | 0.0078 | lb/ton of grain rec'd via truck | AP-42; Table 9.9.1-1; Hopper trucks; 3/2003. | Uncontrolled factor | 99.0% | 99.0% | 90% | 0.101 | 0.023 | 0.159 | 0.035 | 0.228 | 0.051 | 0.126 | 0.028 | 0.069 | 0.015 | a, d | Worst-case PM emissions are from 100% truck receiving. |
| EP01 | EU01 | GR-1 | Rail - Point Source | 156,332 | 0 | 0 | 0.0320 | 0.0078 | lb/ton of grain rec'd via rail | AP-42; Table 9.9.1-1; Railcar; 3/2003. | Uncontrolled factor | 99.0% | 99.0% | 90% | 0.023 | 0.005 | 0.000 | 0.000 | 0.000 | 0.000 | -0.023 | -0.005 | 0.000 | 0.000 | a, d | Worst-case PM emissions are from 100% truck receiving. |
| EP02F | EU02 | Fugitive | Truck (fugitive) | 643,102 | 1,006,500 | 1,444,500 | 0.0350 | 0.0078 | lb/ton of grain rec'd via truck | AP-42; Table 9.9.1-1; Hopper trucks; 3/2003. | Uncontrolled factor | 0.0% | 0.0% | 90% | 1.125 | 0.251 | 1.761 | 0.393 | 2.528 | 0.563 | 1.402 | 0.313 | 0.767 | 0.171 | b, d | Worst-case PM emissions are from 100% truck receiving. |
| EP01F | EU01 | Fugitive | Rail (fugitive) | 156,332 | 0 | 0 | 0.0320 | 0.0078 | lb/ton of grain rec'd via rail | AP-42; Table 9.9.1-1; Railcar; 3/2003. | Uncontrolled factor | 0.0% | 0.0% | 90% | 0.250 | 0.061 | 0.000 | 0.000 | 0.000 | 0.000 | -0.250 | -0.061 | 0.000 | 0.000 | b, d | Worst-case PM emissions are from 100% truck receiving. |
| EP01 | EU04 | GR-1 | Grain Conveying | 799,434 | 1,006,500 | 1,444,500 | 0.061 | 0.034 | lb/ton of grain rec'd | AP-42; Table 9.9.1-1; Grain handling; 3/2003. | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.124 | 0.069 | 0.157 | 0.087 | 0.225 | 0.125 | 0.100 | 0.056 | 0.068 | 0.038 | a | Total beans received (crush + storage capacity = max rate). |
| - | EU06 | - | Grain Storage | 120,000 | 120,000 | 120,000 | 0.025 | 0.0063 | lb/ton of grain to bin | AP-42; Table 9.9.1-1; Storage Bin (vent); 3/2003. | Uncontrolled factor | 0% | 0% | 100% | 1.500 | 0.378 | 1.500 | 0.378 | 1.500 | 0.378 | 0.000 | 0.000 | 0.000 | 0.000 | a | Use of these storage bins is based on market conditions and throughput will not be affected by the project. |
| EP01 | EU03 | GR-1 | Elevator Leg Vents | 799,434 | 1,006,500 | 1,444,500 | 0.061 | 0.034 | lb/ton of grain rec'd | AP-42; Table 9.9.1-1; Grain handling; 3/2003. | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.124 | 0.069 | 0.157 | 0.087 | 0.225 | 0.125 | 0.100 | 0.056 | 0.068 | 0.038 | a, d | Total beans received (crush + storage capacity = max rate). |
| | | | **Grain Storage Bins** | | | | | | | | | | | | | | | | | | | | | | | |
| EP01 | EU05 | GR-1 | Grain Storage Bins | 799,434 | 1,006,500 | 1,444,500 | 0.025 | 0.0063 | lb/ton of grain rec'd | AP-42; Table 9.9.1-1; Storage Bin (vent); 3/2003. | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.051 | 0.013 | 0.064 | 0.016 | 0.092 | 0.023 | 0.041 | 0.010 | 0.028 | 0.007 | a, d | Total beans received (crush + storage capacity = max rate). |
| | | | **Grain Cleaner/Hull Grinder** | | | | | | | | | | | | | | | | | | | | | | | |
| EP03 | EU07 | CE-18 & CE-05 | Grain Conveyor | 792,898 | 876,000 | 1,314,000 | 0.061 | 0.034 | lb/ton of beans processed | AP-42; Table 9.9.1-1; Grain handling; 3/2003. | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.123 | 0.069 | 0.136 | 0.076 | 0.204 | 0.114 | 0.081 | 0.045 | 0.068 | 0.038 | a | Throughput = total beans processed (Crush Rate) x bean density (lb/bu). |
| EP03 | EU09 | CE-18 & CE-05 | Grain Cleaner | 792,898 | 876,000 | 1,314,000 | 0.00102 | 0.00102 | lb/ton of beans processed | PM/PM10 EF based on stack test from bean cleaner at Frankfort (see "Stack Test Data" sheet; 95th percentile value). | Controlled factor | Included in EF | Included in EF | 100% | 0.404 | 0.404 | 0.447 | 0.447 | 0.670 | 0.670 | 0.266 | 0.266 | 0.223 | 0.223 | c | Throughput = total beans processed (Crush Rate) x bean density (lb/bu). |
| EP44 | EU44 | CE-44 | Vertical Seed Conditioner (bean heater) | 0 | 0 | 1,314,000 | 0.0017 | 0.0017 | lb/ton of beans processed | PM/PM10 EF based on stack test from bean heater at another facility (see "Stack Test Data" sheet; 95th percentile value). | Controlled factor | Included in EF | Included in EF | 100% | 0.000 | 0.000 | 0.000 | 0.000 | 1.117 | 1.117 | 1.117 | 1.117 | 1.117 | 1.117 | c | Throughput = total beans processed (Crush Rate) x bean density (lb/bu). |
| EP03 | EU16 | CE-19, CE-19A, CE-19B and CE-05 | Hull Screening | 46,502 | 61,320 | 91,980 | 0.00674 | 0.00674 | lb/ton of hulls processed | PM/PM10 EF based on stack test from hull grinding source at another facility (see "Stack Test Data" sheet; 95th percentile value). | Controlled factor | Included in EF | Included in EF | 100% | 0.157 | 0.157 | 0.207 | 0.207 | 0.310 | 0.310 | 0.153 | 0.153 | 0.103 | 0.103 | c | BA Throughput = total hulls produced; for CHA and PA, Throughput = crush x hull factor (see "Constants" tab). Control efficiency is for baghouse only. Cyclone efficiency is included in the emission factors. |
| EP20 | EU17 | CE-20 & 20A | Hull Grinder | 46,502 | 61,320 | 91,980 | 0.00674 | 0.00674 | lb/ton of hulls processed | PM/PM10 EF based on stack test from hull grinding source at another facility (see "Stack Test Data" sheet; 95th percentile value). | Controlled factor | Included in EF | Included in EF | 100% | 0.157 | 0.157 | 0.207 | 0.207 | 0.310 | 0.310 | 0.153 | 0.153 | 0.103 | 0.103 | c | BA Throughput = total hulls produced; for CHA and PA, Throughput = crush x hull factor (see "Constants" tab). Control efficiency is for baghouse only. Cyclone efficiency is included in the emission factors. |
| EP03 | EU19 | CE18 & CE-05 | Hull Conveyor (baseline configuration) | 46,502 | 61,320 | - | 0.061 | 0.034 | lb/ton of hulls processed | AP-42; Table 9.9.1-1; Grain handling; 3/2003. | Uncontrolled factor | 99.00% | 99.00% | 100% | 0.014 | 0.008 | 0.019 | 0.010 | - | - | | | | | a | BA Throughput = total hulls produced |
| EP03 | EU19 | CE18 & CE-05 | Hull Conveyor (post-project configuration) | - | - | 91,980 | 0.061 | 0.034 | lb/ton of hulls processed | AP-42; Table 9.9.1-1; Grain handling; 3/2003. | Uncontrolled factor | 99.00% | 99.00% | 100% | - | - | - | - | 0.028 | 0.016 | 0.014 | 0.008 | 0.009 | 0.005 | a | Throughput = crush x hull factor (see "Constants" tab). |
| EP03 | EU22 | CE18 & CE-05 | Pellet Storage Unit | 46,502 | 61,320 | 91,980 | 0.025 | 0.0063 | lb/ton of hulls processed | AP-42; Table 9.9.1-1; Storage Bin (vent); 3/2003. | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.003 | 0.001 | 0.004 | 0.001 | 0.006 | 0.001 | 0.003 | 0.001 | 0.002 | 0.000 | a, d | BA Throughput = total hulls produced; for CHA and PA, Throughput = crush x hull factor (see "Constants" tab). |
| EP03 | EU18 | CE18 & CE-05 | Hull Storage Unit | 46,502 | 61,320 | 91,980 | 0.025 | 0.0063 | lb/ton of hulls processed | AP-42; Table 9.9.1-1; Storage Bin (vent); 3/2003. | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.003 | 0.001 | 0.004 | 0.001 | 0.006 | 0.001 | 0.003 | 0.001 | 0.002 | 0.000 | a, d | BA Throughput = total hulls produced; for CHA and PA, Throughput = crush x hull factor (see "Constants" tab). |
| | | | **Grain Dryer** | | | | | | | | | | | | | | | | | | | | | | | |
| N/A | EU-08 | N/A | Grain Dryer | - | - | - | 0.220 | 0.0550 | lb/ton of beans dried | AP-42; Table 9.9.1-1 Column Dryer; 3/2003. | Uncontrolled factor | 0.00% | 0.00% | 100% | - | - | - | - | - | - | - | - | - | - | | Grain drying unrelated to crush; need for drying is based only on properties of raw matl. |
| N/A | EU-08 | N/A | Grain Dryer (Gas Burned) | - | - | - | 7.600 | 7.6000 | lb/MMSCF | AP-42, Table 1.4-2; 7/98. | Uncontrolled factor | 0.00% | 0.00% | 100% | - | - | - | - | - | - | - | - | - | - | | Grain drying unrelated to crush; need for drying is based only on properties of raw matl. |
| EP24 | EU-43 | CE-21 | Bean Cleaner | - | - | - | 0.75 | 0.19 | lb/ton of beans proce | AP-42; Table 9.9.1-1; Grain Cleaning (converted to an uncontrolled factor assuming 90% control eff.); 3/2003. | Uncontrolled factor | 99.00% | 99.00% | 100% | - | - | - | - | - | - | - | - | - | - | | Bean cleaner use unrelated to crush; need for cleaning is based only on properties of raw matl. |
| | | | **Esher Wyss & Cracking** | | | | | | | | | | | | | | | | | | | | | | | |
