

**MINOR SOURCE OPERATING PERMIT
INDIANA DEPARTMENT OF ENVIRONMENTAL
MANAGEMENT, OFFICE OF AIR QUALITY
And
VIGO COUNTY AIR POLLUTION CONTROL**

**Terre Haute Grain
200 Voorhees Street and 2600 South 13th Street
Terre Haute, Indiana 47802**

Terre Haute Grain is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 167-10829-00025	
Issued by: George M. Needham, Director Vigo County Air Pollution Control	Issuance Date: June 15, 2004 Expiration Date: June 15, 2009

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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) and Vigo County Air Pollution (VCAPC). The information describing the source contained in conditions A.1 and 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 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates stationary Grain Elevators that include the following processes: receiving, drying, storing and shipping of corn, beans and wheat.

Authorized Individual: Elevator Manager
Source Address: 200 Voorhees St. and 2600 South 13th St., Terre Haute, Indiana 47802
Mailing Address: 200 Voorhees St., Terre Haute, Indiana 47802
General Source Phone: 812-232-1044
SIC Code: 5153
County Location: Vigo
Source Location Status: Attainment for all criteria pollutants

Source Status: Minor Source, Under Emission Offset Rules;
Minor Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

(a) Sixty (60) grain silos, fourteen (14) each with a storage capacity of 50,740 bushels of grain, one (1) with a storage capacity of 4,016 bushels of grain, five (5) each with a storage capacity of 12,060 bushels of grain, one (1) with a storage capacity of 5,020 bushels of grain, two (2) each with a storage capacity of 4,336 bushels of grain, one (1) with a storage capacity of 9,468 bushels of grain, one (1) with a storage capacity of 7,533 bushels of grain, one (1) with a storage capacity of 26,868 bushels of grain, one (1) with a storage capacity of 14,581 bushels of grain, one (1) with a storage capacity of 23,496 bushels of grain, one (1) with a storage capacity of 335,953 bushels of grain, four (4) each with a storage capacity of 55,465 bushels of grain, four (4) each with a storage capacity of 54,005 bushels of grain, one (1) with a storage capacity of 463,023 bushels of grain, two (2) each with a storage capacity of 28,369 bushels of grain, four (4) each with a storage capacity of 125,293 bushels of grain, one (1) with a storage capacity of 20,572 bushels of grain, and fifteen (15) small indoor bins with a combined capacity of 31,196 bushels of grain.

(b) Two (2) truck unloading pits with a combined capacity of 12,000 bushels per hour.

(c) Two (2) load out bins (one north, one south) with a combined capacity of 20,000 bushels per hour.

(d) One (1) 18.0 mmBtu/hour natural gas-fired column grain dryer with a maximum capacity of 3,000 bushels per hour, with plate perforations of 0.0625 - 0.078 inches.

(e) One (1) 27.0 mmBtu/hour natural gas-fired column grain dryer with a maximum capacity of 4,500 bushels per hour, with plate perforations of 0.0625 - 0.078 inches.

(f) Multiple conveyors and grain transfer points located inside the 200 Voorhees Street facility.

(g) Multiple conveyors and grain transfer points located inside the 2600 South 13th Street facility.

- (h) One (1) dump pit with a maximum capacity of 12,000 bushels per hour.
- (i) Two (2) dump pits each with a maximum capacity of 10,000 bushels per hour.
- (j) One (1) load-out bin with a maximum capacity of 29,999 bushels per hour.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is not required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is not a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is not an affected source under Title IV (Acid Deposition Control) of the Clean Air Act, as defined in 326 IAC 2-7-1(3);
- (c) It is not a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

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

B.2 Definitions

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 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

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

B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit 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 of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality and Vigo County Air Pollution Control stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

- (d) The notification 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, and VCAPC on or before the date it is due.

B.6 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days (this time frame is determined on a case by case basis but no more than ninety (90) days) after issuance of this permit, including the following information on each emissions unit:
- (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, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, IN 47807

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

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

B.7 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, IN 47807

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

- (c) The Permittee shall notify the OAQ and VCAPC within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a non-road engine, as defined in 40 CFR 89.2.

