



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: July 20, 2007
RE: ADM Grain Company / 017-23897-00017
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot 03/23/06



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100 North Senate Avenue
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**NEW SOURCE REVIEW (NSR) AND
FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR QUALITY**

**ADM Grain Company – Logansport Terminal
2626 South 275 West
Logansport, Indiana 46947**

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

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

Indiana statutes from IC 13 and rules from 326 IAC, quoted 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 FESOP under 326 IAC 2-8.

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 2-8 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 new source review requirements and is intended to fulfill the new source review procedures and permit revision requirements pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

Operation Permit No.: F017-23897-00017	
Issued by:Original signed by Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date:July 20, 2007 Expiration Date:July 20, 2012

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.2 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 2-8-3(b)]

The Permittee owns and operates a stationary country grain elevator.

Source Address:	2626 South 275 West, Logansport, Indiana 46947
Mailing Address:	1001 N. Brush College Road, Decatur, Illinois 62521
General Source Phone:	(217) 424-5200
SIC Code:	5153
Source Location Status:	Cass
Source Status:	Attainment for all criteria pollutants Federally Enforceable State Operating Permit (FESOP) Minor Source under PSD Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

- (a) One (1) rail pit and screw auger reclaim system, rated at 5,000 bushels per hour;
- (b) One (1) truck loadout (located over Pit No. 3), with a maximum capacity of 7,000 bushels per hour;
- (c) Two (2) side draw truck loadout spouts;
- (d) One (1) rail loadout with telescoping spout, enclosed by shed;
- (e) Thirty-seven (37) concrete storage silos, with a maximum total storage capacity of 1,199,192 bushels;
- (f) Six (6) steel bins, with a maximum total storage capacity of 2,747,768 bushels;
- (g) Nine (9) belts serving the steel bins, each with a maximum capacity of 20,000 bushels per hour;
- (h) Three (3) temporary storage piles with conveyors, and one (1) temporary storage pile filled by a portable auger with a total maximum storage capacity of 6,700,000 bushels per year;
- (i) Two (2) natural gas-fired column grain dryers, identified as Dryer #1 and Dryer #2, each rated at 20.9 million British thermal units (MMBtu) per hour, with a maximum capacity of processing 7,000 and 4,000 bushels of grain per hour, respectively;
- (j) One (1) wet leg serving Dryers #1 and #2, with a maximum capacity of 15,000 bushels per hour;

- (k) Four (4) receiving pits, identified as Pits #1 through #4, Pits #1 and #2 are enclosed by sheds with particulate emissions controlled by one (1) baghouse, identified as F1, exhausting through one (1) stack (F1), and Pits #3 and #4 with particulate emissions controlled by one (1) baghouse, identified as F2, exhausting through one (1) stack (F2);
- (l) One (1) enclosed receiving conveyor, serving Pits #1 and #2, with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F1, exhausting through one (1) stack (F1);
- (m) One (1) receiving leg, serving Pits #1 and #2, with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (n) One (1) receiving leg, serving Pit #3, with a maximum capacity of 18,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (o) One (1) receiving leg, serving Pit #4, with a maximum capacity of 18,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (p) Two (2) stationary enclosed cleaners, each with a maximum capacity of 22,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (q) Two (2) enclosed conveyors, serving the concrete silos, each with a maximum capacity of 35,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (r) One (1) enclosed conveyor, serving the concrete silos, with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (s) One (1) enclosed distributor, serving the concrete silos, with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (t) Two (2) enclosed distributors, serving the concrete silos, each with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (u) One (1) enclosed reclaim conveyor, serving the concrete silos, with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (v) One (1) dry leg, serving Dryers #1 and #2, with a maximum capacity of 18,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (w) One (1) shipping leg, with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (x) One (1) enclosed shipping conveyor, with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);

- (y) One (1) enclosed reclaim conveyor, serving five (5) of the steel bins (Steel Bins A through E), with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (z) One (1) reclaim conveyor, serving one (1) of the steel bins (Steel Bin F), with a maximum capacity of 20,000 bushels per hour, particulate emissions are controlled by one (1) existing baghouse identified as F4, exhausting through one (1) stack (F4).
- (aa) One (1) crossover conveyor, serving one (1) of the steel bins (Steel Bin F), with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, one (1) existing baghouse, identified as F4, exhausting through one (1) stack (F4).
- (bb) One (1) baghouse, identified as F5, which receives collected dust from baghouses F2 and F3, exhausting through one (1) stack (F5); and
- (cc) Unpaved roads and parking lots with public access.

The source has a maximum throughput of 40,000,000 bushels per year, therefore, the maximum throughput to grain receiving, grain shipping, grain drying, and grain cleaning is 40,000,000 bushels of grain per year. The headhouse and internal handling operations have a maximum throughput of 2 times the maximum grain throughput because the grain is typically handled more than once.

A.3 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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 2-8-4(2)][326 IAC 2-1.1-9.5]

- (a) This permit, FESOP 017-23897-00017, 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, 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 2-8-6]

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 2-8-4(4)]

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 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ, may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.9 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.10 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

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

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

- (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 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.11 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.12 Emergency Provisions [326 IAC 2-8-12]

- (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, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes 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 No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-0178 (ask for Compliance Section)
Facsimile No.: 317-233-6865

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

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

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

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

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

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-3(c)(6) 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 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) 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.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

- (a) All terms and conditions of permits established prior to F017-23897-00017 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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 2-8-3(h) and 326 IAC 2-8-9.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

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

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

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

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP 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 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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 2-8-8(a)]
- (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 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(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 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (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 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 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 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without 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 approval required by 326 IAC 2-8-11.1 has been obtained;

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

(4) The Permittee notifies the:

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). 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 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(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 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(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 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) 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 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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 FESOP 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, at reasonable times, 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 at reasonable times, 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, at reasonable times, 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 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][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) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][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

Emissions Limitations and Standards [326 IAC 2-8-4(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 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty five (25) tons per twelve (12) consecutive month period.

(b) The potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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

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

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

C.4 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.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

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

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

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

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

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

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 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 certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within forty five (45) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within forty five (45), the Permittee may extend the compliance schedule related to the equipment for an additional forty five (45) days provided the Permittee notifies:

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

in writing, prior to the end of the initial forty five (45) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

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

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

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.14 Risk Management Plan [326 IAC 2-8-4] [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.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records;
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance 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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be 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.

Stratospheric Ozone Protection

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

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

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) rail pit and screw auger reclaim system, rated at 5,000 bushels per hour;
- (b) One (1) truck loadout (located over Pit No. 3), with a maximum capacity of 7,000 bushels per hour;
- (c) Two (2) side draw truck loadout spouts;
- (d) One (1) rail loadout with telescoping spout, enclosed by shed;
- (e) Thirty-seven (37) concrete storage silos, with a maximum total storage capacity of 1,199,192 bushels;
- (f) Six (6) steel bins, with a maximum total storage capacity of 2,747,768 bushels;
- (g) Nine (9) belts serving the steel bins, each with a maximum capacity of 20,000 bushels per hour;
- (h) Three (3) temporary storage piles with conveyors, and one (1) temporary storage pile filled by a portable auger with a total maximum storage capacity of 6,700,000 bushels per year;
- (i) Two (2) natural gas-fired column grain dryers, identified as Dryer #1 and Dryer #2, each rated at 20.9 million British thermal units (MMBtu) per hour, with a maximum capacity of processing 7,000 and 4,000 bushels of grain per hour, respectively;
- (j) One (1) wet leg serving Dryers #1 and #2, with a maximum capacity of 15,000 bushels per hour;
- (k) Four (4) receiving pits, identified as Pits #1 through #4, Pits #1 and #2 are enclosed by sheds with particulate emissions controlled by one (1) baghouse, identified as F1, exhausting through one (1) stack (F1), and Pits #3 and #4 with particulate emissions controlled by one (1) baghouse, identified as F2, exhausting through one (1) stack (F2);
- (l) One (1) enclosed receiving conveyor, serving Pits #1 and #2, with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F1, exhausting through one (1) stack (F1);
- (m) One (1) receiving leg, serving Pits #1 and #2, with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (n) One (1) receiving leg, serving Pit #3, with a maximum capacity of 18,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (o) One (1) receiving leg, serving Pit #4, with a maximum capacity of 18,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (p) Two (2) stationary enclosed cleaners, each with a maximum capacity of 22,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);

- (q) Two (2) enclosed conveyors, serving the concrete silos, each with a maximum capacity of 35,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (r) One (1) enclosed conveyor, serving the concrete silos, with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (s) One (1) enclosed distributor, serving the concrete silos, with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (t) Two (2) enclosed distributors, serving the concrete silos, each with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (u) One (1) enclosed reclaim conveyor, serving the concrete silos, with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (v) One (1) dry leg, serving Dryers #1 and #2, with a maximum capacity of 18,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (w) One (1) shipping leg, with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (x) One (1) enclosed shipping conveyor, with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (y) One (1) enclosed reclaim conveyor, serving five (5) of the steel bins (Steel Bins A through E), with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (z) One (1) reclaim conveyor, serving one (1) of the steel bins (Steel Bin F), with a maximum capacity of 20,000 bushels per hour, particulate emissions are controlled by one (1) existing baghouse identified as F4, exhausting through one (1) stack (F4);
- (aa) One (1) crossover conveyor, serving one (1) of the steel bins (Steel Bin F), with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, one (1) existing baghouse, identified as F4, exhausting through one (1) stack (F4);
- (bb) One (1) baghouse, identified as F5, which receives collected dust from baghouses F2 and F3, exhausting through one (1) stack (F5); and
- (cc) Unpaved roads and parking lots with public access.

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

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 FESOP Limit [326 IAC 2-8-4]

The source will limit PM₁₀ emissions to less than 100 tons per year as follows:

Process	PM ₁₀ Emission Limitation (lb/ton of grain)	Grain Throughput Limit (Tons/12 consecutive month period)
Receiving Unit including Pit #1 through Pit #4 and Receiving Conveyor	0.000334	1,160,000*
Headhouse and Internal Handling unit	0.00034	2,320,000*
Rail or Truck Shipping	0.0029	1,160,000*
Grain Dryer (Dryer #1 and Dryer #2)	0.055	600,000
Grain Cleaning Unit	0.000188	1,160,000*

*Note: Operating at maximum throughput.

Compliance with the above limits, combined with the potential to emit of PM₁₀ emissions from natural gas combustion, temporary grain storage piles, and unpaved roadways, will limit the source-wide PM₁₀ emissions to less than 100 tons per year and the render the requirements of 326 IAC 2-7 and 326 IAC 2-2 (PSD) not applicable.

D.1.2 PSD Minor Limitations [326 IAC 2-2]

The source will limit PM emissions to less than 250 tons per year as follows:

Process	PM Emission Limitation (lb/ton of grain)	Grain Throughput Limit (Tons/12 consecutive month period)
Receiving Unit including Pit #1 through Pit #4 and Receiving Conveyor	0.001075	1,160,000*
Headhouse and Internal Handling unit	0.00061	2,320,000*
Rail or Truck Shipping	0.0086	1,160,000*
Grain Dryer (Dryer #1 and Dryer #2)	0.22	600,000
Grain Cleaning Unit	0.00075	1,160,000*

*Note: Operating at maximum throughput.