| EP04 | EU10, EU11 & EU13 | CE-06 | Esher Wyss Cracking Conditioning (baseline configuration w/ cyclone) | 792,898 | 876,000 | 36,000 | 0.131 | 0.085 | lb/ton of beans processed | PM emission factor is based on 95th percentile value from 7/8/05 stack test (see "Stack Test Data" sheet); PM10 = 65% of PM (AP42; Table B.2.2; Category 7; 9/90). | Controlled factor | Included in EF | Included in EF | 100% | 51.935 | 33.698 | 51.935 | 33.698 | 0.000 | 0.000 | - | - | - | - | c | Throughput = total beans processed (Crush Rate). PA emissions from cyclone only control for 200 hr/yr of baghouse bypass. No credit taken for CHA emissions. |
| | | CE-06 and BH-06A | Esher Wyss Cracking Conditioning (post-project configuration w/ baghouse) | - | - | 1,278,000 | 0.00161 | 0.00161 | lb/ton of beans processed | PM/PM10 EF based on stack test from similar unit at another facility (see "Stack Test Data" sheet; 95th percentile value). | Controlled factor | Included in EF | Included in EF | 100% | - | - | - | - | 1.029 | 1.029 | -50.906 | -32.669 | -50.906 | -32.669 | a | Throughput = total beans processed (Crush Rate) x bean density (lb/bu). |
| | | | **Dehulling and Flaking** | | | | | | | | | | | | | | | | | | | | | | | |
| EP05 | EU12 & EU14 | CE-07 | Hull Separator & Flaking | 792,898 | 876,000 | 1,314,000 | 0.050 | 0.033 | lb/ton of beans processed | PM EF (see "Stack Test Data" sheet; 95th percentile value); PM10 = 65% of PM (AP42; Table B.2.2; Category 7; 9/90). | Controlled factor | Included in EF | Included in EF | 100% | 19.822 | 12.885 | 21.900 | 14.235 | 32.850 | 21.353 | 13.028 | 8.468 | 10.950 | 7.118 | c | Throughput = total beans processed (Crush Rate) x bean density (lb/bu). |
| | | | **Pellet Mill Cooler** | | | | | | | | | | | | | | | | | | | | | | | |
| EP07 | EU20 & EU21 | CE-08 | Pellet Mill & Cooler | 46,502 | 61,320 | 91,980 | 0.030 | 0.030 | lb/ton of hulls processed | PM/PM10 EF based on stack test from similar unit at another facility (see "Stack Test Data" sheet; 95th percentile value). | Controlled factor | Included in EF | Included in EF | 100% | 0.698 | 0.698 | 0.920 | 0.920 | 1.380 | 1.380 | 0.682 | 0.682 | 0.460 | 0.460 | c, d | Throughput = total pellets produced; for CHA and PA, Throughput = crush x pellet factor (see "Constants" tab). |
| | | | **DTDC** | | | | | | | | | | | | | | | | | | | | | | | |
| EP08 | EU23 | CE-09 | Meal Dryer Deck #1 | 792,898 | 876,000 | 1,314,000 | 0.00017 | 0.00017 | lb/ton of beans processed | PM EF (see "Stack Test Data" sheet; 95th percentile value); PM10 = assumed equal to PM based on other testing. | Controlled factor | Included in EF | Included in EF | 100% | 0.067 | 0.067 | 0.074 | 0.074 | 0.112 | 0.112 | 0.044 | 0.044 | 0.037 | 0.037 | c | Throughput = total beans processed (Crush Rate) x bean density (lb/bu). |
| EP09 | EU24 | CE-10 | Meal Dryer Deck #2 | 792,898 | 876,000 | 1,314,000 | 0.0063 | 0.0063 | lb/ton of beans processed | PM EF (see "Stack Test Data" sheet; 95th percentile value); PM10 = assumed equal to PM based on other testing. | Cyclone Controlled factor | Included in EF | Included in EF | 100% | 2.498 | 2.498 | 2.759 | 2.759 | 4.139 | 4.139 | 1.641 | 1.641 | 1.380 | 1.380 | c | Throughput = total beans processed (Crush Rate) x bean density (lb/bu). |
| EP09A | EU24A | CE10A | Meal Dryer Deck #3 | 0 | 0 | 1,314,000 | 0.0063 | 0.0063 | lb/ton of beans processed | PM/PM10 EF - assumed equal to EF for Dryer Deck #2 | Controlled factor | Included in EF | Included in EF | 100% | 0.000 | 0.000 | 0.000 | 0.000 | 4.139 | 4.139 | 4.139 | 4.139 | 4.139 | 4.139 | c | Throughput = total beans processed (Crush Rate) x bean density (lb/bu). Unit does not currently have 3rd Dryer Deck. |
| EP10 | EU25 | CE-11 | Meal Cooler Deck | 792,898 | 876,000 | 1,314,000 | 0.0018 | 0.0018 | lb/ton of beans processed | PM EF (see "Stack Test Data" sheet; 95th percentile value); PM10 = assumed equal to PM based on other testing. | Controlled factor | Included in EF | Included in EF | 100% | 0.714 | 0.714 | 0.788 | 0.788 | 1.183 | 1.183 | 0.469 | 0.469 | 0.394 | 0.394 | c | Throughput = total beans processed (Crush Rate) x bean density (lb/bu). |
| | | | **Meal Grind/Sift/Storage** | | | | | | | | | | | | | | | | | | | | | | | |
| EP11 | EU26 | BH-2 | Meal Conveyor | 581,114 | 700,800 | 1,051,200 | 0.0610 | 0.03400 | lb/ton of meal produced | AP-42; Table 9.9.1-1; Grain handling; 3/2003 | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.090 | 0.050 | 0.109 | 0.061 | 0.164 | 0.091 | 0.073 | 0.041 | 0.055 | 0.030 | a | BA Throughput from plant records; for CHA and PA, Throughput = Crush Rate x meal-to-crush ratio. |
| EP11 | EU27 & EU28 | BH-2 | Meal Grinder and Sifter | 581,114 | 876,000 | 1,314,000 | 0.00347 | 0.00347 | lb/ton of beans processed | PM/PM10 EF based on stack test from similar unit at another facility (see "Stack Test Data" sheet; 95th percentile value). | Controlled factor | Included in EF | Included in EF | 100% | 1.008 | 1.008 | 1.520 | 1.520 | 2.280 | 2.280 | 1.272 | 1.272 | 0.760 | 0.760 | c | Throughput = total beans processed (Crush Rate) x bean density (lb/bu). |
| EP11 | EU30 | BH-2 | Meal Storage Unit | 581,114 | 700,800 | 1,051,200 | 0.025 | 0.0063 | lb/ton of meal produced | AP-42; Table 9.9.1-1; Storage Bin (vent); 3/2003. | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.037 | 0.009 | 0.045 | 0.011 | 0.067 | 0.017 | 0.030 | 0.008 | 0.022 | 0.006 | a, d | BA Throughput from plant records; for CHA and PA, Throughput = Crush Rate x meal-to-crush ratio. |
| EP11 | EU29 | BH-2 | Meal Storage Conveyor | 581,114 | 700,800 | 1,051,200 | 0.061 | 0.034 | lb/ton of meal produced | AP-42; Table 9.9.1-1; Grain handling; 3/2003. | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.090 | 0.050 | 0.109 | 0.061 | 0.164 | 0.091 | 0.073 | 0.041 | 0.055 | 0.030 | a | BA Throughput from plant records; for CHA and PA, Throughput = Crush Rate x meal-to-crush ratio. |
| | | | **Meal Loadout** | | | | | | | | | | | | | | | | | | | | | | | |
| EP12 | EU34 | ML-1 | Truck Meal and Hull Pellet Loadout | 627,616 | 762,120 | 1,143,180 | 0.061 | 0.034 | lb/ton of meal produced | AP-42; Table 9.9.1-1; Grain handling; 3/2003. | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.098 | 0.054 | 0.119 | 0.066 | 0.178 | 0.099 | 0.080 | 0.045 | 0.059 | 0.033 | a, d | BA Throughput from plant records; for CHA and PA, Throughput = Crush Rate x (meal-to-crush ratio + hull-to-crush ratio) |
| EP12 | EU35 & EU36 | ML-1 | Rail Meal and Hull Pellet Loadout | 792,898 | 876,000 | 1,314,000 | 0.270 | 0.1755 | lb/ton of 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). | Uncontrolled factor | 99.49% | 99.49% | 95% | 0.519 | 0.337 | 0.573 | 0.372 | 0.859 | 0.559 | 0.341 | 0.222 | 0.286 | 0.186 | a, d | Throughput = total beans processed (Crush Rate) x bean density (lb/bu). |
| Fugitive | EU35 & EU36 | Fugitive | Rail Meal and Hull Pellet Loadout | 792,898 | 876,000 | 1,314,000 | 0.270 | 0.1755 | lb/ton of 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). | Uncontrolled factor | 0.00% | 0.00% | 95% | 5.352 | 3.479 | 5.913 | 3.843 | 8.870 | 5.765 | 3.517 | 2.286 | 2.957 | 1.922 | b, d | Throughput = total beans processed (Crush Rate) x bean density (lb/bu). |
| EP12 | EU31 | ML-1 | Meal Surge Tank | 581,114 | 700,800 | 1,051,200 | 0.025 | 0.0063 | lb/ton of meal produced | AP-42; Table 9.9.1-1; Storage Bin (vent); 3/2003. | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.037 | 0.009 | 0.045 | 0.011 | 0.067 | 0.017 | 0.030 | 0.008 | 0.022 | 0.006 | a | BA Throughput from plant records; for CHA and PA, Throughput = Crush Rate x meal-to-crush ratio. |
| EP12 | EU32 | ML-1 | Hull Surge Tank | 46,502 | 61,320 | 91,980 | 0.025 | 0.0063 | lb/ton of hulls processed | AP-42; Table 9.9.1-1; Storage Bin (vent); 3/2003. | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.003 | 0.001 | 0.004 | 0.001 | 0.006 | 0.001 | 0.003 | 0.001 | 0.002 | 0.000 | a, d | BA Throughput = total hulls produced; for CHA and PA, Throughput = crush x hull factor (see "Constants" tab). |
| | | | **Meal Clay Storage** | | | | | | | | | | | | | | | | | | | | | | | |
| EP13 | EU36 | MC-1 | Meal Clay Storage Unit | 2,927 | 4,380 | 6,570 | 0.571 | 0.4000 | lb/ton of clay rec'd | 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). | Uncontrolled factor | 99.49% | 99.49% | 100% | 0.004 | 0.003 | 0.006 | 0.004 | 0.010 | 0.007 | 0.005 | 0.004 | 0.003 | 0.002 | a, d | BA Throughput = total meal clay used; for CHA and FA, Throughput = crush x meal clay factor (see "Constants" tab). |
| | | | | | | | | | | | | | | | | | | | | Totals = | -22.19 | -11.16 | -26.70 | -14.31 | | |
| | | | | | | | | | | | | | | | | | | | | Excluded from Increase = | | | 4.51 | 3.15 | | |