B.8 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] [IC13-17-3-2][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, VCAPC and U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted 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 this title or the conditions of this permit or any operating permit revisions;
- (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 processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (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.9 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch and VCAPC, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, and VCAPC shall issue a revised permit.

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.

B.10 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ and VCAPC within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM and VCAPC, the fact that continuance of this permit is not consistent with purposes of this article.

C.2 Opacity [326 IAC 5-1]

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

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

C.3 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.4 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 by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

C.5 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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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 an "authorized individual" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements

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

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, IN 47807

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ and VCAPC of the actual test date at least fourteen (14) days prior to the actual date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and VCAPC not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ and VCAPC, if the Permittee submits to IDEM, OAQ and VCAPC 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.7 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

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

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.9 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.

Record Keeping and Reporting Requirements

C.10 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ and VCAPC, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.11 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (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 or Vigo County Air Pollution Control makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Vigo County Air Pollution Control within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.12 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

- (b) 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, and VCAPC on or before the date it is due.
- (c) Unless otherwise specified in this permit, any semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) Sixty (60) grain silos, fourteen (14) each with a storage capacity of 50,740 bushels of grain, one (1) with a storage capacity of 4,016 bushels of grain, five (5) each with a storage capacity of 12,060 bushels of grain, one (1) with a storage capacity of 5,020 bushels of grain, two (2) each with a storage capacity of 4,336 bushels of grain, one (1) with a storage capacity of 9,468 bushels of grain, one (1) with a storage capacity of 7,533 bushels of grain, one (1) with a storage capacity of 26,868 bushels of grain, one (1) with a storage capacity of 14,581 bushels of grain, one (1) with a storage capacity of 23,496 bushels of grain, one (1) with a storage capacity of 335,953 bushels of grain, four (4) each with a storage capacity of 55,465 bushels of grain, four (4) each with a storage capacity of 54,005 bushels of grain, one (1) with a storage capacity of 463,023 bushels of grain, two (2) each with a storage capacity of 28,369 bushels of grain, four (4) each with a storage capacity of 125,293 bushels of grain, one (1) with a storage capacity of 20,572 bushels of grain, and fifteen (15) small indoor bins with a combined capacity of 31,196 bushels of grain.
- (b) Two (2) truck unloading pits with a combined capacity of 12,000 bushels per hour.
- (c) Two (2) load out bins (one north, one south) with a combined capacity of 20,000 bushels per hour.
- (d) One (1) 18.0 mmBtu/hour natural gas-fired column grain dryer with a maximum capacity of 3,000 bushels per hour, with plate perforations of 0.0625 - 0.078 inches.
- (e) One (1) 27.0 mmBtu/hour natural gas-fired column grain dryer with a maximum capacity of 4,500 bushels per hour, with plate perforations of 0.0625 - 0.078 inches.
- (f) Multiple conveyors and grain transfer points located inside the 200 Voorhees Street facility.
- (g) Multiple conveyors and grain transfer points located inside the 2600 South 13th Street facility.
- (h) One (1) dump pit with a maximum capacity of 12,000 bushels per hour.
- (i) Two (2) dump pits each with a maximum capacity of 10,000 bushels per hour.
- (j) One (1) load-out bin with a maximum capacity of 29,999 bushels per hour.

Emission Limitations and Standards

D.1.1 Particulate [326 IAC 6-1-2(d)] [326 IAC 2-6.1-6] [326 IAC 6-1-13]

- (a) Pursuant to 326 IAC 6-1-2 particulate matter (PM) emissions shall be limited to no greater than 0.03 grain per dscf. Both facilities will also provide for housekeeping and maintenance procedures that minimize the opportunity for particulate matter to become airborne and leave the property.
- (b) Any change or modification which may increase the potential PM emissions to 250 tons per year or the PM10 emissions to 100 tons per year or more from the equipment covered in this permit must be approved by IDEM, OAQ and Vigo County Air Pollution Control before such change may occur.
- (c) In addition to emissions limitations contained in 326 IAC 6-1-2, the source shall comply with emission limitations specified in 326 IAC 6-1-13. Based on the location coordinates listed in this section, Grower's Co-Op shall comply with the "Terre Haute Grain" listing and Terre Haute Grain shall comply with the "Graham Grain" listing.