Compliance with the above limits, combined with the potential to emit of particulate matter emissions from natural gas combustion, temporary grain storage piles, and unpaved roadways, will limit the source-wide PM emissions to less than 250 tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable.

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the facilities listed below shall be limited as follows:

The pounds per hour limitation was calculated with the following equation:

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

Emission Unit	Process Weight Rate (tons per hour)	Allowable Particulate Emissions (lb/hr)
Grain Receiving		
Rail pit and screw auger reclaim system	145	55.09
Truck loadout (located over Pit No. 3)	203	58.67
Headhouse and Internal Handling		
Nine (9) belts serving the steel bins	580 each	70.75 each
One (1) wet leg serving Dryers #1 and #2	435	67.29
Grain Drying		
Dryer #1	203	53.67
Dryer #2	116	52.78

Compliance Determination Requirements

D.1.4 Particulate Control

-
- (a) In order to comply with conditions D.1.1, D.1.2 and D.1.12, the baghouses (F1 through F5) for particulate control shall be in operation and control emissions from the receiving Pits #1 through #4, the receiving conveyor serving Pits #1 and #2, the receiving legs serving Pits #1 through #4, the grain cleaning, and the internal handling operations at all times that these facilities are in operation.
 - (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

Within 180 days after issuance of this permit F017-23897-00017, in order to determine compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM and PM₁₀ emission stack testing for the grain dryers, receiving units and receiving conveyors, headhouse and internal handling unit, rail or truck shipping, and grain cleaning unit, utilizing the methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.1.6 Visible Emissions Notations

- (a) Daily visible emission notations of the baghouses F1 through F5 stack exhausts shall be performed during normal daylight operations when combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.1.7 Parametric Monitoring

The Permittee shall record the pressure drop across each of the baghouses used in conjunction with the receiving Pits #1 through #4, the receiving conveyor serving Pits #1 and #2, the receiving legs serving Pits #1 through #4, the grain cleaning, and the internal handling operations, at least once per day when the receiving Pits #1 through #4, the receiving conveyor serving Pits #1 and #2, the receiving legs serving Pits #1 through #4, the grain cleaning, and the internal handling operations are in operation. When for any one reading, the pressure drop across any one (1) of the baghouses is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.8 Broken or Failed Bag Detection

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

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain monthly records of the amount of grain input to the grain dryer.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain a daily record of visible emission notations for each of the stack exhausts for baghouses F1 through F5. The Permittee shall include in each daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (c) To document compliance with Condition D.1.7, the Permittee shall maintain a daily record of pressure drop reading across each of the baghouses F1 through F5. The Permittee shall include in each daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter month period being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

New Source Performance Standards (NSPS) [326 IAC 12]

D.1.11 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

- (a) The provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the Pit #1 through #4 and Receiving Conveyor, Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors, and Steel Bin Handling except when otherwise specified in 40 CFR 60, Subpart DD.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

D.1.12 New Source Performance Standards for Grain Elevators Requirements [40 CFR Part 60, Subpart DD] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart DD, the Permittee shall comply with the provisions of New Source Performance Standards for Grain Elevators, which are incorporated by reference as 326 IAC 12, for the truck and railcar unloading and loading stations and all grain handling operations, which includes headhouse and internal handling and grain cleaning as follows:

§ 60.300 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under §60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after August 3, 1978, is subject to the requirements of this part.

§ 60.301 Definitions.

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

(a) Grain means corn, wheat, sorghum, rice, rye, oats, barley, and soybeans.

(b) Grain elevator means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded.

(c) Grain terminal elevator means any grain elevator which has a permanent storage capacity of more than 88,100 m³ (ca. 2.5 million U.S. bushels), except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.

(d) Permanent storage capacity means grain storage capacity which is inside a building, bin, or silo.

(e) Railcar means railroad hopper car or boxcar.

(f) Grain storage elevator means any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant which has a permanent grain storage capacity of 35,200 m³ (ca. 1 million bushels).

(g) Process emission means the particulate matter which is collected by a capture system.

(h) Fugitive emission means the particulate matter which is not collected by a capture system and is released directly into the atmosphere from an affected facility at a grain elevator.

(i) Capture system means the equipment such as sheds, hoods, ducts, fans, dampers, etc. used to collect particulate matter generated by an affected facility at a grain elevator.

(j) Grain unloading station means that portion of a grain elevator where the grain is transferred from a truck, railcar, barge, or ship to a receiving hopper.

(k) Grain loading station means that portion of a grain elevator where the grain is transferred from the elevator to a truck, railcar, barge, or ship.

(l) Grain handling operations include bucket elevators or legs (excluding legs used to unload barges or ships), scale hoppers and surge bins (garners), turn heads, scalpings, cleaners, trippers, and the headhouse and other such structures.

(m) Column dryer means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in one or more continuous packed columns between two perforated metal sheets.

(n) Rack dryer means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in a cascading flow around rows of baffles (racks).

(o) Unloading leg means a device which includes a bucket-type elevator which is used to remove grain from a barge or ship.

§ 60.302 Standard for particulate matter.

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

- (1) Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).
- (2) Exhibits greater than 0 percent opacity.

(c) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from:

- (1) Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.
- (2) Any grain handling operation which exhibits greater than 0 percent opacity.
- (3) Any truck loading station which exhibits greater than 10 percent opacity.

§ 60.303 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (c) of this section.

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.302 as follows:

- (1) Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.
- (2) Method 2 shall be used to determine the ventilation volumetric flow rate.
- (3) Method 9 and the procedures in §60.11 shall be used to determine opacity.

(c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

- (1) For Method 5, Method 17 may be used.

D.1.13 One Time Deadlines Relating to New Source Performance Standards for Grain Elevators [40 CFR 60, Subpart DD]

The Permittee shall comply with the following requirements by the dates listed:

Requirement	Rule Cite	Affected Facility	Deadline
Initial Performance Test	40 CFR 60.303 and 40 CFR 60.8	Pit #1 through #4 and Receiving Conveyor, Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors, and Steel Bin Handling	Initial Performance test was conducted on September 24, 2004.
Notification of Date of Reconstruction	40 CFR 60.7(a)(1)	Pit #1 through #4 and Receiving Conveyor, Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors, and Steel Bin Handling	No later than 30 days after reconstruction
Notification of Date of Actual Startup	41 CFR 60.7(a)(3)	Pit #1 through #4 and Receiving Conveyor, Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors, and Steel Bin Handling	Within 15 days of startup date
Notification of any Physical or Operational Change to an existing facility not exempt under 40 CFR 60.14(e)	41 CFR 60.7(a)(4)	Pit #1 through #4 and Receiving Conveyor, Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors, and Steel Bin Handling	Within 60 days as soon as practicable before change is commenced.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: **ADM Grain Company – Logansport Terminal**
Source Address: **2626 South 275 West, Logansport, Indiana 46947**
Mailing Address: **2626 South 275 West, Logansport, Indiana 46947**
FESOP No.: **017-23897-00017**

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:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: **ADM Grain Company – Logansport Terminal**
Source Address: **2626 South 275 West, Logansport, Indiana 46947**
Mailing Address: **2626 South 275 West, Logansport, Indiana 46947**
FESOP No.: **017-23897-00017**

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: **ADM Grain Company – Logansport Terminal**
Source Address: **2626 South 275 West, Logansport, Indiana 46947**
Mailing Address: **2626 South 275 West, Logansport, Indiana 46947**
FESOP No.: **017-23897-00017**
Facility: Grain Dryers
Parameter: Total Grain Processed
Limit: Less than 600,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: **ADM Grain Company – Logansport Terminal**
Source Address: **2626 South 275 West, Logansport, Indiana 46947**
Mailing Address: **2626 South 275 West, Logansport, Indiana 46947**
FESOP No.: **017-23897-00017**

Months: _____ to _____ Year: _____

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<p><input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.</p>	
<p><input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD</p>	
<p>Permit Requirement (specify permit condition #)</p>	
<p>Date of Deviation:</p>	<p>Duration of Deviation:</p>
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	
<p>Permit Requirement (specify permit condition #)</p>	
<p>Date of Deviation:</p>	<p>Duration of Deviation:</p>
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality**

Addendum to the
Technical Support Document for a New Source Review (NSR) and Federally
Enforceable State Operating Permit

Source Name:	ADM Grain Company – Logansport Terminal
Source Location:	2626 South 275 West, Logansport, Indiana 46947
County:	Cass
SIC Code:	5153
Permit No.:	F017-23897-00017
Permit Reviewer:	Surya Ramaswamy / EVP

On March 29, 2007, the Office of Air Quality (OAQ) had a notice published in the Pharos Tribune, Logansport, Indiana, stating that ADM Grain Company – Logansport Terminal had applied for a New Source Review (NSR) and Federally Enforceable Source Operating Permit (FESOP) to operate a stationary country grain elevator. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On December 13, 2006, Beth York at ADM Grain Company – Logansport Terminal submitted comments on the proposed FESOP. The summary of the comments and corresponding responses is as follows (bolded language has been added and the language with a line through it has been deleted):

Comment 1:

The source is replacing the 4,000 bushels of grain per hour dryer with a 7,000 bushels of grain per hour dryer and replacing the old leg with a new leg. In addition, the maximum throughput used in the permit provided by the source was incorrect. The source has provided the correct maximum throughput which is 40,000,000 bushels instead of the previously used value of 28,000,000 bushels.

Response 1:

The following changes have been made to the Permit and Technical Support Document as a result of Comment 1:

Change 1

Condition A.2 has been revised to reflect the replacement of the grain dryer and the leg and the correct maximum throughput of the source.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

.....

- (i) Two (2) natural gas-fired column grain dryers, identified as Dryer #1 and Dryer #2, each rated at 20.9 million British thermal units (MMBtu) per hour, ~~each~~ with a maximum capacity of processing **7,000 and 4,000** bushels of grain per hour, **respectively**;
- (j) One (1) wet leg serving Dryers #1 and #2, with a maximum capacity of ~~40,000~~ **15,000** bushels per hour;

....

The source has a maximum throughput of ~~28,000,000~~ **40,000,000** bushels per year, therefore, the maximum throughput to grain receiving, grain shipping, grain drying, and grain cleaning is ~~28,000,000~~ **40,000,000** bushels of grain per year. The headhouse and internal handling operations have a maximum throughput of 2 times the maximum grain throughput because the grain is typically handled more than once.

Change 2

The above listed changes will affect both before and after control PM and PM₁₀ emissions, 326 IAC 6-3-2 allowable emissions, and the FESOP and PSD Minor limits in Section of the permit. The following changes have been made to the Technical Support Document as requested. The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the technical support document that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The Technical Support Document is revised in this addendum as shown below (**bolded** language has been added, the language with a ~~line~~ through it has been deleted).

Potential to Emit

Pursuant to 326 IAC 2-7-1(29), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, 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, the department, or the appropriate local air pollution control agency.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential to Emit (tons/yr)
PM	342.23 413.57
PM ₁₀	104.65 136.51
SO ₂	0.11
VOC	1.01
CO	15.38
NO _x	18.31
HAPs	Potential to Emit (tons/yr)
Hexane	less than 10
Formaldehyde	less than 10
TOTAL	less than 25

The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀ is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.