NOTES:
a Emissions = Throughput (tons/yr) x EF (lb/ton) x (Capture Efficiency) x (1 - Control Efficiency) x (1 ton/2000 lb)
b Emissions = Throughput (tons/yr) x EF (lb/ton) x (1 - Capture Efficiency) x (1 - Control Efficiency) x (1 ton/2000 lb)
c Emissions = Throughput (tons/yr) x EF (lb/ton) x (Capture Efficiency) x (1 ton/2000 lb)
d These units are not being modified; instead they will experience increased utilization. Since the respective emission factors for PA, BA and CHA are the same for a given unit, calculation of PA - CHA is an adequate measure of the increased emissions from these units.

**Appendix A: Emission Calculations**
**PTE Summary**

**Company Name:** Archer Daniels Midland Company
**Address City IN Zip:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit No./Pit ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| Site Designation | EP ID(s) | EU ID(s) | CE ID(s) | Description | Unlimited Potential Throughput (tpy) | Maximum throughput (tons/hr) | Emission Factors (lbs/ton) | | | Control Efficiency (%) | Capture Efficiency (%) | After Control Emission Factors (lbs/ton) | | | Uncontrolled Emissions (tpy) | | | Potential Emissions controlled (tpy) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | PM | PM10 | PM2.5 | PM | PM | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 |
| **New Emissions Units [Emissions Change = Potential to Emit]** | | | | | | | | | | | | | | | | | | | | |
| Rail Meal Receiving Station (EU51) | EP11 | EU51 | BH-2A | Truck Grain - Point Source | 1,095,000 | 125 | 0.0033 | 0.0008 | 0.0008 | 99% | 80% | ######## | ######## | ######## | 1.81 | 0.44 | 0.44 | 0.014 | 0.004 | 0.004 |
| Rail Meal Receiving Station - Fugitive Emissions (EU51) | EP50F | EU51 | Fugitive | Truck Grain - Fugitive | | | | | | 0% | 80% | | | | | | | 0.36 | 0.09 | 0.09 |
| | | | | | | | | | | | | | | | **1.81** | **0.44** | **0.44** | **0.38** | **0.09** | **0.09** |

Notes
PM, PM10 emission factors from AP-42 Section 9.9; Table 9.9.1-1; for Feed shipping SCC 3-02-008-03

The proposed rail receiving station will only receive soybean meal (feed) and not whole soybeans (grain). The SCC 3-02-005-53 emission factor is for grain receiving, while the SCC 3-02-008-03 emission factor is specifically for meal shipping, e.g. loading meal to an open truck or rail, which directly applies to the rail soybean meal receiving process. The soybean meal has already been processed and aspirated to baghouses during processing, so the dust/particulate generation rate tends to be much lower than unprocessed grain/soybeans

PM2.5 emissions are assumed to equal PM10 emissions.
BH-2A control efficiency of 99% is based on most recent performance testing and permits issued for the facility. Assumed capture efficiency of 80% is based on a 2-sided enclosure for the rail receiving station and the receiving pit being aspirated to BH-2A.