<u>Source</u>	<u>Process</u>	<u>Emission Limits</u>	
		<u>tons/yr</u>	<u>other units</u>
Terre Haute Grain	Unloading	45.9	Good housekeeping as defined by 326 IAC 6-1 and the board or its designated agent.
	Loading	22.9	
	Bin Unloading	76.1	
Graham Grain	Drying	10.1	Good housekeeping as defined by 326 IAC 6-1 and the board or its designated agent.
	Drying	1.7	
	Handling	16.0	

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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

D.1.3 Particulate Control

In order to comply with D.1.1, the baghouses for particulate control shall be in operation and controlling emissions from the grain transfer processes at all times these processes are in operation.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.4 Visible Emissions Notations

- (a) Visible emission notations of the baghouse exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

D.1.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the grain transfer process, at least once per shift when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

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

D.1.6 Baghouse Inspections

Inspections shall be performed each calendar quarter of all bags controlling the grain transfer process when venting to the atmosphere. Inspections on the baghouse shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.1.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 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.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

Record Keeping Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, the Permittee shall keep records of grain being processed at both facilities annually.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
AND
VIGO COUNTY AIR POLLUTION CONTROL**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Terre Haute Grain
Address:	200 Voorhees Street
City:	Terre Haute
Phone #:	812-234-7246
MSOP #:	167-10829-00025

I hereby certify that Terre Haute Grain is still in operation.
 no longer in operation.

I hereby certify that Terre Haute Grain is in compliance with the requirements of MSOP 167-10829-00025.
 not in compliance with the requirements of MSOP 167-10829-00025.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967**

**VIGO COUNTY AIR POLLUTION CONTROL
FAX NUMBER - 812-462-3447**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ? Yes. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERM LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/19____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/19____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

**Indiana Department of Environmental Management
Office of Air Quality
Vigo County Air Pollution Control**

**Technical Support Document (TSD) for a
Minor Source Operating Permit (MSOP)**

Source Background and Description

Source Name: Terre Haute Grain
Source Location: 200 Voorhees Street and 2600 South 13th Street
County: Vigo
SIC Code: 5153
Operation Permit No.: 167-10829-00025
Permit Reviewer: Scott Sines

Vigo County Air Pollution Control has reviewed an initial application from Terre Haute Grain relating to the construction, modification, and operation of a grain terminal elevator.

EPA guidance for determining PTE for grain elevators will be used to establish the source maximum throughput, and will be based on the source's five year largest historical production multiplied by 1.2.

Permitted Emission Units and Pollution Control Equipment

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

- (a) Sixty (60) grain silos, fourteen (14) each with a storage capacity of 50,740 bushels of grain, one (1) with a storage capacity of 4,016 bushels of grain, five (5) each with a storage capacity of 12,060 bushels of grain, one (1) with a storage capacity of 5,020 bushels of grain, two (2) each with a storage capacity of 4,336 bushels of grain, one (1) with a storage capacity of 9,468 bushels of grain, one (1) with a storage capacity of 7,533 bushels of grain, one (1) with a storage capacity of 26,868 bushels of grain, one (1) with a storage capacity of 14,581 bushels of grain, one (1) with a storage capacity of 23,496 bushels of grain, one (1) with a storage capacity of 335,953 bushels of grain, four (4) each with a storage capacity of 55,465 bushels of grain, four (4) each with a storage capacity of 54,005 bushels of grain, one (1) with a storage capacity of 463,023 bushels of grain, two (2) each with a storage capacity of 28,369 bushels of grain, four (4) each with a storage capacity of 125,293 bushels of grain, one (1) with a storage capacity of 20,572 bushels of grain, and fifteen (15) small indoor bins with a combined capacity of 31,196 bushels of grain.
- (b) Two (2) truck unloading pits with a combined capacity of 12,000 bushels per hour.
- (c) Two (2) load out bins (one north, one south) with a combined capacity of 20,000 bushels per hour.
- (d) One (1) 18.0 mmBtu/hour natural gas-fired column grain dryer with a maximum capacity of 3,000 bushels per hour, with plate perforations of 0.0625 - 0.078 inches.
- (e) One (1) 27.0 mmBtu/hour natural gas-fired column grain dryer with a maximum capacity of 4,500 bushels per hour, with plate perforations of 0.0625 - 0.078 inches.