Potential to Emit After Issuance

The source has opted to be a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/emission unit	Potential To Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Grain Receiving ⁽¹⁾	0.62	0.14 0.19	0.00	0.00	0.00	0.00	0.00
Headhouse and Internal Handling ⁽¹⁾	0.71	0.28 0.39	0.00	0.00	0.00	0.00	0.00
Rail or Truck Shipping ⁽¹⁾	4.99	1.18 1.68	0.00	0.00	0.00	0.00	0.00
Grain Cleaning ⁽¹⁾	0.44	0.08 0.11	0.00	0.00	0.00	0.00	0.00
Pile Conveying	5.93	3.30	0.00	0.00	0.00	0.00	0.00
Pile Loading	3.40	0.76	0.00	0.00	0.00	0.00	0.00
Storage Bin Vents	4.06 5.80	1.02 1.46	0.00	0.00	0.00	0.00	0.00
Grain Drying ⁽²⁾	66.00	16.50	0.00	0.00	0.00	0.00	0.00
Combustion	0.35	1.39	0.11	1.01	15.38	18.31	0.33 (Hexane) 0.35 (Total)
Unpaved Roadways – Fugitive	29.81 11.60	6.61 2.96	0.00	0.00	0.00	0.00	0.00
Total Emissions	141.35 99.84	31.25 28.74	0.11	1.01	15.38	18.31	Single < 10 Total < 25

⁽¹⁾ Emission units limited based on 326 IAC 2-2 and 326 IAC 2-8-4.

⁽²⁾ Annual throughput is limited to less than 600,000 tons per year.

Change 3

The existing PM/PM₁₀ emission limitations were based on 40 CFR Part 60, Subpart DD, however, these limitations are not sufficient to comply with 326 IAC 2-8-4 and render the requirements of 326 IAC 2-2 not applicable. Therefore, the PM/PM₁₀ limits have been revised to be listed in terms of pounds per ton of grain emission factor and corresponding throughput limit for each operation as follows:

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source, originally constructed in 1985, is not subject to this rule. Pursuant to CP 017-8604-00017, issued on June 19, 1998, emissions of all pollutants from the existing equipment at the source at that time and the new equipment added under that permit were less than the PSD major source threshold of 250 tons per year. All modifications to this source after the rule applicability date of August 7, 1977, had potential emissions less than the PSD major modification thresholds.

~~This source is subject to the NSPS, 40 CFR 60.300 – 60.304, Subpart DD for grain elevators. Pursuant to this rule,~~

- ~~(a) The PM/PM₁₀ emissions from receiving pits #1 and #2 and receiving conveyor, controlled by baghouse F1 based on an exhaust rate of 25,000 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 2.14 pounds per hour.~~
- ~~(b) The PM/PM₁₀ emissions from receiving pits #3 and #4 and receiving conveyor, controlled by baghouse F2 based on an exhaust rate of 22,000 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 1.89 pounds per hour.~~

- (c) ~~The PM/PM₁₀ emissions from internal handling, shipping and receiving legs, reclaim, transfer and shipping conveyors, controlled by baghouse F3 based on an exhaust rate of 27,000 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 2.34 pounds per hour.~~
- (d) ~~The PM/PM₁₀ emissions from steel bin handling, controlled by baghouse F4 based on an exhaust rate of 10,000 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 0.86 pounds per hour.~~
- (e) ~~The PM/PM₁₀ emissions from baghouse F2 and baghouse F3, controlled by baghouse F5 based on an exhaust rate of 700 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 0.06 pounds per hour.~~

The above limits are equivalent to 31.80 tons per year of PM/PM₁₀ emissions (7.26 lbs per hour) (see Appendix A, page 3 of 6, for detailed calculations) from grain receiving, headhouse and internal handling, grain shipping, and grain cleaning processes. These emissions combined with controlled particulate matter emissions from the grain dryer (see 326 IAC 2-8-4 discussion below), natural combustion, temporary grain storage piles, and unpaved roadways are equal to 141.35 tons per year. Since the sourcewide potential PM/PM₁₀ emissions are limited to less than 250 tons per year after application of all federally enforceable emission limits, the requirements of 326 IAC 2-2 (PSD) do not apply.

The source will limit PM emissions to less than 250 tons per year as follows:

Process	PM Emission Limitation (lb/ton of grain)	Grain Throughput Limit (Tons/12 consecutive month period)
Receiving Unit including Pit #1 through Pit #4 and Receiving Conveyor	0.001075	1,160,000*
Headhouse and Internal Handling unit	0.00061	2,320,000*
Rail or Truck Shipping	0.0086	1,160,000*
Grain Dryer (Dryer #1 and Dryer #2)	0.22	600,000
Grain Cleaning Unit	0.00075	1,160,000*

*Note: Operating at maximum throughput.

Compliance with the above limits, combined with the potential to emit of particulate matter emissions from natural gas combustion, temporary grain storage piles, and unpaved roadways, will limit the source-wide PM emissions to less than 250 tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable. Potential emission of all the other regulated pollutants are below 250 tons per year.

326 IAC 2-8-4 (FESOP)

The source will limit PM₁₀ emissions to less than 100 tons per year (22.83 lb/hr) as shown below:

- (a) ~~The amount of annual throughput to the grain dryer shall not exceed 600,000 tons per twelve (12) consecutive month period.~~
- (b) ~~The PM₁₀ emissions from the receiving units shall be limited to 0.0334 pounds per ton of grain.~~
- (c) ~~The PM₁₀ emissions from the headhouse and internal handling units shall be limited to 0.034 pounds per ton of grain.~~

- (d) ~~The PM₁₀ emissions from the rail or truck shipping shall be limited to 0.029 pounds per ton of grain.~~
- (e) ~~The PM₁₀ emissions from the grain cleaning units shall be limited to 0.019 pounds per ton of grain.~~

These limits are required to limit the source-wide potential to emit PM₁₀ to below 100 tons per year. This will render 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-2 not applicable.

The source will limit PM₁₀ emissions to less than 100 tons per year as follows:

Process	PM ₁₀ Emission Limitation (lb/ton of grain)	Grain Throughput Limit (Tons/12 consecutive month period)
Receiving Unit including Pit #1 through Pit #4 and Receiving Conveyor	0.000334	1,160,000*
Headhouse and Internal Handling unit	0.00034	2,320,000*
Rail or Truck Shipping	0.0029	1,160,000*
Grain Dryer (Dryer #1 and Dryer #2)	0.055	600,000
Grain Cleaning Unit	0.000188	1,160,000*

*Note: Operating at maximum throughput.

Compliance with the above limits, combined with the potential to emit of PM₁₀ emissions from natural gas combustion, temporary grain storage piles, and unpaved roadways, will limit the source-wide PM₁₀ emissions to less than 100 tons per year and the render the requirements of 326 IAC 2-7 and 326 IAC 2-2 (PSD) not applicable.

Change 4

Due to the replacement of 4,000 bushels of grain per hour dryer with a 7,000 bushels of grain per hour dryer and the old leg with a new leg, the 326 IAC 6-3-2 allowable emissions for the dryer and the wet leg have been revised as follows:

State Rule Applicability – Individual Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (b) Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the emission units listed below shall be limited by the following:

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

Emission Unit	Process Weight Rate (tons per hour)	Allowable Particulate Emissions (lb/hr)	Potential Emissions (lb/hr)*	Controlled Emissions (lb/hr)**	In Compliance ?
Grain Receiving					
Rail pit and screw auger reclaim system	145	55.09	15.59	0.16	yes
Truck loadout (located over Pit No. 3)	203	58.67	21.82	0.22	yes
Headhouse and Internal Handling					
Nine (9) belts serving the steel bins	580 each	70.75 each	35.38 each	35.38 each	yes
One (1) wet leg serving Dryers #1 and #2	290 435	62.62 67.29	17.69	17.69	yes
Grain Drying					
Dryer #1	116 203	52.78 58.67	25.52	25.52	yes
Dryer #2	116	52.78	25.52	25.52	yes

* For purposes of determining compliance with this rule, potential emissions were calculated using the maximum process weight rates for each unit and the PM emission factors, in lb/ton from US EPA's AP-42, Section 9.9.1, Table 9.9.1-1. These calculations do not represent the PTE of the source, which is based on the maximum grain throughput to the source, calculated using guidance from US EPA.

** Controlled emissions for the grain receiving operations were calculated using the control efficiency of baghouse F3 which controls internal handling including shipping and receiving legs, reclaim, transfer and shipping conveyors.

Upon further review IDEM has decided to make further changes to the permit as follow:

1. All addresses have been revised to include a mail code (MC) as follows:

Asbestos Section:	MC 61-52 IGCN 1003
Compliance Branch:	MC 61-53 IGCN 1003
Permits Branch:	MC 61-53 IGCN 1003
Technical Support and Modeling Section:	MC 61-50 IGCN 1003

2. The Table of Contents has been updated to match the conditions in Sections A, B, C, D and E.
3. Conditions C.2 and C.11 have been revised as shown below:

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:

- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than ~~twenty-five~~ **twenty five** (25) tons per twelve (12) consecutive month period.

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ~~ninety (90)~~ **forty five (45)** days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ~~ninety (90)~~ **forty five (45)**, the Permittee may extend the compliance schedule related to the equipment for an additional ~~ninety (90)~~ **forty five (45)** days provided the Permittee notifies:

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

in writing, prior to the end of the initial ~~ninety (90)~~ **forty five (45)** day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

4. The existing PM/PM₁₀ emission limitations were based on 40 CFR Part 60, Subpart DD, however, these limitation are not sufficient to comply with 326 IAC 2-8-4 and render the requirements of 326 IAC 2-2 not applicable. Therefore, the PM/PM₁₀ limits have been revised to be listed in terms of pounds per ton of grain emission factor and corresponding throughput limit for each operation as follows:

D.1.1 FESOP and PSD Minor Limitations [326 IAC 2-2] [326 IAC 2-8-4]

~~The source will limit PM₁₀ emissions to less than 100 tons per year (22.83 lb/hr) as shown below:~~

- (a) ~~The amount of annual throughput to the grain dryer shall not exceed 600,000 tons per twelve (12) consecutive month period.~~
- (b) ~~The PM₁₀ emissions from the receiving units shall be limited to 0.0334 pounds per ton of grain.~~
- (c) ~~The PM₁₀ emissions from the headhouse and internal handling units shall be limited to 0.034 pounds per ton of grain.~~
- (d) ~~The PM₁₀ emissions from the rail or truck shipping shall be limited to 0.029 pounds per ton of grain.~~
- (e) ~~The PM₁₀ emissions from the grain cleaning units shall be limited to 0.019 pounds per ton of grain.~~

D.1.2 ~~Particulate matter (PM) [40 CFR 60.302, Subpart DD]~~

~~The operations controlled by baghouses F1 through F5, which include receiving Pits #1 through #4, the receiving conveyor serving Pits #1 and #2, the receiving legs serving Pits #1 through #4, the grain cleaning, and the internal handling operations are subject to the New Source Performance Standard (NSPS), 40 CFR 60.300 through 60.304, Subpart DD, which limits particulate matter emissions to 0.01 gr/dscf from each of the baghouse stacks.~~

D.1.1 FESOP Limit [326 IAC 2-8-4]

The source will limit PM₁₀ emissions to less than 100 tons per year as follows:

Process	PM ₁₀ Emission Limitation (lb/ton of grain)	Grain Throughput Limit (Tons/12 consecutive month period)
Receiving Unit including Pit #1 through Pit #4 and Receiving Conveyor	0.000334	1,160,000*
Headhouse and Internal Handling unit	0.00034	2,320,000*
Rail or Truck Shipping	0.0029	1,160,000*
Grain Dryer (Dryer #1 and Dryer #2)	0.055	600,000
Grain Cleaning Unit	0.000188	1,160,000*

*Note: Operating at maximum throughput.