Calculations are based on unlimited potential throughput to verify the project is minor for PSD. However, the amount of soybean meal throughput to the rail meal receiving station is limited to the existing amount of soybean meal allowed to be stockpiled into the railcars during plant shutdowns which is 100,000 tons per year (in order to keep the project in SSM 023-26411-00011 minor PSD).

Methodology
Uncontrolled Emissions = Unlimited Potential Throughput (tons/yr) x EF (lb/ton) x (1 ton/2000 lb)
Controlled Potential Emissions = Unlimited Potential Throughput (tons/yr) x After Control EF (lb/ton) x (1 ton/2000 lb)

**Appendix A: Emission Calculations**
**Summary of Uncontrolled Emissions from New and Modified Units**

**Company Name:** Archer Daniels Midland Company
**Address City IN Zip:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| Uncontrolled Emissions - Post Project (tons/yr)[a][b][c] | | | | |
|---|---|---|---|---|
| **Emission Unit** | **Permit Emission Unit** | **PM** | **PM10** | **PM2.5** |
| ***New Emission Units*** | | | | |
| New Rail Receiving Station (EU51) | EU51 | 1.81 | 0.44 | 0.44 |
| New Rail Receiving Station Fugitives (EU51) | EU51 | 0.00 | 0.00 | 0.00 |
| **Total** | | 1.81 | 0.44 | 0.44 |
| ***New Emission Units (Permitted under SSM 023-47029-00011, issued February 15, 2024)*** [d] | | | | |
| Truck Receiving Pit (EU50) | EU50 | 22.75 | 5.07 | 5.07 |
| Truck Receiving Pit - Fugitive Emissions (EU50) | EU50 | 22.75 | 5.07 | 5.07 |
| Drag Conveyor for EU50 - New Truck Receiving Pit (EU50a) | EU50a | 44.06 | 24.56 | 4.19 |
| 100 Fill Conveyor for EU05 - Concrete Silos (EU05a) | EU05a | 44.06 | 24.56 | 4.19 |
| Jump Drag Reclaim Conveyor for EU06 - Steel Storage Tanks (EU06a) | EU06a | 3.66 | 2.04 | 0.35 |
| Grain Sweep Conveyors for EU06 - Steel Storage Tanks (EU06b) | EU06b | 3.66 | 2.04 | 0.35 |
| Expander Re-Addition (EU15) | EU15 | 49.78 | 32.36 | 32.36 |
| **Total** | | 190.72 | 95.70 | 51.58 |
| ***Modified Emission Units*** [d] | | | | |
| Discharge drag conveyors, S-1, S-1A | EU01 | 44.06 | 24.56 | 4.19 |
| Drag conveyor, S-2 | EU02 | 44.06 | 24.56 | 4.19 |
| Elevator legs, S-3, S-4 | EU03 | 44.06 | 24.56 | 4.19 |
| Drag Conveyor, S-5, S-28 and B-2, B-3 Steel Tank Fills | EU04 | 44.06 | 24.56 | 4.19 |
| Drag Conveyor, S-5a | EU04a | 44.06 | 24.56 | 4.19 |
| B-1 Tank Out Drag, B-5 West Tank Reclaim, B-6 East Tank Reclaim, S-6a and S-7a | EU07 | 40.08 | 22.34 | 3.81 |
| T-27 Meal Reclaim Drag | EU29 | 2.10 | 1.94 | 1.94 |
| **Total** | | 262.48 | 147.08 | 26.70 |
| **Uncontrolled Emissions - Before Project (tons/yr)** | | | | |
| ***Modified Emission Units*** [d] | | | | |
| Discharge drag conveyors, S-1, S-1A | EU01 | 44.06 | 24.56 | 4.19 |
| Drag conveyor, S-2 | EU02 | 44.06 | 24.56 | 4.19 |
| Elevator legs, S-3, S-4 | EU03 | 44.06 | 24.56 | 4.19 |
| Drag Conveyor, S-5, S-28 and B-2, B-3 Steel Tank Fills | EU04 | 44.06 | 24.56 | 4.19 |
| Drag Conveyor, S-5a | EU04a | 44.06 | 24.56 | 4.19 |
| B-1 Tank Out Drag, B-5 West Tank Reclaim, B-6 East Tank Reclaim, S-6a and S-7a | EU07 | 40.08 | 22.34 | 3.81 |
| T-27 Meal Reclaim Drag | EU29 | 2.10 | 1.94 | 1.94 |

(a) Uncontrolled emissions are based on AP-42 emission factors and do not include applicable federally enforceable limits that the units are subject to such as 40 CFR Part 60 Subpart DD PM emission limits or existing permit limits that are applicable to the modified emission units. Therefore, the uncontrolled emissions do not represent the unit potential to emit as calculated per 40 CFR 52.21(b)(4), which states that federally enforceable limits including throughput and operation restrictions should be included in PTE calculations.

(b) Uncontrolled emissions were calculated based on uncontrolled AP-42 emission factors and permit limited soybean throughputs that apply on a facility-wide basis. ADM does not seek to make changes to existing soybean throughput limits.

(c) Modified conveyor units will have their grain conveying maximum throughput increased on a short-term basis. However, ADM is not seeking a change to the Facility-wide soybean throughput that is currently applicable through the Title V Operating Permit. Therefore, post-project and pre-project uncontrolled emissions are equivalent on an annual basis.

(d) Emission values taken from SSM 023-47029-00011 issued February 15, 2024

**Appendix A: Emission Calculations**
**PSD Analysis and Emissions Summary**

**Company Name:** Archer Daniels Midland Company
**Address City IN Zip:** 2191 West County Road 0 N/S, Frankfort, IN 4604
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| ***New Emissions Units*** [a] | | | |
|---|---|---|---|
| New Rail Soybean Meal Receiving Station (EU51) | 0.014 | 0.004 | 0.004 |
| New Rail Soybean Meal Receiving Station (EU51) (Fugitve) | 0.36 | 0.09 | 0.09 |
| | **0.38** | **0.09** | **0.09** |

| ***New Emissions Units*** [a] ***(Permitted under SSM 023-47029-00011, issued February 15, 2024)*** [(b)] | | | |
|---|---|---|---|
| New Truck Receiving Pit (EU50) | 0.72 | 0.26 | 0.26 |
| New Truck Receiving Pit - Fugitive Emissions (EU50) | 2.53 | 0.56 | 0.56 |
| New Drag Conveyor for EU50 - New Truck Receiving Pit (EU50a) | 0.72 | 0.26 | 0.26 |
| 100 Fill Conveyor for EU05 - Concrete Silos (EU05a) | 0.72 | 0.26 | 0.26 |
| Jump Drag Reclaim Conveyor for EU06 - Steel Storage Tanks (EU06 | 0.72 | 0.26 | 0.26 |
| Grain Sweep Conveyors for EU06 - Steel Storage Tanks (EU06b) | 0.72 | 0.26 | 0.26 |
| Expander Re-Addition (EU15) | 9.96 | 6.47 | 6.47 |
| | **16.09** | **8.33** | **8.33** |