- (f) Multiple conveyors and grain transfer points located inside the 200 Voorhees Street facility.
- (g) Multiple conveyors and grain transfer points located inside the 2600 South 13th Street facility.
- (h) One (1) dump pit with a maximum capacity of 12,000 bushels per hour.
- (i) Two (2) dump pits each with a maximum capacity of 10,000 bushels per hour.
- (j) One (1) load-out bin with a maximum capacity of 29,999 bushels per hour.

Un-permitted Emission Units and Pollution Control Equipment

There are no un-permitted facilities operating at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) OP 25-4221-01-91, issued on May 1, 1991, and
- (b) OP 27-4221-01-91, issued on April 30, 1991.

Source Definition

This Grain Elevator consists of a source with different owners (Peavey Grain a Division of ConAgra and Grower's Co-Op), but under common control of Terre Haute Grain:

- (a) Plant 1 Terre Haute Grain, the primary operation, is located at 200 Voorhees Street, Terre Haute, IN, and
- (b) Plant 2 Grower's Co-Op, the supporting operation, is located at 2600 South 13th Street, Terre Haute, IN.

VCAPC has determined that Plant 1 (Terre Haute Grain) and Plant 2 (Grower's Co-Op) are under the common control of Terre Haute Grain. These two plants are considered one source due to contractual control. Therefore, the term "source" in the Minor Source Operating Permit documents refers to both Terre Haute Grain and Grower's Co-Op as one source.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Minor Source Operating Permit (MSOP) 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 August 2, 1999, with the final piece of needed information received on April 15, 2004.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document pages 1 through 7.

Potential To Emit

This table reflects the unrestricted potential to emit of the source, which includes proposed and permitted emission units.

Pollutant	Unrestricted Potential Emissions (tons/year)
PM	111.20
PM-10	34.95
SO ₂	0.1
VOC	1.1
CO	16.5
NO _x	19.7

Note: For the purpose of determining Title V applicability for particulates PM-10, not PM, is the regulated pollutant in consideration.

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of Particulate Matter (PM) and Particulate Matter Less Than Ten Microns (PM10) are each greater the twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 6.1 Minor Source Operating Permit (MSOP).
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10 and all the other criteria pollutants except PM are each less than one hundred (100) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

Potential to Emit After Issuance

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units after controls.

Process/facility	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Drying Operation (Two Grain Dryers)	0.3	1.5	0.1	1.1	16.5	19.7	-
Grain Receiving	46.63	15.21	0.0	0.0	0.0	0.0	-
Headhouse & Internal Handling	1.72	0.96	0.0	0.0	0.0	0.0	-
Bin Vent	7.06	1.78	0.0	0.0	0.0	0.0	-
Grain Shipping	12.35	1.38	0.0	0.0	0.0	0.0	-
Total Emissions	68.06	20.83	0.1	1.1	16.5	19.7	-

The existing source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2 the PSD requirements do not apply.

County Attainment Status

The source is located in Vigo County.

Pollutant	Status
PM-10	attainment
SO ₂	maintenance attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Vigo County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

- (a) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.300, Subpart DD, due to its construction date. This source was constructed prior to August 3, 1978.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source has not yet submitted a Preventive Maintenance Plan (PMP) to Vigo County Air Pollution Control. The source has 90 days from permit issuance to submit a PMP for review.