Compliance with the above limits, combined with the potential to emit of PM₁₀ emissions from natural gas combustion, temporary grain storage piles, and unpaved roadways, will limit the source-wide PM₁₀ emissions to less than 100 tons per year and the render the requirements of 326 IAC 2-7 and 326 IAC 2-2 (PSD) not applicable.

D.1.2 PSD Minor Limitations [326 IAC 2-2]

The source will limit PM emissions to less than 250 tons per year as follows:

Process	PM Emission Limitation (lb/ton of grain)	Grain Throughput Limit (Tons/12 consecutive month period)
Receiving Unit including Pit #1 through Pit #4 and Receiving Conveyor	0.001075	1,160,000*
Headhouse and Internal Handling unit	0.00061	2,320,000*
Rail or Truck Shipping	0.0086	1,160,000*
Grain Dryer (Dryer #1 and Dryer #2)	0.22	600,000
Grain Cleaning Unit	0.00075	1,160,000*

*Note: Operating at maximum throughput.

Compliance with the above limits, combined with the potential to emit of particulate matter emissions from natural gas combustion, temporary grain storage piles, and unpaved roadways, will limit the source-wide PM emissions to less than 250 tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.1.4 Particulate Control

- (a) In order to comply with conditions **D.1.1**, D.1.2 and D.1.12, the baghouses (F1 through F5) for particulate control shall be in operation and control emissions from the receiving Pits #1 through #4, the receiving conveyor serving Pits #1 and #2, the receiving legs serving Pits #1 through #4, the grain cleaning, and the internal handling operations at all times that these facilities are in operation.
5. Condition D.1.5 has been incorporated to include the PM/PM₁₀ testing requirements for the grain dryers, receiving units and receiving conveyors, headhouse and internal handling unit, rail or truck shipping, and grain cleaning unit.

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

Within 180 days after issuance of this permit F017-23897-00017, in order to determine compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM and PM₁₀ emission stack testing for the grain dryers, receiving units and receiving conveyors, headhouse and internal handling unit, rail or truck shipping, and grain cleaning unit, utilizing the methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.1.65 Visible Emissions Notations

- (a) Daily visible emission notations of the baghouses F1 through F5 stack exhausts shall be performed during normal daylight operations when ~~exhausting to the atmosphere and~~ combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.

D.1.76 Parametric Monitoring

The Permittee shall record the pressure drop across each of the baghouses used in conjunction with the receiving Pits #1 through #4, the receiving conveyor serving Pits #1 and #2, the receiving legs serving Pits #1 through #4, the grain cleaning, and the internal handling operations, at least once per day when the receiving Pits #1 through #4, the receiving conveyor serving Pits #1 and #2, the receiving legs serving Pits #1 through #4, the grain cleaning, and the internal handling operations are in operation ~~when venting to the atmosphere~~. When for any one reading, the pressure drop across any one (1) of the baghouses is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.98 Record Keeping Requirements

- (a) To document compliance with Conditions **D.1.1 and D.1.2**, the Permittee shall maintain monthly records of the amount of grain input to the grain dryer.
- (b) To document compliance with Condition D.1.65, the Permittee shall maintain **a daily** records of visible emission notations **for each** of the stack exhausts for baghouses F1 through F5 ~~once per day or the reason why no reading was taken~~. **The Permittee shall include in each daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).**

- (c) To document compliance with Condition D.1.76, the Permittee shall maintain a **daily** records ~~once per shift of the total static pressure drop~~ **reading across each of the baghouses F1 through F5** during normal operation or the reason why no reading was taken. **The Permittee shall include in each daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).**
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.109 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter month period being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

6. Conditions D.1.10 and D.12 (now renumbered D.1.11 and D.1.13) have been revised as follows to list all the affected facilities.

New Source Performance Standards (NSPS) [326 IAC 12]

D.1.1140 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

- (a) The provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the **Pit #1 through #4 and Receiving Conveyor, Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors, and Steel Bin Handling** ~~truck and railcar unloading and loading stations and all grain handling operations, which includes headhouse and internal handling and grain cleaning~~ except when otherwise specified in 40 CFR 60, Subpart DD.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

D.1.1342 One Time Deadlines Relating to New Source Performance Standards for Grain Elevators [40 CFR 60, Subpart DD]

~~Pursuant to 40 CFR 60.303, the Permittee conducted an initial Performance test on September 24, 2004~~

The Permittee shall comply with the following requirements by the dates listed:

Requirement	Rule Cite	Affected Facility	Deadline
Initial Performance Test	40 CFR 60.303 and 40 CFR 60.8	Pit #1 through #4 and Receiving Conveyor, Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors, and Steel Bin Handling	Initial Performance test was conducted on September 24, 2004.
Notification of Date of Reconstruction	40 CFR 60.7(a)(1)	Pit #1 through #4 and Receiving Conveyor, Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors, and Steel Bin Handling	No later than 30 days after reconstruction
Notification of Date of Actual Startup	41 CFR 60.7(a)(3)	Pit #1 through #4 and Receiving Conveyor, Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors, and Steel Bin Handling	Within 15 days of startup date
Notification of any Physical or Operational Change to an existing facility not exempt under 40 CFR 60.14(e)	41 CFR 60.7(a)(4)	Pit #1 through #4 and Receiving Conveyor, Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors, and Steel Bin Handling	Within 60 days as soon as practicable before change is commenced.

7. Following statement under "Fugitive Emissions" discussion has been revised to clarify that this grain elevator operation is not one of the twenty eight (28) listed source categories under 326 IAC 2-2 and fugitive emissions are counted towards the determination of PSD applicability since there are applicable New Source Performance Standards that were in effect on August 7, 1980.

The following changes have been made to the Technical Support Document as requested. The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the technical support document that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The Technical Support Document is revised in this addendum as shown below (**bolded** language has been added, the language with a ~~line~~ through it has been deleted).

County Attainment Status

Fugitive Emissions

Since this type of operation is in one of the twenty eight (28) listed source categories under 326 IAC 2-2, fugitive emissions are counted toward the determination of PSD applicability. **This type of operation is not in one of the twenty-eight (28) listed source categories under 326 IAC 2-2. However, since there are applicable New Source Performance Standards that were in effect on August 7, 1980 (40 CFR 60, Subpart DD), the fugitive emissions are counted toward determination of PSD applicability.**

Emission Summary

Company Name: ADM Grain Company - Logansport Terminal
Address City IN Zip: 2626 South 275 West, Logansport, Indiana 46947
Permit No.: 017-23897
Pit ID: 017-00017
Reviewer: Surya Ramaswamy/EVP
Date: July 20, 2007

Uncontrolled Emissions in Tons Per Year						
Pollutant	PM	PM-10	SO ₂	NO _x	VOC	CO
Process/Emission Unit	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Grain Receiving	62.35	19.37	0.00	0.00	0.00	0.00
Headhouse and Internal Handling	70.76	39.44	0.00	0.00	0.00	0.00
Rail or Truck Shipping	49.88	16.82	0.00	0.00	0.00	0.00
Grain Cleaning	43.50	10.88	0.00	0.00	0.00	0.00
Temporary Storage Piles	23.83	7.71	0.00	0.00	0.00	0.00
Grain Drying	127.60	31.90	0.00	0.00	0.00	0.00
Combustion	0.35	1.39	0.11	18.31	1.01	15.38
Unpaved Roadways	35.30	9.00	0.00	0.00	0.00	0.00
Total	413.57	136.51	0.11	18.31	1.01	15.38

Controlled Emissions in Tons Per Year						
Pollutant	PM	PM-10	SO ₂	NO _x	VOC	CO
Process/Emission Unit	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Grain Receiving	0.62	0.19	0.00	0.00	0.00	0.00
Headhouse and Internal Handling	0.71	0.39	0.00	0.00	0.00	0.00
Rail or Truck Shipping	4.99	1.68	0.00	0.00	0.00	0.00
Grain Cleaning	0.44	0.11	0.00	0.00	0.00	0.00
Temporary Storage Piles	15.13	5.52	0.00	0.00	0.00	0.00
Grain Drying ^A	66.00	16.50	0.00	0.00	0.00	0.00
Combustion	0.35	1.39	0.11	18.31	1.01	15.38
Unpaved Roadways	11.60	2.96	0.00	0.00	0.00	0.00
Total	99.84	28.74	0.11	18.31	1.01	15.38

Note:

^AAnnual throughput is limited to less than 600,000 tons per year

**Appendix A: Emissions Calculations
Grain Elevator
Country Elevator-Small (Potential)**

Company Name: ADM Grain Company - Logansport Terminal
Address City IN Zip: 2626 South 275 West, Logansport, Indiana 46947
Permit No.: 017-23897
Pit ID: 017-00017
Reviewer: Surya Ramaswamy/EVP
Date: July 20, 2007

	Bushels	Tons
Annual Maximum Throughput	40,000,000	1,160,000
Temporary Storage Pile Capacity	6,700,000	194,300

Process	Pollutant	Emission Factor (lb/ton)	Throughput (tons/yr)	Potential Emissions (tons/yr)
Grain Receiving*	PM	0.1075	1,160,000	62.35
Worst case = Truck	PM-10	0.0334	1,160,000	19.37
Headhouse and Internal Handling**	PM	0.061	2,320,000	70.76
	PM-10	0.034	2,320,000	39.44
Rail or Truck Shipping	PM	0.086	1,160,000	49.88
Worst case = Truck	PM-10	0.029	1,160,000	16.82
Grain Drying	PM	0.22	1,160,000	127.60
	PM-10	0.055	1,160,000	31.90
Natural gas Combustion in Grain Dryers	PM			0.35
	PM-10			1.39
	SO2			0.11
	NOx			18.31
	VOC			1.01
	CO			15.38
Grain Cleaning	PM	0.075	1,160,000	43.50
	PM-10	0.019	1,160,000	10.88
Temporary Grain Storage Piles				
Pile Conveying	PM	0.061	194,300	5.93
	PM-10	0.034	194,300	3.30
Pile Loading	PM	0.035	194,300	3.40
	PM-10	0.0078	194,300	0.76
Storage Bin Vents	PM	0.025	1,160,000	14.50
	PM-10	0.0063	1,160,000	3.65
Total Non-fugitive Emissions				PM
				378.27
				PM-10
				127.51
				SO2
				0.11
				NOx
				18.31
				VOC
				1.01
				CO
				15.38
Unpaved Roadways - Fugitive	PM			35.9
	PM-10			9.00
Total Emissions				PM
				414.17
				PM-10
				136.51
				SO2
				0.11
				NOx
				18.31
				VOC
				1.01
				CO
				15.38

Emission Factors from US EPA's AP-42, Section 9.9.1, Table 9.9.1-1, April, 2003.

The maximum grain throughput of this source was calculated using the Guidance Memo from US EPA's Office of Air Quality Planning and Standards, dated November 14, 1995, for calculating PTE for country grain elevators. It is the maximum grain throughput of the source during the previous 5 years multiplied by an adjustment factor of 1.2.