***Modified Existing Emissions Units*** [(b)]

| **Process/Unit (ID)** | **Emissions (tpy)** | | |
|---|---|---|---|
| | **PM** | **PM10** | **PM2.5** |
| **Project Emissions Summary (PTE -BAE)** | | | |
| ***Modified Emissions Units*** | | | |
| **Discharge drag conveyors, S-1, S-1A (EU01)** | | | |
| Potential Emissions | 0.79 | 0.29 | 0.29 |
| Baseline Actual Emissions | 0.0102 | 0.0037 | 0.0037 |
| **ATPA** | 0.78 | 0.29 | 0.29 |
| **Drag conveyor, S-2 (EU02)** | | | |
| Potential Emissions | 0.79 | 0.29 | 0.29 |
| Baseline Actual Emissions | 0.0071 | 0.0026 | 0.0026 |
| **ATPA** | 0.78 | 0.29 | 0.29 |
| **Elevator legs, S-3, S-4 (EU03)** | | | |
| Potential Emissions | 0.79 | 0.29 | 0.29 |
| Baseline Actual Emissions | 0.0184 | 0.0067 | 0.0067 |
| **ATPA** | 0.77 | 0.28 | 0.28 |
| **Drag Conveyor, S-5, S-28 and B-2, B-3 Steel Tank Fills (EU04)** | | | |
| Potential Emissions | 0.79 | 0.29 | 0.29 |
| Baseline Actual Emissions | 0.0085 | 0.0031 | 0.0031 |
| **ATPA** | 0.78 | 0.29 | 0.29 |
| **Drag Conveyor, S-5a (EU04a)** | | | |
| Potential Emissions | 0.13 | 0.074 | 0.074 |
| Baseline Actual Emissions | 0.0013 | 0.0008 | 0.0008 |
| **ATPA** | 0.13 | 0.07 | 0.07 |
| **B-1 Tank Out Drag, B-5 West Tank Reclaim, B-6 East Tank Reclaim, S-6a and S-7a (EU07)** | | | |
| Potential Emissions | 1.18 | 1.12 | 1.12 |
| Baseline Actual Emissions | 0.95 | 0.89 | 0.89 |
| **ATPA** | 0.23 | 0.23 | 0.23 |
| **T-27 Meal Reclaim Drag (EU29)** | | | |
| Potential Emissions | 0.01 | 0.010 | 0.010 |
| Baseline Actual Emissions | 0.008 | 0.007 | 0.007 |
| **ATPA** | 2.00E-03 | 3.00E-03 | 3.00E-03 |

| **Project Emissions (tpy)** | | | |
|---|---|---|---|
| Process/Emission Unit | **PM** | **$PM_{10}$** | **$PM_{2.5}$** |
| Sum of ATP Increases | 16.47 | 8.42 | 8.42 |
| Sum of ATPA Increases | 3.48 | 1.45 | 1.45 |
| **Project Emissions** | **19.94** | **9.87** | **9.87** |
| **Significant Levels** | **25** | **15** | **10** |

Notes:
(a) The listed PM, PM10 and PM2.5 emissions change represents limited emissions.
(b) Emission values taken from SSM 023-47029-00011 issued February 15, 2024

**Appendix A: Emission Calculations**
**Modification Summary**

**Company Name:** Archer Daniels Midland Company
**Source Address:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit Number:** 023-47831-00011
**Reviewer:** Tamera Wessel

| PTE of New Emissions Units (tons/yr) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **New Emission Units** | **PM** | **PM10** | **PM2.5 *** | **$SO_2$** | **NOx** | **VOC** | **CO** | **Total HAPs** |
| Rail Receiving Station (EU51) | 1.81 | 0.44 | 0.44 | - | - | - | - | |
| ***Total:*** | **1.81** | **0.44** | **0.44** | | | | | |

**Appendix A: Emission Calculations**
**PTE Summary**

**Company Name:** Archer Daniels Midland Company
**Address City IN Zip:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| Uncontrolled Potential to Emit (tons/yr) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Emission Unit** | **PM** | **PM10** | **PM2.5 *** | **$SO_2$** | **NOx** | **VOC** | **CO** | **Total HAPs** |
| Soybean Processing and Railcars | >250 | >250 | >250 | - | - | - | - | - |
| Hexane Bubble | - | - | - | - | - | 662.10 | - | 423.75 |
| Boilers (worst case)** | 3.11 | 12.45 | 12.45 | 0.98 | 90.96 | 9.01 | 164.37 | 3.09 |
| Cooling Towers | 5.33 | 5.33 | 5.33 | - | - | - | - | - |
| Expanders | 49.78 | 32.36 | 32.36 | - | - | - | - | - |
| Stationary Emergency Fire Pump | 0.13 | 0.13 | 0.13 | 0.12 | 1.78 | 0.14 | 0.38 | 1.56E-03 |
| **Total** | **>250** | **>250** | **>250** | **1.10** | **92.74** | **671.26** | **164.75** | **426.84** |
| *Fugitive Emissions* | | | | | | | | |
| Paved Roads | 12.35 | 2.47 | 0.61 | - | - | - | - | - |
| Unpaved Roads | 23.32 | 5.94 | 0.59 | - | - | - | - | - |

** 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 and Railcars | 105.59 | 61.92 | 56.82 | - | - | - | - | - |
| Hexane Bubble | - | - | - | - | - | 662.10 | - | 423.75 |
| Boilers (worst case)** | 3.11 | 12.45 | 12.45 | 0.98 | 90.96 | 9.01 | 164.37 | 3.09 |
| Cooling Towers | 5.33 | 5.33 | 5.33 | - | - | - | - | - |
| Expanders | 9.96 | 6.47 | 6.47 | - | - | - | - | - |
| Stationary Emergency Fire Pump | 0.13 | 0.13 | 0.13 | 0.12 | 1.78 | 0.14 | 0.38 | 1.56E-03 |
| *Fugitive Emissions* | | | | | | | | |
| Paved Roads | 6.18 | 1.24 | 0.30 | - | - | - | - | - |
| Unpaved Roads | 11.66 | 2.97 | 0.30 | - | - | - | - | - |
| **Total** | **141.96** | **90.51** | **81.81** | **1.10** | **92.74** | **671.26** | **164.75** | **426.84** |

** PM2.5 listed is direct PM2.5*

*Note: The shaded cells indicate where limits are included.*

**Appendix A: Emission Calculations**
**PTE Summary of Nested Source**

**Company Name:** Archer Daniels Midland Company
**Address City IN Zip:** 2191 West County Road 0 N/S, Frankfort, Indiana 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| Uncontrolled Potential to Emit (tons/yr) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Emission Unit** | **PM** | **PM10** | **PM2.5 *** | **$SO_2$** | **NOx** | **VOC** | **CO** | **Total HAPs** |
| Boiler EU40 | 1.17 | 4.70 | 4.70 | 0.37 | 29.01 | 3.40 | 56.76 | 1.17 |
| Boiler EU41 | 0.67 | 2.69 | 2.69 | 0.21 | 35.43 | 1.95 | 29.76 | 0.67 |
| Boiler EU42 | 0.08 | 0.33 | 0.33 | 0.03 | 4.29 | 0.24 | 3.60 | 0.08 |
| Boiler EU46 | 1.18 | 4.73 | 4.73 | 0.37 | 22.23 | 3.43 | 74.24 | 1.18 |
| **Total** | **3.11** | **12.45** | **12.45** | **0.98** | **90.96** | **9.01** | **164.37** | **3.09** |

**Appendix A: Emission Calculations**
**PTE HAPs Summary**

**Company Name:** Archer Daniels Midland Company
**Address City IN Zip:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| Uncontrolled Potential to Emit (tons/yr) | | | | |
|---|---|---|---|---|
| **HAPs** | **Hexane Bubble** | **Boilers** | **Stationary Emergency Fire Pump** | **Total** |
| Hexane | 423.75 | 2.95 | - | 426.70 |
| Benzene | - | 3.44E-03 | 3.76E-04 | 3.82E-03 |
| Dichlorobenzene | - | 1.97E-03 | - | 1.97E-03 |
| Formaldhyde | - | 1.23E-01 | 4.75E-04 | 1.23E-01 |
| Toluene | - | 5.57E-03 | 1.65E-04 | 5.73E-03 |
| Lead | - | 8.19E-04 | - | 8.19E-04 |
| Cadmium | - | 1.80E-03 | - | 1.80E-03 |
| Chromium | - | 2.29E-03 | - | 2.29E-03 |
| Manganese | - | 6.23E-04 | - | 6.23E-04 |
| Nickel | - | 3.44E-03 | - | 3.44E-03 |
| Arsenic | - | - | - | 0.00E+00 |
| Beryllium | - | - | - | 0.00E+00 |
| Mercury | - | - | - | 0.00E+00 |
| Selenium | - | - | - | 0.00E+00 |
| Xylene | - | - | 1.15E-04 | 1.15E-04 |
| 1,3-Butadiene | - | - | 0.00 | 1.57E-05 |
| Acetaldehyde | - | - | 0.00 | 3.09E-04 |
| Acrolein | - | - | 0.00 | 3.72E-05 |
| Total PAH HAPs | - | - | 6.76E-05 | 6.76E-05 |

| | |
|---|---|
| **Worst Single HAP** | **426.70** |
| **Combined HAPs** | **426.84** |