326 IAC 2-6 (Emission Reporting)

This source is not a Title V source. 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 this permit:

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

State Rule Applicability - Individual Facilities

326 IAC 6-1-2 (Particulate Emissions)

Pursuant to 326 IAC 6-1-2 particulate matter (PM) emissions from the grain storage elevator shall be limited to no greater than 0.03 grain per dscf.

326 IAC 6-1-13 (Vigo County)

In addition to emissions limitations contained in 326 IAC 6-1-2, the source shall comply with emission limitations specified in 326 IAC 6-1-13. Based on the location coordinates listed in this section, Grower's Co-Op shall comply with the "Terre Haute Grain" listing and Terre Haute Grain shall comply with the "Graham Grain listing."

<u>Source</u>	<u>Process</u>	<u>Emission Limits</u>	
		tons/yr	other units
Terre Haute Grain	Unloading	45.9	Good housekeeping as defined by 326 IAC 6-1 and the board or its designated agent.
	Loading	22.9	
	Bin Unloading	76.1	
	Drying	10.1	
Graham Grain	Drying	1.7	Good housekeeping as defined by 326 IAC 6-1 and the board or its designated agent.
	Handling	16.0	

326 IAC 6-4 (Fugitive Dust Emissions)

The source is subject to 326 IAC 6-4 (Fugitive Dust Emissions). Pursuant to this rule, the 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).

Conclusion

The operation of this grain elevator shall be subject to the conditions of the attached Minor Source Operating Permit 167-10829-00025.

**Indiana Department of Environmental Management
Office of Air Quality
and
Vigo County Air Pollution Control**

Addendum to the
Technical Support Document for Minor Source Operating Permit

Source Name:	Terre Haute Grain
Source Location:	200 Voorhees Street and 2600 South 13 th Street, Terre Haute, Indiana
County:	Vigo County
SIC Code:	5153
Operation Permit No.:	167-10829-00025
Permit Reviewer:	Scott Sines

On May 5, 2004, Vigo County Air Pollution Control (VCAPC) had a notice published in the Terre Haute Tribune-Star, Terre Haute, Indiana, stating that Terre Haute Grain had applied for a Minor Source Operating Permit. The notice also stated that VCAPC 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. Where applicable in this document the use of ~~strikeout~~ indicates removed language and **bold** indicates added language.

On May 24, 2004, Terre Haute Grain submitted comments on the proposed Minor Source Operating Permit. The summary of the comments is as follows:

Comment 1:

In sections A.2 and D.1 of the permit change the grain storage capacities.

Response to Comment 1:

The engineering firm submitting the permit application did not use U.S. Government certified storage capacity figures. The new quantities reflect those figures. Changes made within Conditions A.2 (Emissions Units and Pollution Control Equipment Summary) and Section D.1 (Facility Description) as follows:

(a) ~~Forty-seven (47) concrete grain silos, one (1) with a storage capacity of 64,283 bushels of grain, one (1) with a storage capacity of 64,272 bushels of grain, one (1) with a storage capacity of 62,694 bushels of grain, one (1) with a storage capacity of 61,977 bushels of grain, one (1) with a storage capacity of 64,320 bushels of grain, one (1) with a storage capacity of 64,484 bushels of grain, one (1) with a storage capacity of 60,792 bushels of grain, one (1) with a storage capacity of 60,645 bushels of grain, two (2) each with a storage capacity of 32,077 bushels of grain, two (2) each with a storage capacity of 139,317 bushels of grain, one (1) with a storage capacity of 139,139 bushels of grain, one (1) with a storage capacity of 138,885 bushels of grain, one (1) with a storage capacity of 23,576 bushels of grain, one (1) with a storage capacity of 509,325 bushels of grain,~~ **Sixty (60) grain silos, fourteen (14) each with a storage capacity of 50,740 bushels of grain, one (1) with a storage capacity of 4,016 bushels of grain, five (5) each with a storage capacity of 12,060 bushels of grain, one (1) with a storage capacity of 5,020 bushels of grain, two (2) each with a storage capacity of 4,336 bushels of grain, one (1) with a storage capacity of 9,468 bushels of grain, one (1) with a storage capacity of 7,533 bushels of grain, one (1) with a storage capacity of 26,868 bushels of grain, one (1) with a storage capacity of 14,581 bushels of grain, one (1) with a storage capacity of 23,496 bushels of grain, one (1) with a storage capacity of 335,953 bushels of grain,** four (4) each with a storage capacity of 55,465 bushels of grain, four (4) each with a storage capacity of 54,005 bushels of grain, one (1) with a storage capacity of 463,023 bushels of grain, two (2) each with a storage capacity of 28,369 bushels of grain, four (4) each with a storage capacity of 125,293 bushels of grain, one (1) with a storage capacity of 20,572 bushels of grain, and fifteen (15) small indoor bins with a combined capacity of 31,196 bushels of grain.