* PM and PM10 emission factors for grain receiving are the weighted average emission factors based on 50% of grain received by straight trucks and 50% of grain received by hopper bottom trucks as a worst case scenario using the methodology from US EPA's AP-42, Section 9.9.1, page 9.9.1-19, April 2003.

**Throughput for Internal Handling is based on a conservative estimate of 2 times the grain throughput since the grain is typically handled more than once.

**Appendix A: Emissions Calculations
Grain Elevator
Country Elevator-Small (Limited)**

Company Name: ADM Grain Company - Logansport Terminal
Address City IN Zip: 2626 South 275 West, Logansport, Indiana 46947
Permit No.: 017-23897
Pit ID: 017-00017
Reviewer: Surya Ramaswamy/EVP
Date: July 20, 2007

	<u>Bushels</u>	<u>Tons</u>
Annual Maximum Throughput	40,000,000	1,160,000
Temporary Storage Pile Capacity	6,700,000	194,300

Process	Pollutant	Emission Factor (lb/ton)	Throughput (tons/yr)	Potential Emissions (tons/yr)	Control Efficiency %	Controlled Emissions (tons/yr)
Grain Receiving Worst case = Truck	PM	0.1075	1,160,000	62.35	99.0%	0.62
	PM-10	0.0334	1,160,000	19.37	99.0%	0.19
Headhouse and Internal Handling	PM	0.061	2,320,000	70.76	99.0%	0.71
	PM-10	0.034	2,320,000	39.44	99.0%	0.39
Rail or Truck Shipping Worst case = Truck	PM	0.086	1,160,000	49.88	90.0%	4.99
	PM-10	0.029	1,160,000	16.82	90.0%	1.68
Grain Drying*	PM	0.22	600,000	66.00	0.0%	66.00
	PM-10	0.055	600,000	16.50	0.0%	16.50
Natural gas Combustion in Grain Dryers	PM			0.35	0.0%	0.35
	PM-10			1.39	0.0%	1.39
	SO2			0.11	0.0%	0.11
	NOx			18.31	0.0%	18.31
	VOC			1.01	0.0%	1.01
Grain Cleaning	PM	0.075	1,160,000	43.50	99.0%	0.44
	PM-10	0.019	1,160,000	10.88	99.0%	0.11
Temporary Grain Storage Piles						
Pile Conveying	PM	0.061	194,300	5.93	0.0%	5.93
	PM-10	0.034	194,300	3.30	0.0%	3.30
Pile Loading	PM	0.035	194,300	3.40	0.0%	3.40
	PM-10	0.0078	194,300	0.76	0.0%	0.76
Storage Bin Vents	PM	0.025	1,160,000	14.50	60.0%	5.80
	PM-10	0.0063	1,160,000	3.65	60.0%	1.46
Total Non-fugitive Emissions				PM	316.67	88.23
				PM-10	112.11	25.79
				SO2	0.11	0.11
				NOx	18.31	18.31
				VOC	1.01	1.01
				CO	15.38	15.38
Unpaved Roadways - Fugitive	PM					11.6
	PM-10					2.96
Total Emissions				PM	316.67	99.83
				PM-10	112.11	28.75
				SO2	0.11	0.11
				NOx	18.31	18.31
				VOC	1.01	1.01
				CO	15.38	15.38

Note: * Annual throughput is limited to less than 600,000 tons per year

**Appendix A: Emissions Calculations
Grain Elevator
Country Elevator-Small**

Company Name: ADM Grain Company - Logansport Terminal
Address City IN Zip: 2626 South 275 West, Logansport, Indiana 46947
Permit No.: 017-23897
Pit ID: 017-00017
Reviewer: Surya Ramaswamy/EVP
Date: July 20, 2007

40 CFR Part 60.302, Subpart DD (Standards of Performance for Grain Elevators) Compliance Calculations:

The following calculations determine compliance with NSPS, which limits stack emissions from affected facilities at a grain elevator to 0.01 gr/dscf:

Baghouse F1 Controlling Receiving Pits #1 and #2 and Receiving Conveyor
 Emissions include receiving emissions only.

Process: Grain Receiving

$\frac{0.62 \text{ ton/yr}^*}{525600 \text{ min/yr}^*}$	$\frac{2000 \text{ lb/ton}^*}{25000 \text{ dscf/min}}$	$7000 \text{ gr/lb} =$	$0.0007 \frac{\text{gr/yr}}{\text{dscf/yr}}$ (will be able to comply)
Allowable particulate emissions under NSPS equate to		9.39 tons per year.	2.14 lbs/hr

Note:

$$\begin{aligned} \text{SCFM} &= 25000 \text{ acfm} * (460 + 68) / (460 + 68) \\ &= 25000 \text{ scfm} \end{aligned}$$

Baghouse F2 Controlling Receiving Pits #3 and #4 and Receiving Conveyor
 Emissions include receiving emissions only.

Process: Grain Receiving

$\frac{0.62 \text{ ton/yr}^*}{525600 \text{ min/yr}^*}$	$\frac{2000 \text{ lb/ton}^*}{22000 \text{ dscf/min}}$	$7000 \text{ gr/lb} =$	$0.0008 \frac{\text{gr/yr}}{\text{dscf/yr}}$ (will be able to comply)
Allowable particulate emissions under NSPS equate to		8.26 tons per year.	1.89 lbs/hr

Note:

$$\begin{aligned} \text{SCFM} &= 22000 \text{ acfm} * (460 + 68) / (460 + 68) \\ &= 22000 \text{ scfm} \end{aligned}$$

Baghouse F3 Controlling Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors
 Emissions include receiving, internal handling, grain shipping, and grain cleaning.

Process: Grain Receiving + Headhouse and Internal Handling + Rail or Truck Shipping + Grain Cleaning

$\frac{6.75 \text{ ton/yr}^*}{525600 \text{ min/yr}^*}$	$\frac{2000 \text{ lb/ton}^*}{27000 \text{ dscf/min}}$	$7000 \text{ gr/lb} =$	$0.0067 \frac{\text{gr/yr}}{\text{dscf/yr}}$ (will be able to comply)
Allowable particulate emissions under NSPS equate to		10.14 tons per year.	2.31 lbs/hr

Note:

$$\begin{aligned} \text{SCFM} &= 27000 \text{ acfm} * (460 + 68) / (460 + 68) \\ &= 27000 \text{ scfm} \end{aligned}$$

Baghouse F4 Controlling Steel Bin Handling
 Emissions include internal handling emissions only.

Process: Headhouse and Internal Handling

$\frac{0.71 \text{ ton/yr}^*}{525600 \text{ min/yr}^*}$	$\frac{2000 \text{ lb/ton}^*}{10000 \text{ dscf/min}}$	$7000 \text{ gr/lb} =$	$0.0019 \frac{\text{gr/yr}}{\text{dscf/yr}}$ (will be able to comply)
Allowable particulate emissions under NSPS equate to		3.75 tons per year.	0.86 lbs/hr

Note:

$$\begin{aligned} \text{SCFM} &= 10000 \text{ acfm} * (460 + 68) / (460 + 68) \\ &= 10000 \text{ scfm} \end{aligned}$$

Baghouse F5 Controlling Baghouses F2 and F3

Emissions include emissions from baghouses F2 and F3 included above and a 99% control efficiency for baghouse F5.

$$\text{Emission from Baghouses F2 and F3} = (0.44 + 4.73) * (1-0.99) = 0.05 \text{ ton/yr}$$

Process: Emission from Baghouses F2 and F3

$\frac{0.07 \text{ ton/yr}^*}{525600 \text{ min/yr}^*}$	$\frac{2000 \text{ lb/ton}^*}{700 \text{ dscf/min}}$	$7000 \text{ gr/lb} =$	$0.0028 \frac{\text{gr/yr}}{\text{dscf/yr}}$ (will be able to comply)
Allowable particulate emissions under NSPS equate to		0.26 tons per year.	0.06 lbs/hr

Note:

$$\begin{aligned} \text{SCFM} &= 700 \text{ acfm} * (460 + 68) / (460 + 68) \\ &= 700 \text{ scfm} \end{aligned}$$

Total Allowable Emission from baghouses F1 through F5 = **31.80** TPY

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a New Source Review (NSR) and Federally Enforceable Operating Permit (FESOP)

Source Background and Description

Source Name:	ADM Grain Company – Logansport Terminal
Source Location:	2626 South 275 West, Logansport, Indiana 46947
County:	Cass
SIC Code:	5153
Permit No.:	F017-23897-00017
Permit Reviewer:	Surya Ramaswamy / EVP

The Office of Air Quality (OAQ) has reviewed an application from ADM Grain Company – Logansport Terminal relating to the operation of a country grain elevator.

History

On November 15, 2006, IDEM, OAQ received an application from ADM Grain Company – Logansport Terminal requesting a transition from their existing MSOP Permit No. 017-17216-00017, issued on August 25, 2003 to a FESOP.

Due to increase in their annual throughput limits from 25,000,000 bushels to 28,000,000 bushels, the source-wide potential to emit PM₁₀ exceeds Title V thresholds. Although the potential to emit PM₁₀ exceed the Title V thresholds, actual emissions are well below these levels. Therefore, this source qualifies for a Federally Enforceable State Operating Permit (FESOP) pursuant to 326 IAC 2-8. This permit is being reviewed pursuant to the requirements of 326 IAC 2-8 (FESOP).

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) rail pit and screw auger reclaim system, rated at 5,000 bushels per hour;
- (b) One (1) truck loadout (located over Pit No. 3), with a maximum capacity of 7,000 bushels per hour;
- (c) Two (2) side draw truck loadout spouts;
- (d) One (1) rail loadout with telescoping spout, enclosed by shed;
- (e) Thirty-seven (37) concrete storage silos, with a maximum total storage capacity of 1,199,192 bushels;
- (f) Six (6) steel bins, with a maximum total storage capacity of 2,747,768 bushels;
- (g) Nine (9) belts serving the steel bins, each with a maximum capacity of 20,000 bushels per hour;

- (h) Three (3) temporary storage piles with conveyors, and one (1) temporary storage pile filled by a portable auger with a total maximum storage capacity of 6,700,000 bushels per year;
- (i) Two (2) natural gas-fired column grain dryers, identified as Dryer #1 and Dryer #2, each rated at 20.9 million British thermal units (MMBtu) per hour, each with a maximum capacity of processing 4,000 bushels of grain per hour;
- (j) One (1) wet leg serving Dryers #1 and #2, with a maximum capacity of 10,000 bushels per hour;
- (k) Four (4) receiving pits, identified as Pits #1 through #4, Pits #1 and #2 are enclosed by sheds with particulate emissions controlled by one (1) baghouse, identified as F1, exhausting through one (1) stack (F1), and Pits #3 and #4 with particulate emissions controlled by one (1) baghouse, identified as F2, exhausting through one (1) stack (F2);
- (l) One (1) enclosed receiving conveyor, serving Pits #1 and #2, with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F1, exhausting through one (1) stack (F1);
- (m) One (1) receiving leg, serving Pits #1 and #2, with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (n) One (1) receiving leg, serving Pit #3, with a maximum capacity of 18,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (o) One (1) receiving leg, serving Pit #4, with a maximum capacity of 18,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (p) Two (2) stationary enclosed cleaners, each with a maximum capacity of 22,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (q) Two (2) enclosed conveyors, serving the concrete silos, each with a maximum capacity of 35,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (r) One (1) enclosed conveyor, serving the concrete silos, with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (s) One (1) enclosed distributor, serving the concrete silos, with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (t) Two (2) enclosed distributors, serving the concrete silos, each with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (u) One (1) enclosed reclaim conveyor, serving the concrete silos, with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);

- (v) One (1) dry leg, serving Dryers #1 and #2, with a maximum capacity of 18,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (w) One (1) shipping leg, with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (x) One (1) enclosed shipping conveyor, with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (y) One (1) enclosed reclaim conveyor, serving five (5) of the steel bins (Steel Bins A through E), with a maximum capacity of 40,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, identified as F3, exhausting through one (1) stack (F3);
- (z) One (1) reclaim conveyor, serving one (1) of the steel bins (Steel Bin F), with a maximum capacity of 20,000 bushels per hour, particulate emissions are controlled by one (1) existing baghouse identified as F4, exhausting through one (1) stack (F4).
- (aa) One (1) crossover conveyor, serving one (1) of the steel bins (Steel Bin F), with a maximum capacity of 20,000 bushels per hour, with particulate emissions controlled by one (1) existing baghouse, one (1) existing baghouse, identified as F4, exhausting through one (1) stack (F4).
- (bb) One (1) baghouse, identified as F5, which receives collected dust from baghouses F2 and F3, exhausting through one (1) stack (F5); and
- (cc) Unpaved roads and parking lots with public access.