**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 0 N/S, Frankfort, IN 46041
**Permit No./Pl ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| EP ID(s) | EU ID(s) | CE ID(s) | Description | Maximum Throughput (tpv) | Limited Throughput (tpv) | 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, EU50, EU50a, EU05a, & EU06a | GR-1 | Rail - Point Source (EU01), Truck Point Source (EU02), Grain/Meal Elevator Leg Vents (EU03), and Conveyor to Meal Storage Tanks (EU04 and EU05) | 1,444,500 | 1,314,000 | 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 to render 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10 | Limited Factor | 0.723 | 0.263 | 0.263 | 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) | 1,444,500 | 1,314,000 | 0.0350 | 0.0078 | 0.0013 | lb/ton grain received via rail & truck | AP-42; Table 9.9.1-1; Railcar; 3/2003<br>AP-42; Table 9.9.1-1; Hopper Truck; 3/2003 (PM) | Unlimited factor | 2.30 | 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-1 | Grain Conveying | 4905600 | 1,314,000 | 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 to render 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10 | Limited Factor | 22.34 | 13.14 | 13.14 | a | |
| EP50F | EU50 | Fugitive | Truck Grain - Fugitive | | 1,314,000 | 0.0035 | 0.0008 | 0.0008 | lb/ton grain received | AP-42; Table 9.9.1-1; Hopper trucks; 3/2003. | Limited factor | 2.30 | 0.51 | 0.51 | 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) | | 1,314,000 | 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 and SPM No. 023-47029-00011. Emission factors are limited in order to render 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10 | Limited factor | 1.18 | 1.12 | 1.12 | a | EU07,09,16:Throughput = total beans processed (Crush Rate).<br>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 to render 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 to render 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). |
| EP16 | EU15 | CE-15 | Expander | | 584,000 | 2.2730 | 1.4780 | 1.4780 | lb/hr | Stack Tested Emission Factor from Decatur Crush Plant (0.0078 grains per DSCF) | Controlled Factor | 9.96 | 6.47 | 6.47 | | |
| EP20 | EU17 | CE-20 & 20A | Hull Grinders (2 units) | | 91,980 | ###### | 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 to render 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 | 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 to render 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 to render 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 to render 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, EU29, and EU51 | BH-2A | Meal Conveyor and Rail Receiving | | 1,314,000 | 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 to render 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10 | Limited factor | 2.63 | 2.43 | 2.43 | a | Baseline Throughput from plant records; throughputs = Crush Rate x meal-to-crush ratio. |
| EP51F | EU51 | Fugitive | Rail Receiving | | 1,095,000 | 0.0033 | 0.00080 | 0.00080 | lb/ton of meal produced | PM, PM10 emission factors from AP-42 Section 9.9; Table 9.9.1-1; for Feed shipping SCC 3-02-008-03 | Unlimited factor | 1.81 | 0.44 | 0.44 | c | |
| EP30A | **EU30 | BH-30A | Meal Storage (2 Tanks) | | 1,143,180 | ###### | 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 to render 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 | ###### | 0.00003 | 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 to render 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 | ###### | 0.00003 | 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 to render 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 | ###### | 0.00003 | 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 to render 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). |
| | EU33 | Enclosed | Enclosed Conveying System | 1,051,200 | 1,314,000 | | | | | EU33 is totally enclosed and therefore does not generate any emissions. | | | | | | |
| 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 to render 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 to render 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 | ###### | 0.00204 | 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 to render 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 = PM10 | 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 | 0.0017 | 0.0017 | 0.0017 | 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 to render 326 IAC 2-2 (PSD) not applicable, with respect to PM/PM10. Assumed PM2.5 = PM10 | Limited factor | 1.12 | 1.12 | 1.12 | a | Throughput = total beans processed (Crush Rate). |
| EP19 | EU47 | RC-2 | Silica Clay Storage | | 450 | ###### | 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 to render 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** | | **105.59** | **61.92** | **56.82** | | |
| | | | | | | | | | | **Fugitive Total** | | **15.28** | **6.72** | **1.93** | | |

*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 separately 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 stockpiled 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 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

(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 | 900 | 76.23 |
| Truck Unloading, EU02 | 900 | 76.23 |
| Grain elevator, EU03 | 900 | 76.23 |
| Conveyor, EU-04 to grain storage, EU-05 | 900 | 76.23 |
| Conveyor, EU-04a to grain storage, EU-05 | 900 | 76.23 |
| Concrete silo top vents, EU05 | 720 | 73.41 |
| Fill conveyor for EU05, EU05a | 300 | 63.00 |
| Steel storage tank vents, EU06 | 720 | 73.41 |
| Reclaim conveyor for EU06, EU06a | 300 | 63.00 |
| Sweep conveyor for EU06, EU06b | 300 | 63.00 |
| Conveyor from grain storage, EU07 | 900 | 76.23 |
| 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 | 900 | 76.23 |
| 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 |
| Truck Receiving Pit, EU50 | 900 | 76.23 |
| Truck Receiving Conveyors, EU50a | 900 | 76.23 |
| Rail Receiving Pit, EU51 | 15 | 34.09 |

(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 (EU38)**

**Company Name:** Archer Daniels Midland Company
**Address City IN Zip:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| 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))**

**Company Name:** Archer Daniels Midland Company
**Address City IN Zip:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| | Total Worst Case Emissions | | | | | | |
|---|---|---|---|---|---|---|---|
| | Pollutant | | | | | | |
| | PM | PM10 | direct PM2.5 | SO2 | Nox | VOC | CO |
| **Limited Emission in tons/yr** | **3.11** | **12.45** | **12.45** | **0.98** | **90.96** | **9.01** | **164.37** |

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 | 3.44E-03 | 1.97E-03 | 1.23E-01 | 2.95E+00 | 5.57E-03 | 3.083 |

| | 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 | 8.191E-04 | 1.802E-03 | 2.293E-03 | 6.225E-04 | 3.440E-03 | 8.977E-03 |
| | | | | **Total HAPs from NG** | | **3.09** |
| | | | | **Worst HAP from NG** | | **2.95** |

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.

**Appendix A: Emission Calculations**
**Natural Gas Combustion ( > 100 MMBtu/hr)**
**Large Industrial and Utility Boilers**

**Company Name:** Archer Daniels Midland Company
**Source Address:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit Number:** 023-47831-00011
**Reviewer:** Tamera Wessel

| Heat Input Capacity MMBtu/hr | HHV mmBtu / mmscf | Potential Throughput MMCF/yr |
|---|---|---|
| 144.0 | 1020 | 1236.7 |

| | Pollutant | | | | | | |
|---|---|---|---|---|---|---|---|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.9 | 7.6 | 7.6 | 0.6 | - | 5.5 | 84.0 |
| Emission Factor in lb/MMBtu | | | | | 0.046 | | 0.09 |
| | | | | | **see below | | |
| Potential Emission in tons/yr | 1.17 | 4.70 | 4.70 | 0.37 | 29.01 | 3.40 | 56.76 |

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
PM2.5 emission factor is condensable and filterable PM2.5 combined.
Emission Factors for NOx: Uncontrolled = 280 (pre-NSPS) or 190 (post-NSPS), Low NOx Burner = 140, Flue gas recirculation = 100 (See Table 1.4-1)
**Emission Factors for NOx and CO derived from manufacturer supplied emissions data stating NOx emissions at 30 ppm and CO emissions at 100 ppm
Note: Source will use CEMS data to show compliance with the NOx emission factor.