Comment 2:

In sections D.1.4 (a), D.1.5, and D.1.6 change baghouses to baghouse.

Response to Comment 2:

One baghouse has been removed since the permit application was submitted. Change made as follows:

D.1.4 Visible Emissions Notations

- (a) Visible emission notations of ~~each baghouse~~ **the baghouse** exhaust will be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

D.1.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across ~~each baghouse~~ **the baghouse** used in conjunction with the grain transfer process, at least once per shift when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 5.0 to 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

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

D.1.6 Baghouse Inspections

Inspections shall be performed each calendar quarter of all bags controlling the grain transfer process when venting to the atmosphere. Inspections on ~~all baghouses~~ **the baghouse** shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

Comment 3:

In section D.1.5 change the pressure drop across the baghouse from 5.0 to 7.0 inches of water to 1.0 to 5.0 inches of water.

Response to Comment 3:

After evaluating the existing system and current operating parameters, it has been determined that the baghouse is operating properly, but at a lower water drop range. This conclusion was reached after inspecting the system for defects, conferring with an employee at another company-owned elevator (which uses the same system), and conferring with a representative of the baghouse manufacturer. When new bags are installed the water drop across the baghouse drops to under two (2.0) inches of water, then slowly builds up over time. Therefore the source has requested the water drop be changed to reflect actual performance. Change made as follows:

D.1.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse used in conjunction with the grain transfer process, at least once per shift when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of ~~5.0 to 7.0 inches of water~~ **1.0 to 5.0 inches of water** or a range established during the latest stack test, the Permittee shall take reasonable steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

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

TERRE HAUTE GRAIN 1999 PRODUCTION DATA UNCONTROLLED EMISSIONS

792,309,290 pounds processed
 x 1.2 =
 950,771,148 pounds
 or 475,385.574 tons

Receiving 90% by truck (used straight truck figures) = 427,847.02 tons
 10% by rail = 47,538.56 tons

	<u>PM</u>	<u>Pounds</u> <u>PM10</u>	<u>PM2.5</u>
Truck	77,012.46	25,242.97	4,278.47
Rail	1,521.23	370.80	61.80
Total	78,533.69	25,613.77	4,340.27

Grain Drying 45% = 213,923.51 tons
 (Column dryer)

	<u>PM</u>	<u>Pounds</u> <u>PM10</u>	<u>PM2.5</u>
	47,063.17	11,765.79	2,010.88

Headhouse & Grain Handling

	<u>PM</u>	<u>Pounds</u> <u>PM10</u>	<u>PM2.5</u>
	28,998.52	16,163.11	2,757.24

Storage Bin (vent)

	<u>PM</u>	<u>Pounds</u> <u>PM10</u>	<u>PM2.5</u>
	11,884.64	2,994.93	522.92

Shipping 10% by straight truck = 47,538.56 tons
 90% by rail = 427,847.02 tons

	<u>PM</u>	<u>Pounds</u> <u>PM10</u>	<u>PM2.5</u>
Truck	4,088.31	1,378.62	232.94
Rail	11,551.87	941.26	158.30
Total	15,640.18	2,319.88	391.24

TOTALS FOR TERRE HAUTE GRAIN

	<u>PM</u>	<u>Pounds</u> <u>PM10</u>	<u>PM2.5</u>
Tons	182,120.20	58,857.48	10,022.55
	91.06	29.43	5.01