The source has a maximum throughput of 28,000,000 bushels per year, therefore, the maximum throughput to grain receiving, grain shipping, grain drying, and grain cleaning is 28,000,000 bushels of grain per year. The headhouse and internal handling operations have a maximum throughput of 2 times the maximum grain throughput because the grain is typically handled more than once.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Existing Approvals

The source was issued a MSOP No. M017-17216-00017 on August 25, 2003. The source has since received the following approvals:

- (a) First Notice-Only Change No. 017-19872-00017 issued on September 24, 2004; and
- (b) Second Notice-Only Change No. 017-23568-00017 issued on September 12, 2006.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the initial FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 15, 2006.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 6).

Potential to Emit

Pursuant to 326 IAC 2-7-1(29), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, 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, the department, or the appropriate local air pollution control agency.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential to Emit (tons/yr)
PM	342.23
PM-10	104.65
SO ₂	0.11
VOC	1.01
CO	15.38
NO _x	18.31
HAPs	Potential to Emit (tons/yr)
Hexane	less than 10
Formaldehyde	less than 10
TOTAL	less than 25

The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀ is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.

Potential to Emit After Issuance

The source has opted to be a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/emission unit	Potential To Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Grain Receiving	31.80 ⁽¹⁾	0.14	0.00	0.00	0.00	0.00	0.00
Headhouse and Internal		0.28	0.00	0.00	0.00	0.00	0.00
Rail or Truck Shipping		1.18	0.00	0.00	0.00	0.00	0.00
Grain Cleaning		0.08	0.00	0.00	0.00	0.00	0.00
Pile Conveying	5.93	3.30	0.00	0.00	0.00	0.00	0.00
Pile Loading	3.40	0.76	0.00	0.00	0.00	0.00	0.00
Storage Bin Vents	4.06	1.02	0.00	0.00	0.00	0.00	0.00
Grain Drying ⁽²⁾	66.00	16.50	0.00	0.00	0.00	0.00	0.00
Combustion	0.35	1.39	0.11	1.01	15.38	18.31	0.33 (Hexane) 0.35 (Total)
Unpaved Roadways – Fugitive	29.81	6.61	0.00	0.00	0.00	0.00	0.00
Total Emissions	141.35	31.25	0.11	1.01	15.38	18.31	Single < 10 Total < 25

⁽¹⁾ Emission units limited based on 40 CFR 60 Subpart DD.

⁽²⁾ Annual throughput is limited to less than 600,000 tons per year.

County Attainment Status

The source is located in Cass County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard, redesignating Lake County to attainment for the sulfur dioxide standard, and revoking the one-hour ozone standard in Indiana.
- (b) 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. Cass County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (c) Cass County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.
- (d) Cass County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (e) Fugitive Emissions
Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2, fugitive emissions are counted toward the determination of PSD applicability.

Federal Rule Applicability

- (a) ADM Grain Company – Logansport Terminal is an existing grain elevator which has a total grain storage capacity greater than 2.5 million bushels and was constructed after August 3, 1978, the applicability date for the New Source Performance Standards for Grain Elevators (326 IAC 12, 40 CFR 60.300-304, Subpart DD). Therefore, the truck and railcar unloading and loading stations and all grain handling operations, which includes headhouse and internal handling and grain cleaning, at this grain elevator are subject to the following provisions of 40 CFR 60, Subpart DD.

40 CFR 60.300
40 CFR 60.301
40 CFR 60.302(b)
40 CFR 60.302(c) (1) (2) (3)
40 CFR 60.303

Non applicable portions of the NSPS will not be included in the permit.

However, none of the provisions of this rule are applicable to the two (2) column grain dryers, per 40 CFR Part 60.302(a), because each of the grain dryers does not have a column plate perforation exceeding 0.094 inches.

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) included in this review.
- (c) 40 CFR 64.2 Compliance Assurance Monitoring (CAM)
The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this source. Generally, such requirements apply to a Part 70 source that involves a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, that meets the following criteria:
 - (1) the unit is subject to an emission limitation or standard for an applicable regulated air pollutant,
 - (2) the unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard, and
 - (3) the unit has a potential to emit before controls equal to or greater than the applicable Part 70 major source threshold for the regulated pollutant.

As a FESOP source, this source has accepted federally enforceable limits such that the requirements of 326 IAC 2-7 (Part 70) do not apply. Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not applicable to this source.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit F017-23897-00017, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source and the emission calculations in Appendix A of this document.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source, originally constructed in 1985, is not subject to this rule. Pursuant to CP 017-8604-00017, issued on June 19, 1998, emissions of all pollutants from the existing equipment at the source at that time and the new equipment added under that permit were less than the PSD major source threshold of 250 tons per year. All modifications to this source after the rule applicability date of August 7, 1977, had potential emissions less than the PSD major modification thresholds.

This source is subject to the NSPS, 40 CFR 60.300 - 60.304, Subpart DD for grain elevators. Pursuant to this rule,

- (a) The PM/PM₁₀ emissions from receiving pits #1 and #2 and receiving conveyor, controlled by baghouse F1 based on an exhaust rate of 25,000 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 2.14 pounds per hour.
- (b) The PM/PM₁₀ emissions from receiving pits #3 and #4 and receiving conveyor, controlled by baghouse F2 based on an exhaust rate of 22,000 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 1.89 pounds per hour.
- (c) The PM/PM₁₀ emissions from internal handling, shipping and receiving legs, reclaim, transfer and shipping conveyors, controlled by baghouse F3 based on an exhaust rate of 27,000 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 2.31 pounds per hour.
- (d) The PM/PM₁₀ emissions from steel bin handling, controlled by baghouse F4 based on an exhaust rate of 10,000 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 0.86 pounds per hour.
- (e) The PM/PM₁₀ emissions from baghouse F2 and baghouse F3, controlled by baghouse F5 based on an exhaust rate of 700 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 0.06 pounds per hour.

The above limits are equivalent to 31.80 tons per year of PM/PM₁₀ emissions (7.26 lbs per hour) (see Appendix A, page 3 of 6, for detailed calculations) from grain receiving, headhouse and internal handling, grain shipping, and grain cleaning processes. These emissions combined with controlled particulate matter emissions from the grain dryer (see 326 IAC 2-8-4 discussion below), natural combustion, temporary grain storage piles, and unpaved roadways are equal to 141.35 tons per year. Since the sourcewide potential PM/PM₁₀ emissions are limited to less than 250 tons per year after application of all federally enforceable emission limits, the requirements of 326 IAC 2-2 (PSD) do not apply.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake or Porter counties, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

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

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

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of country grain elevator will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-8-4 (FESOP)

The source will limit PM₁₀ emissions to less than 100 tons per year (22.83 lb/hr) as shown below:

- (a) The amount of annual throughput to the grain dryer shall not exceed 600,000 tons per twelve (12) consecutive month period.
- (b) The PM₁₀ emissions from the receiving units shall be limited to 0.0334 pounds per ton of grain.
- (c) The PM₁₀ emissions from the headhouse and internal handling units shall be limited to 0.034 pounds per ton of grain.
- (d) The PM₁₀ emissions from the rail or truck shipping shall be limited to 0.029 pounds per ton of grain.
- (e) The PM₁₀ emissions from the grain cleaning units shall be limited to 0.019 pounds per ton of grain.

These limits are required to limit the source-wide potential to emit PM₁₀ to below 100 tons per year. This will render 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-2 not applicable.

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

State Rule Applicability – Individual Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

(a) Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the emission units listed below shall be limited by the following:

Emission Unit	Process Weight Rate (tons per hour)	Allowable Particulate Emissions (lb/hr)
Baghouse F1 Controlling Receiving Pits #1 and #2 and Receiving Conveyor		
Grain Receiving	580	70.75
Baghouse F2 Controlling Receiving Pits #3 and #4 and Receiving Conveyor		
Grain Receiving	580	70.75
Baghouse F3 Controlling Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors		
Grain Receiving + Headhouse and Internal Handling + Rail or Truck Shipping + Grain Cleaning	1160	79.52
Baghouse F4 Controlling Steel Bin Handling		
Headhouse and Internal Handling	1160	79.52
Baghouse F5 Controlling Baghouses F2 and F3		
Emission from Baghouses F2 and F3	1740	84.97

However, pursuant to 326 IAC 6-3-1(c), this rule shall not apply if a particulate matter limitation established in 326 IAC 2-2, 326 IAC 2-3, 326 IAC 6-1, 326 IAC 11, 326 IAC 12 (NSPS), or 326 IAC 20 (NESHAP) is more stringent than the particulate limitation established in this rule. The above listed operations are subject to the New Source Performance Standard (NSPS), 40 CFR 60.300 through 60.304, Subpart DD, which limits particulate matter emissions to 0.01 gr/dscf from each of the baghouse stacks. This emission limitation is equivalent to the following emission rates, which are more stringent:

- (1) The PM/PM₁₀ emissions from receiving pits #1 and #2 and receiving conveyor, controlled by baghouse F1 based on an exhaust rate of 25,000 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 2.14 pounds per hour.
- (2) The PM/PM₁₀ emissions from receiving pits #3 and #4 and receiving conveyor, controlled by baghouse F2 based on an exhaust rate of 22,000 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 1.89 pounds per hour.

- (3) The PM/PM₁₀ emissions from internal handling, shipping and receiving legs, reclaim, transfer and shipping conveyors, controlled by baghouse F3 based on an exhaust rate of 27,000 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 2.31 pounds per hour.
- (4) The PM/PM₁₀ emissions from steel bin handling, controlled by baghouse F4 based on an exhaust rate of 10,000 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 0.86 pounds per hour.
- (5) The PM/PM₁₀ emissions from baghouse F2 and baghouse F3, controlled by baghouse F5 based on an exhaust rate of 700 acfm and an exhaust temperature of 68 degrees Fahrenheit shall not exceed 0.06 pounds per hour.

The operations listed above are controlled by baghouses F1 through F5, which include receiving Pits #1 through #4, the receiving conveyor serving Pits #1 and #2, the receiving legs serving Pits #1 through #4, the grain cleaning, and the internal handling operations.