**Methodology**
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu; MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-01, 1-01-006-04 (AP-42 Supplement D 3/98)
Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Potential Emission (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**Hazardous Air Pollutants (HAPs)**

| | HAPs - Organics | | | | |
|---|---|---|---|---|---|
| | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
| 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 | 1.30E-03 | 7.42E-04 | 0.05 | 1.11 | 2.10E-03 |

| | HAPs - Metals | | | | |
|---|---|---|---|---|---|
| | Lead | Cadmium | Chromium | Manganese | Nickel |
| 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 | 3.09E-04 | 6.80E-04 | 8.66E-04 | 2.35E-04 | 1.30E-03 |

| | |
|---|---|
| **Potential Emission of Combined HAPs (tons/yr)** | **1.17** |
| **Potential Emission of Highest Single HAP (tons/yr)** | **1.11** **Hexane** |

**Methodology**
Methodology is the same 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.

**Appendix A: Emissions Calculations**
**Natural Gas Combustion ( ≤ 100 MMBtu/hr)**

**Company Name:** Archer Daniels Midland Company
**Source Address:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit Number:** 023-47831-00011
**Reviewer:** Tamera Wessel

| Heat Input Capacity MMBtu/hr | HHV mmBtu/mmscf | Potential Throughput MMCF/yr |
|---|---|---|
| 82.50 | 1020 | 708.5 |

| | Pollutant | | | | | | |
|---|---|---|---|---|---|---|---|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.9 | 7.6 | 7.6 | 0.6 | 100 **see below | 5.5 | 84 |
| Potential Emission in tons/yr | 0.67 | 2.69 | 2.69 | 0.21 | 35.43 | 1.95 | 29.76 |

*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

**Methodology**
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu; MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Potential Emission (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**Hazardous Air Pollutants (HAPs)**

| | HAPs - Organics | | | | |
|---|---|---|---|---|---|
| | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
| 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 | 7.4E-04 | 4.3E-04 | 2.7E-02 | 6.4E-01 | 1.2E-03 |

| | HAPs - Metals | | | | |
|---|---|---|---|---|---|
| | Lead | Cadmium | Chromium | Manganese | Nickel |
| 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 | 1.8E-04 | 3.9E-04 | 5.0E-04 | 1.3E-04 | 7.4E-04 |

| | |
|---|---|
| **Potential Emission of Combined HAPs (tons/yr)** | **6.7E-01** |
| **Potential Emission of Highest Single HAP (tons/yr)** | **6.4E-01** **Hexane** |

**Methodology**
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.

**Appendix A: Emissions Calculations**
**Natural Gas Combustion ( ≤ 100 MMBtu/hr)**

**Company Name:** Archer Daniels Midland Company
**Source Address:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit Number:** 023-47831-00011
**Reviewer:** Tamera Wessel

| Heat Input Capacity MMBtu/hr | HHV mmBtu/mmscf | Potential Throughput MMCF/yr |
|---|---|---|
| 9.99 | 1020 | 85.8 |

| | Pollutant | | | | | | |
|---|---|---|---|---|---|---|---|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.9 | 7.6 | 7.6 | 0.6 | 100 **see below | 5.5 | 84 |
| Potential Emission in tons/yr | 0.08 | 0.33 | 0.33 | 0.03 | 4.29 | 0.24 | 3.60 |

*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

**Methodology**
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu; MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Potential Emission (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**Hazardous Air Pollutants (HAPs)**

| | HAPs - Organics | | | | |
|---|---|---|---|---|---|
| | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
| 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 | 9.0E-05 | 5.1E-05 | 3.2E-03 | 7.7E-02 | 1.5E-04 |

| | HAPs - Metals | | | | |
|---|---|---|---|---|---|
| | Lead | Cadmium | Chromium | Manganese | Nickel |
| 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 | 2.1E-05 | 4.7E-05 | 6.0E-05 | 1.6E-05 | 9.0E-05 |

| | |
|---|---|
| **Potential Emission of Combined HAPs (tons/yr)** | **8.1E-02** |
| **Potential Emission of Highest Single HAP (tons/yr)** | **7.7E-02** **Hexane** |

**Methodology**
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.

**Appendix A: Emissions Calculations**
**Natural Gas 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 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| Heat Input Capacity MMBtu/hr | HHV mmBtu / mmscf | Potential Throughput MMCF/yr | Potential Throughput kgals/year |
|---|---|---|---|
| 145.0 | 1020 | 1245.3 | 9072.86 |

| | 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 | 0.0350 lb/MMBtu | 0.0054 lb/MMBtu | 0.1169 lb/MMBtu |
| Potential Emission in tons/yr | 1.18 | 4.73 | 4.73 | 0.37 | 22.23 | 3.43 | 74.24 |

NG Notes / References:
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 023-24843-00011.
All emission factors are based on normal firing.

NG Metholdology:
PM/PM10/PM2.5/SO2/Nox/VOC EF (lb/MMcf) / 1020 (mmcf/MMBtu)
EF (lb/MMBtu) =
Potential Emissions (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 (hrs/yr) /2,000 (lb/ton)

**Appendix A: Emissions Calculations**
**Natural Gas Combustion, Only (Boiler EU46)**
**MM BTU/HR >100**

**Company Name:** Archer Daniels Midland Company
**Address City IN Zip:** 2191 West County Road 0 N/S, Frankfort, Indiana 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

**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.

**Greenhouse Gas Calculations**

| | Greenhouse Gas | | |
|---|---|---|---|
| | CO2 | CH4 | N2O |
| Emission Factor in Natural Gas (lb/MMcf) | 120,000 | 2.3 | 2.2 |
| Potential Emission in tons/yr Natural Gas | 74,718 | 1 | 1 |
| Summed Potential Emissions in tons/yr Natural Gas | 74,720 | | |
| CO2e Total in tons/yr Natural Gas | 75,162 | | |
| **Worst Case** | **75,162** | | |

**Methodology**
Boiler EU46 is only permitted to burn natural gas at 145 MMBtu per hour firing
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
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.
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
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 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| | | | | | | | Potential to Emit After Issuance | |
|---|---|---|---|---|---|---|---|---|
| **Unit ID** | **Description** | | **Cooling 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 |
| *PM2.5 = $PM_{10}$ = PM (worse case) | | | | **Total Emissions from Cooling Towers (tons/yr)** | | | **1.22** | **5.33** |

**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)

**Appendix A: Emissions Calculations**
**Expander System**
**Company Name:** Archer Daniels Midland Company
**Address City IN Zip:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| 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 | 2.27 | 9.96 | 1.48 | 6.47 | 1.48 | 6.47 | 49.78 | 32.36 | 32.36 | 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

**TSD 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 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| | |
|---|---|
| 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 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

**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 of Loaded Vehicle (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 (entering plant) (one-way trip) | 15.0 | 1.0 | 15.0 | 40.0 | 600.0 | 478 | 0.091 | 1.4 | 495.7 |
| Oil Truck (leaving plant) (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 tr | 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-Beans (entering plant) (one-way tr | 250.0 | 1.0 | 250.0 | 40.0 | 10000.0 | 2783 | 0.527 | 131.8 | 48096.4 |
| Raw Material-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 |
| 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 |
| Dust Control Efficiency = | 50% | 50% | 50% | (pursuant to control measures outlined in fugitive dust control plan) |

| Process | Mitigated PTE of PM (Before Control) (tons/yr) | Mitigated PTE of PM10 (Before Control) (tons/yr) | Mitigated PTE of PM2.5 (Before Control) (tons/yr) | Mitigated PTE of PM (After Control) (tons/yr) | Mitigated PTE of PM10 (After Control) (tons/yr) | Mitigated PTE of PM2.5 (After Control) (tons/yr) |
|---|---|---|---|---|---|---|
| Oil Truck (entering plant) (one-way trip) | 0.08 | 0.02 | 0.00 | 0.04 | 0.01 | 0.00 |
| Oil Truck (leaving plant) (one-way trip) | 0.19 | 0.04 | 0.01 | 0.10 | 0.02 | 0.00 |
| Meal Transportation (entering plant) (one-way tr | 0.82 | 0.16 | 0.04 | 0.41 | 0.08 | 0.02 |
| Meal Transportation (leaving plant) (one-way trip | 0.38 | 0.08 | 0.02 | 0.19 | 0.04 | 0.01 |
| Raw Material-Beans (entering plant) (one-way tr | 7.75 | 1.55 | 0.38 | 3.88 | 0.78 | 0.19 |
| Raw Material-Beans (leaving plant) (one-way trip | 3.13 | 0.63 | 0.15 | 1.57 | 0.31 | 0.08 |
| **Totals** | **12.35** | **2.47** | **0.61** | **6.18** | **1.24** | **0.30** |