- (b) Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the emission units listed below shall be limited by the following:

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

Emission Unit	Process Weight Rate (tons per hour)	Allowable Particulate Emissions (lb/hr)	Potential Emissions (lb/hr)*	Controlled Emissions (lb/hr)**	In Compliance?
Grain Receiving					
Rail pit and screw auger reclaim system	145	55.09	15.59	0.16	yes
Truck loadout (located over Pit No. 3)	203	58.67	21.82	0.22	yes
Headhouse and Internal Handling					
Nine (9) belts serving the steel bins	580 each	70.75 each	35.38 each	35.38 each	yes
One (1) wet leg serving Dryers #1 and #2	290	62.62	17.69	17.69	yes
Grain Drying					
Dryer #1	116	52.78	25.52	25.52	yes
Dryer #2	116	52.78	25.52	25.52	yes

* For purposes of determining compliance with this rule, potential emissions were calculated using the maximum process weight rates for each unit and the PM emission factors, in lb/ton from US EPA's AP-42, Section 9.9.1, Table 9.9.1-1. These calculations do not represent the PTE of the source, which is based on the maximum grain throughput to the source, calculated using guidance from US EPA.

** Controlled emissions for the grain receiving operations were calculated using the control efficiency of baghouse F3 which controls internal handling including shipping and receiving legs, reclaim, transfer and shipping conveyors.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This rule applies to sources of fugitive particulate matter emissions, located anywhere in the state, requiring a permit under 326 IAC 2, which has not received all the necessary preconstruction approvals before December 13, 1985. This source is not subject to the requirements of this rule because the grain elevator was originally permitted in January, 1985. Therefore, since the source received the necessary preconstruction approvals before December 13, 1985, it is not subject to this rule.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

The compliance monitoring requirements applicable to this source are as follows:

The baghouses F1 through F5 have applicable compliance monitoring conditions as specified below:

- (a) Daily visible emission notations of the baghouses F1 through F5 stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere and combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

- (f) The Permittee shall record the total static pressure drop across each of the baghouses used in conjunction with the receiving Pits #1 through #4, the receiving conveyor serving Pits #1 and #2, the receiving legs serving Pits #1 through #4, the grain cleaning, and the internal handling operations, at least once per day when the receiving Pits #1 through #4, the receiving conveyor serving Pits #1 and #2, the receiving legs serving Pits #1 through #4, the grain cleaning, and the internal handling operations are in operation when venting to the atmosphere. When for any one reading, the pressure drop across any one (1) of the baghouses is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

These monitoring conditions are necessary because the baghouse for the grain elevator systems process must operate properly to ensure compliance with 326 IAC 6-3 (Particulate emission limitations, work practices, and control technologies), 326 IAC 2-2 (PSD), 40 CFR 60, Subpart DD and 326 IAC 2-8 (FESOP).

Conclusion

The construction and operation of this country grain elevator shall be subject to the conditions of the attached proposed **F017-23897-00017**.

Emission Summary

Company Name: ADM Grain Company - Logansport Terminal
Address City IN Zip: 2626 South 275 West, Logansport, Indiana 46947
Permit No.: 017-23897
Pit ID: 017-00017
Reviewer: Surya Ramaswamy/EVP
Date: July 20, 2007

Uncontrolled Emissions in Tons Per Year						
Pollutant	PM	PM-10	SO ₂	NO _x	VOC	CO
Process/Emission Unit	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Grain Receiving	43.65	13.56	0.00	0.00	0.00	0.00
Headhouse and Internal Handling	49.53	27.61	0.00	0.00	0.00	0.00
Rail or Truck Shipping	34.92	11.77	0.00	0.00	0.00	0.00
Grain Cleaning	30.45	7.61	0.00	0.00	0.00	0.00
Temporary Storage Piles	19.48	6.62	0.00	0.00	0.00	0.00
Grain Drying	89.32	22.33	0.00	0.00	0.00	0.00
Combustion	0.35	1.39	0.11	18.31	1.01	15.38
Unpaved Roadways	74.54	13.76	0.00	0.00	0.00	0.00
Total	342.23	104.65	0.11	18.31	1.01	15.38

Controlled Emissions in Tons Per Year						
Pollutant	PM	PM-10	SO ₂	NO _x	VOC	CO
Process/Emission Unit	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Grain Receiving ^A	31.80	0.14	0.00	0.00	0.00	0.00
Headhouse and Internal Handling ^A		0.28	0.00	0.00	0.00	0.00
Rail or Truck Shipping ^A		1.18	0.00	0.00	0.00	0.00
Grain Cleaning ^B		0.08	0.00	0.00	0.00	0.00
Temporary Storage Piles	13.39	5.08	0.00	0.00	0.00	0.00
Grain Drying	66.00	16.50	0.00	0.00	0.00	0.00
Combustion	0.35	1.39	0.11	18.31	1.01	15.38
Unpaved Roadways	29.81	6.61	0.00	0.00	0.00	0.00
Total	141.35	31.25	0.11	18.31	1.01	15.38

Note:

^AEmission units limited based on 40 CFR 60 Subpart DD (Refer Page 3 of 6 TSD App A)

^BAnnual throughput is limited to less than 600,000 tons per year

**Appendix A: Emissions Calculations
Grain Elevator
Country Elevator-Small (Potential)**

Company Name: ADM Grain Company - Logansport Terminal
Address City IN Zip: 2626 South 275 West, Logansport, Indiana 46947
Permit No.: 017-23897
Pit ID: 017-00017
Reviewer: Surya Ramaswamy/EVP
Date: July 20, 2007

	Bushels	Tons
Annual Maximum Throughput	28,000,000	812,000
Temporary Storage Pile Capacity	6,700,000	194,300

Process	Pollutant	Emission Factor (lb/ton)	Throughput (tons/yr)	Potential Emissions (tons/yr)
Grain Receiving*	PM	0.1075	812,000	86.65
Worst case = Truck	PM-10	0.0334	812,000	26.85
Headhouse and Internal Handling**	PM	0.061	1,624,000	99.16
	PM-10	0.034	1,624,000	55.16
Rail or Truck Shipping	PM	0.086	812,000	69.92
Worst case = Truck	PM-10	0.029	812,000	23.77
Grain Drying	PM	0.22	812,000	178.22
	PM-10	0.055	812,000	44.93
Natural gas Combustion in Grain Dryers	PM			0.35
	PM-10			1.39
	SO2			0.11
	NOx			18.31
	VOC			1.01
	CO			15.38
Grain Cleaning	PM	0.075	812,000	61.50
	PM-10	0.019	812,000	15.43
Temporary Grain Storage Piles				
Pile Conveying	PM	0.061	194,300	11.85
	PM-10	0.034	194,300	6.30
Pile Loading	PM	0.035	194,300	6.84
	PM-10	0.0078	194,300	1.52
Storage Bin Vents	PM	0.025	812,000	20.25
	PM-10	0.0063	812,000	5.16
Total Non-fugitive Emissions				PM 267.69
				PM-10 90.89
				SO2 0.11
				NOx 18.31
				VOC 1.01
				CO 15.38
Unpaved Roadways - Fugitive	PM			74.54
	PM-10			13.76
Total Emissions				PM 342.23
				PM-10 104.65
				SO2 0.11
				NOx 18.31
				VOC 1.01
				CO 15.38

Emission Factors from US EPA's AP-42, Section 9.9.1, Table 9.9.1-1, April, 2003.

The maximum grain throughput of this source was calculated using the Guidance Memo from US EPA's Office of Air Quality Planning and Standards, dated November 14, 1995, for calculating PTE for country grain elevators. It is the maximum grain throughput of the source during the previous 5 years multiplied by an adjustment factor of 1.2.

* PM and PM10 emission factors for grain receiving are the weighted average emission factors based on 50% of grain received by straight trucks and 50% of grain received by hopper bottom trucks as a worst case scenario using the methodology from US EPA's AP-42, Section 9.9.1, page 9.9.1-19, April 2003.

**Throughput for Internal Handling is based on a conservative estimate of 2 times the grain throughput since the grain is typically handled more than once.

**Appendix A: Emissions Calculations
Grain Elevator
Country Elevator-Small (Limited)**

Page 3 of 6 TSD App A

Company Name: ADM Grain Company - Logansport Terminal
Address City IN Zip: 2626 South 275 West, Logansport, Indiana 46947
Permit No.: 017-23897
Pit ID: 017-00017
Reviewer: Surya Ramaswamy/EVP
Date: July 20, 2007

	<u>Bushels</u>	<u>Tons</u>
Annual Maximum Throughput	28,000,000	812,000
Temporary Storage Pile Capacity	6,700,000	194,300

Process	Pollutant	Emission Factor (lb/ton)	Throughput (tons/yr)	Potential Emissions (tons/yr)	Control Efficiency %	Controlled Emissions (tons/yr)
Grain Receiving*	PM	0.1075	812,000	43.65	99.0%	0.44
	Worst case = Truck PM-10	0.0334	812,000	13.56	99.0%	0.14
Headhouse and Internal Handling**	PM	0.061	1,624,000	49.53	99.0%	0.50
	PM-10	0.034	1,624,000	27.61	99.0%	0.28
Rail or Truck Shipping	PM	0.086	812,000	34.92	90.0%	3.49
	Worst case = Truck PM-10	0.029	812,000	11.77	90.0%	1.18
Grain Drying*	PM	0.22	600,000	66.00	0.0%	66.00
	PM-10	0.055	600,000	16.50	0.0%	16.50
Natural gas Combustion in Grain Dryers	PM			0.35	0.0%	0.35
	PM-10			1.39	0.0%	1.39
	SO2			0.11	0.0%	0.11
	NOx			18.31	0.0%	18.31
	VOC			1.01	0.0%	1.01
Grain Cleaning	PM	0.075	812,000	30.45	99.0%	0.30
	PM-10	0.019	812,000	7.61	99.0%	0.08
Temporary Grain Storage Piles						
Pile Conveying	PM	0.061	194,300	5.93	0.0%	5.93
	PM-10	0.034	194,300	3.30	0.0%	3.30
Pile Loading	PM	0.035	194,300	3.40	0.0%	3.40
	PM-10	0.0078	194,300	0.76	0.0%	0.76
Storage Bin Vents	PM	0.025	812,000	10.15	60.0%	4.06
	PM-10	0.0063	812,000	2.56	60.0%	1.02
Total Non-fugitive Emissions				PM	244.37	84.46
				PM-10	85.06	24.64
				SO2	0.11	0.11
				NOx	18.31	18.31
				VOC	1.01	1.01
				CO	15.38	15.38
Unpaved Roadways - Fugitive	PM			74.54	50.0%	29.81
	PM-10			13.76	50.0%	6.61
Total Emissions				PM	318.91	114.27
				PM-10	98.82	31.25
				SO2	0.11	0.11
				NOx	18.31	18.31
				VOC	1.01	1.01
				CO	15.38	15.38

Note: * Annual throughput is limited to less than 600,000 tons per year

**Appendix A: Emissions Calculations
Grain Elevator
Country Elevator-Small**

Company Name: ADM Grain Company - Logansport Terminal
Address City IN Zip: 2626 South 275 West, Logansport, Indiana 46947
Permit No.: 017-23897
Pit ID: 017-00017
Reviewer: Surya Ramaswamy/EVP
Date: July 20, 2007

40 CFR Part 60.302, Subpart DD (Standards of Performance for Grain Elevators) Compliance Calculations:

The following calculations determine compliance with NSPS, which limits stack emissions from affected facilities at a grain elevator to 0.01 gr/dscf:

Baghouse F1 Controlling Receiving Pits #1 and #2 and Receiving Conveyor

Emissions include receiving emissions only.

Process: Grain Receiving

$\frac{0.44 \text{ ton/yr}^*}{525600 \text{ min/yr}^*}$	$\frac{2000 \text{ lb/ton}^*}{25000 \text{ dscf/min}}$	$7000 \text{ gr/lb} =$	$0.0005 \frac{\text{gr/yr}}{\text{dscf/yr}}$ (will be able to comply)
Allowable particulate emissions under NSPS equate to		9.39 tons per year.	2.14 lbs/hr

Note:

$$\begin{aligned} \text{SCFM} &= 25000 \text{ acfm} * (460 + 68) / (460 + 68) \\ &= 25000 \text{ scfm} \end{aligned}$$

Baghouse F2 Controlling Receiving Pits #3 and #4 and Receiving Conveyor

Emissions include receiving emissions only.

Process: Grain Receiving

$\frac{0.44 \text{ ton/yr}^*}{525600 \text{ min/yr}^*}$	$\frac{2000 \text{ lb/ton}^*}{22000 \text{ dscf/min}}$	$7000 \text{ gr/lb} =$	$0.0005 \frac{\text{gr/yr}}{\text{dscf/yr}}$ (will be able to comply)
Allowable particulate emissions under NSPS equate to		8.26 tons per year.	1.89 lbs/hr

Note:

$$\begin{aligned} \text{SCFM} &= 22000 \text{ acfm} * (460 + 68) / (460 + 68) \\ &= 22000 \text{ scfm} \end{aligned}$$

Baghouse F3 Controlling Internal Handling, Shipping and Receiving Legs, Reclaim, Transfer, and Shipping Conveyors

Emissions include receiving, internal handling, grain shipping, and grain cleaning.

Process: Grain Receiving + Headhouse and Internal Handling + Rail or Truck Shipping + Grain Cleaning

$\frac{4.73 \text{ ton/yr}^*}{525600 \text{ min/yr}^*}$	$\frac{2000 \text{ lb/ton}^*}{27000 \text{ dscf/min}}$	$7000 \text{ gr/lb} =$	$0.0047 \frac{\text{gr/yr}}{\text{dscf/yr}}$ (will be able to comply)
Allowable particulate emissions under NSPS equate to		10.14 tons per year.	2.31 lbs/hr

Note:

$$\begin{aligned} \text{SCFM} &= 27000 \text{ acfm} * (460 + 68) / (460 + 68) \\ &= 27000 \text{ scfm} \end{aligned}$$

Baghouse F4 Controlling Steel Bin Handling

Emissions include internal handling emissions only.

Process: Headhouse and Internal Handling

$\frac{0.50 \text{ ton/yr}^*}{525600 \text{ min/yr}^*}$	$\frac{2000 \text{ lb/ton}^*}{10000 \text{ dscf/min}}$	$7000 \text{ gr/lb} =$	$0.0013 \frac{\text{gr/yr}}{\text{dscf/yr}}$ (will be able to comply)
Allowable particulate emissions under NSPS equate to		3.75 tons per year.	0.86 lbs/hr

Note:

$$\begin{aligned} \text{SCFM} &= 10000 \text{ acfm} * (460 + 68) / (460 + 68) \\ &= 10000 \text{ scfm} \end{aligned}$$

Baghouse F5 Controlling Baghouses F2 and F3

Emissions include emissions from baghouses F2 and F3 included above and a 99% control efficiency for baghouse F5.

$$\text{Emission from Baghouses F2 and F3} = (0.44 + 4.73) * (1-0.99) = 0.05 \text{ ton/yr}$$

Process: Emission from Baghouses F2 and F3

$\frac{0.05 \text{ ton/yr}^*}{525600 \text{ min/yr}^*}$	$\frac{2000 \text{ lb/ton}^*}{700 \text{ dscf/min}}$	$7000 \text{ gr/lb} =$	$0.0020 \frac{\text{gr/yr}}{\text{dscf/yr}}$ (will be able to comply)
Allowable particulate emissions under NSPS equate to		0.26 tons per year.	0.06 lbs/hr

Note:

$$\begin{aligned} \text{SCFM} &= 700 \text{ acfm} * (460 + 68) / (460 + 68) \\ &= 700 \text{ scfm} \end{aligned}$$

Total Allowable Emission from baghouses F1 through F5 = 31.80 TPY

Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved and Paved Roads

Company Name: ADM Grain Company - Logansport Termina
Address City IN Zip: 2626 South 275 West, Logansport, Indiana 46947
Minor Source Operating Permit No.: 017-23897
Plt ID: 017-00017
Reviewer: Surya Ramaswamy/EVP
Date: #####

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 (12/2003).

Process	Maximum number of vehicles	Maximum Weight of Vehicle and Load (tons/trip)	Number of one-way trips per hour per vehicle	Maximum trips per year (trip/yr)	Total Weight driven per year (ton/yr)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/yr)
Heavy Duty Diesel - Large Truck (entering plant)	1	26	1.78	1.6E+04	4.1E+05	660	0.125	1949.1
Heavy Duty Diesel - Large Truck (leaving plant)	1	26	1.78	1.6E+04	4.1E+05	660	0.125	1949.1
Heavy Duty Diesel - Small Truck (entering plant)	1	12	3.55	3.1E+04	3.7E+05	660	0.125	3887.3
Heavy Duty Diesel - Small Truck (leaving plant)	1	12	3.55	3.1E+04	3.7E+05	660	0.125	3887.3
Light Duty Gas Car/Truck used by customers and employees (entering plant)	1	2	0.75	6.6E+03	1.3E+04	660	0.125	821.3
Light Duty Gas Car/Truck used by customers and employees (leaving plant)	1	2	0.75	6.6E+03	1.3E+04	660	0.125	821.3
Total				1.1E+05	1.6E+06			1.3E+04

Average Vehicle Weight Per Trip = $\frac{14.9}{0.125}$ tons/trip
Average Miles Per Trip = $\frac{0.125}{0.125}$ miles/trip

Unmitigated Emission Factor, $E_f = k \cdot [(s/12)^a] \cdot [(W/3)^b]$ (Equation 1a from AP-42 13.2.2)

	PM	PM10	
where k =	4.9	1.5	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-3 Sand/Gravel Processing Plant Road)
a =	0.7	0.9	= constant (AP-42 Table 13.2.2-2)
W =	14.9	14.9	tons = average vehicle weight (provided by source)
b =	0.45	0.45	= constant (AP-42 Table 13.2.2-2)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E \cdot [(365 - P)/365]$

Mitigated Emission Factor, $E_{ext} = E \cdot [(365 - P)/365]$

where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	
Unmitigated Emission Factor, $E_f =$	5.30	1.35	lb/mile
Mitigated Emission Factor, $E_{ext} =$	3.49	0.89	lb/mile
Dust Control Efficiency =	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)
Heavy Duty Diesel - Large Truck (entering plant)	5.17	1.32	3.40	0.87	1.70	0.43
Heavy Duty Diesel - Large Truck (leaving plant)	5.17	1.32	3.40	0.87	1.70	0.43
Heavy Duty Diesel - Small Truck (entering plant)	10.304	2.626	6.775	1.727	3.388	0.863
Heavy Duty Diesel - Small Truck (leaving plant)	10.304	2.626	6.775	1.727	3.388	0.863
Light Duty Gas Car/Truck used by customers and employees (entering plant)	2.177	0.555	1.431	0.365	0.716	0.182
Light Duty Gas Car/Truck used by customers and employees (leaving plant)	2.177	0.555	1.431	0.365	0.716	0.182
Totals	35.30	9.00	23.21	5.91	11.60	2.96

Methodology

Maximum trips per year (trip/yr) = [Number of one-way trips per hour per vehicle] * [Maximum number of vehicles] * [8760 hours/year]
Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PTE = Potential to Emit

**Appendix A: Emissions Calculations
Grain Elevator
Country Elevator-Small**

Company Name: ADM Grain Company - Logansport Terminal
Address City IN Zip: 2626 South 275 West, Logansport, Indiana 46947
Minor Source Operating Permit No.: 017-23897
Pit ID: 017-00017
Reviewer: Surya Ramaswamy/EVP
Date: July 20, 2007

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 13.2.2.2. Equation(1a).

I. Heavy Duty Diesel - Large Truck

1.78 trip/hr x
 0.125 mile/trip x
 2 (round trip) x
 8,760 hr/yr = 3898.2 miles per year

$$E_f = k \left[\frac{s}{12} \right]^a \left[\frac{W}{3} \right]^b$$

= 2.69 lb PM-10/mile
 = 15.43 lb PM/mile

where k = 2.6 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP)
 a = 0.9 (For PM-10)
 a = 0.7 (For PM-30)
 s = 4.8 mean % silt content of unpaved roads
 b = 0.4 Constant for PM-10 (b = 0.5 for PM-30 or TSP)
 W = 26 tons average vehicle weight

PM-10:	2.69 lb/mi x	3898.2 mi/yr =	5.25 tons/yr
	2000 lb/ton		
PM:	15.43 lb/mi x	3898.2 mi/yr =	30.07 tons/yr
	2000 lb/ton		

II. Heavy Duty Diesel - Small Truck

3.55 trip/hr x
 0.125 mile/trip x
 2 (round trip) x
 8,760 hr/yr = 7774.5 miles per year

$$E_f = k \left[\frac{s}{12} \right]^a \left[\frac{W}{3} \right]^b$$

= 1.98 lb PM-10/mile
 = 10.53 lb PM/mile

where k = 2.6 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP)
 a = 0.9 (For PM-10)
 a = 0.7 (For PM-30)
 s = 4.8 mean % silt content of unpaved roads
 b = 0.4 Constant for PM-10 (b = 0.5 for PM-30 or TSP)
 W = 12 tons average vehicle weight

PM-10:	1.98 lb/mi x	7774.5 mi/yr =	7.71 tons/yr
	2000 lb/ton		
PM:	10.53 lb/mi x	7774.5 mi/yr =	40.94 tons/yr
	2000 lb/ton		

III. Light Duty gas car/truck used by customers and employees

0.75 trip/hr x
 0.125 mile/trip x
 2 (round trip) x
 8,760 hr/yr = 1642.5 miles per year

$$E_f = k \left[\frac{s}{12} \right]^a \left[\frac{W}{3} \right]^b$$

= 0.97 lb PM-10/mile
 = 4.30 lb PM/mile

where k = 2.6 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP)
 a = 0.9 (For PM-10)
 a = 0.7 (For PM-30)
 s = 4.8 mean % silt content of unpaved roads
 b = 0.4 Constant for PM-10 (b = 0.5 for PM-30 or TSP)
 W = 2 tons average vehicle weight

PM-10:	0.97 lb/mi x	1642.5 mi/yr =	0.80 tons/yr
	2000 lb/ton		
PM:	4.30 lb/mi x	1642.5 mi/yr =	3.53 tons/yr
	2000 lb/ton		

Total PM Emissions From Unpaved Roads = 74.54 tons/yr
Total PM-10 Emissions From Unpaved Roads = 13.76 tons/yr