**Methodology**

| | |
|---|---|
| Total Weight driven per day (ton/day) | = [Maximum Weight of Loaded Vehicle (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 (Before Control) (tons/yr) | = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs) |
| Mitigated PTE (After Control) (tons/yr) | = [Mitigated PTE (Before Control) (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 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

**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)

| Type | Maximum number of vehicles | Number of one-way trips per day per vehicle | Maximum trips per day (trip/day) | Maximum Weight of Loaded Vehicle (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) |
|---|---|---|---|---|---|---|---|---|---|
| Raw Material - Beans (entering plant) (one-way trip) | 250.0 | 1.0 | 250.0 | 40.0 | 10000.0 | 387 | 0.073 | 18.3 | 6688.2 |
| Raw Material - Beans (leaving plant) (one-way trip) | 250.0 | 1.0 | 250.0 | 15.0 | 3750.0 | 200 | 0.038 | 9.5 | 3456.4 |
| | | **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 | |
|---|---|---|---|---|
| where k = | 4.9 | 1.5 | 0.15 | lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads) |
| s = | 4.8 | 4.8 | 4.8 | % = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Sand/Gravel Processing Plan |
| a = | 0.7 | 0.9 | 0.9 | = constant (AP-42 Table 13.2.2-2 for Industrial Roads) |
| W = | 27.5 | 27.5 | 27.5 | tons = average vehicle weight |
| b = | 0.45 | 0.45 | 0.45 | = constant (AP-42 Table 13.2.2-2 for Industrial Roads) |

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365] (Equation 2 from AP-42 13.2.2)
Mitigated Emission Factor, Eext = E * [(365 - P)/365]
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

| | PM | PM10 | PM2.5 | |
|---|---|---|---|---|
| Unmitigated Emission Factor, Ef = | 6.99 | 1.78 | 0.18 | lb/mile |
| Mitigated Emission Factor, Eext = | 4.60 | 1.17 | 0.12 | lb/mile |
| Dust Control Efficiency = | 50% | 50% | 50% | (pursuant to control measures outlined in fugitive dust control plan) |

| Process | Mitigated PTE of PM (Before Control) (tons/yr) | Mitigated PTE of PM10 (Before Control) (tons/yr) | Mitigated PTE of PM2.5 (Before Control) (tons/yr) | Mitigated PTE of PM (After Control) (tons/yr) | Mitigated PTE of PM10 (After Control) (tons/yr) | Mitigated PTE of PM2.5 (After Control) (tons/yr) |
|---|---|---|---|---|---|---|
| Vehicle (entering plant) (one-way trip) | 15.38 | 3.92 | 0.39 | 7.69 | 1.96 | 0.20 |
| Vehicle (leaving plant) (one-way trip) | 7.95 | 2.03 | 0.20 | 3.97 | 1.01 | 0.10 |
| **Totals** | **23.32** | **5.94** | **0.59** | **11.66** | **2.97** | **0.30** |

**Methodology**

| | |
|---|---|
| Total Weight driven per day (ton/day) | = [Maximum Weight of Loaded Vehicle (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)] |
| Mitigated PTE (Before Control) (tons/yr) | = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs) |
| Mitigated PTE (After Control) (tons/yr) | = (Mitigated PTE (Before Control) (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

**Emissions Calculations**
**Stack Test Data**

**Company Name:** Archer Daniels Midland Company
**Address City IN Zip:** 2191 West County Road 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| 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 meal | 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 0 N/S, Frankfort, IN 46041
**Permit No./Plt ID:** 023-47831-00011
**Reviewer:** Tamera Wessel

| 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. % | |

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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**Eric J. Holcomb**
*Governor*
**Brian C. Rockensuess**
*Commissioner*

**SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED**

TO: Austin Jarvis
*Archer Daniels Midland Company*
2191 West County Road 0 N/S
Frankfort, Indiana 46041

DATE: June 26, 2024

FROM: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Title V Minor Source Modification
023-47831-00011

This notice is to inform you that a final decision has been issued for the air permit application referenced above.

Our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person. In addition, the Notice of Decision has been sent to the OAQ Permits Branch Interested Parties List and, if applicable, the Consultant/Agent and/or Responsible Official/Authorized Individual.

**The final decision and supporting materials are available electronically**; the original signature page is enclosed for your convenience. The final decision and supporting materials available electronically at:

**IDEM's online searchable database:** http://www.in.gov/apps/idem/caats/ . Choose Search Option **by Permit Number**, then enter permit 47831

and

**IDEM's Virtual File Cabinet (VFC):** https://www.in.gov/idem. Enter VFC in the search box, then search for permit documents using a variety of criteria, such as Program area, date range, permit #, Agency Interest Number, or Source ID.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, or have difficulty accessing the documents online, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

**Eric J. Holcomb**
*Governor*

**Brian C. Rockensuess**
*Commissioner*

**June 26, 2024**
**Archer Daniels Midland Company**
**023-47831-00011**

To: Interested Parties

This notice is to inform you that a final decision has been issued for the air permit application referenced above. This notice is for informational purposes only. You are not required to take any action.

You are receiving this notice because you asked to be on IDEM's notification list for this company and/or county; or because your property is nearby the company being permitted; or because you represent a local/regional government entity.

The enclosed Notice of Decision Letter provides additional information about the final permit decision.

The final decision and supporting materials are available electronically at:

IDEM's online searchable database: http://www.in.gov/apps/idem/caats/ . Choose Search Option by Permit Number, then enter permit 47831

and

IDEM's Virtual File Cabinet (VFC): https://www.in.gov/idem. Enter VFC in the search box, then search for permit documents using a variety of criteria, such as Program area, date range, permit #, Agency Interest Number, or Source ID.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit.

**Please Note:** *If you would like to be removed from the Air Permits mailing list, please contact Joanne Smiddie-Brush with the Air Permits Administration Section at 1-800-451-6027, ext. 3-0185 or via e-mail at JBRUSH@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
Final Interested Parties Cover Letter 10/13/2023

# Mail Code 61-53

| | | | |
|---|---|---|---|
| IDEM Staff | JJACKSON 6/26/2024<br>Archer Daniels Midland Company 023-47831-00011 (final) | | AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING |
| Name and address of Sender | ▶ | Indiana Department of Environmental Management<br>Office of Air Quality – Permits Branch<br>100 N. Senate<br>Indianapolis, IN 46204 | Type of Mail:<br>**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<br>Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | Austin Jarvis Archer Daniels Midland Company 2191 W CR 0 N/S Frankfort IN 46041 (Source CAATS) Sent Via UPS Campus Ship | | | | | | | | | |
| 2 | | Ryan Pitzer Plant Manager Archer Daniels Midland Company 2191 W CR 0 N/S Frankfort IN 46041 *(RO CAATS)* | | | | | | | | | |
| 3 | | Frankfort City Council and Mayors Office 301 E Clinton St Frankfort IN 46041 *(Local Official)* | | | | | | | | | |
| 4 | | Clinton County Health Department 1234 Rossville Ave, Ste B Frankfort IN 46041 *(Health Department)* | | | | | | | | | |
| 5 | | Clinton County Board of Commissioners 125 Courthouse Square Frankfort IN 46041-1942 *(Local Official)* | | | | | | | | | |
| 6 | | Eric Sulita Burns & McDonnell 200 W Adams Ste 2700 Chicago IL 60606 *(Consultant)* | | | | | | | | | |
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