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Natural Gas Fired Grain Dryer

Company Name: Terre Haute Grain
Address City IN Zip: 200 Voorhees Street and 2600 South 13th Street
Permit Number: 167-10829
Pit ID: 167-00025
Reviewer: Scott B. Sines
Date: April 15, 2004

Heat Input Capacity
 MMBtu/hr

Potential Throughput
 MMCF/yr

18.0

157.7

Grain dryer with a maximum capacity of 3,000 bushels per hour

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.1	0.6	0.0	7.9	0.4	6.6

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Natural Gas Fired Grain Dryer

Company Name: Terre Haute Grain
Address City IN Zip: 200 Voorhees Street and 2600 South 13th Street
Permit Number: 167-10829
Pit ID: 167-00025
Reviewer: Scott B. Sines
Date: April 15, 2004

Heat Input Capacity
 MMBtu/hr

Potential Throughput
 MMCF/yr

27.0

236.5

Grain dryer with maximum capacity of 4,500 bushels per hour

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.2	0.9	0.1	11.8	0.7	9.9

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

TERRE HAUTE GRAIN CALCULATIONS

CY 2003

BUSHEL

	CORN-WEST	CORN-EAST	BEANS-WEST	BEANS-EAST	WHEAT-WEST	WHEAT-EAST
JAN	1,131,807.04	0.00	203,842.11	79,687.03	0.00	336.87
FEB	947,007.60	0.00	176,263.05	0.00	0.00	5,455.62
MAR	832,306.43	0.00	213,891.41	0.00	0.00	0.00
APR	562,792.23	0.00	159,817.31	83,721.32	0.00	4,259.03
MAY	582,133.90	0.00	171,490.57	879.00	0.00	3,838.16
JUN	438,783.53	0.00	82,101.65	0.00	3,719.15	86,199.88
JUL	647,667.61	0.00	97,006.62	0.00	10,035.17	150,805.44
AUG	468,432.04	0.00	81,838.93	0.00	0.00	73,539.24
SEP	546,180.39	0.00	284,521.76	0.00	0.00	26,385.66
OCT	1,253,859.95	208,224.70	602,699.96	196,429.31	2,865.47	0.00
NOV	1,201,416.19	263,374.84	54,617.55	1,639.23	0.00	1,023.73
DEC	827,201.79	0.00	101,847.79	0.00	0.00	1,560.10
TOTAL	9,439,588.70	471,599.54	2,229,938.71	362,355.89	16,619.79	353,403.73
LBS/YR	528,616,967.20	26,409,574.24	124,876,567.76	20,291,929.84	997,187.40	21,204,223.80

TOTAL BUSHEL/HR	12,873,506.36					
TH GRAIN LBS/YR	654,490,722.36					
TH GRAIN LBS/HR	256,864.49	(2,548 HRS/YR)	X 1.2 =		308,237.39	
GROWER'S LBS/YR	67,905,727.88					
GROWER'S LBS/HR	51,443.73	(1,320 HRS/YR)	X 1.2 =		61,732.48	
TOTAL LBS/HR	308,308.22		X 1.2 =		369,969.87	

CY 2002

BUSHEL

	CORN-WEST	CORN-EAST	BEANS-WEST	BEANS-EAST	WHEAT-WEST	WHEAT-EAST
JAN	1,428,568.09	0.00	227,168.60	0.00	0.00	0.00
FEB	815,003.56	0.00	143,490.99	0.00	0.00	0.00
MAR	574,796.47	82,137.57	247,127.64	0.00	0.00	0.00
APR	813,081.73	0.00	171,133.03	0.00	0.00	423.97
MAY	607,007.61	636.43	53,437.74	0.00	0.00	0.00
JUN	651,191.46	0.00	82,570.58	0.00	9,120.25	56,336.37
JUL	1,010,685.65	0.00	138,657.25	0.00	5,527.32	102,692.71
AUG	529,949.64	141,432.43	86,815.88	0.00	0.00	32,637.66
SEP	453,939.60	60,247.93	188,780.93	15,039.95	0.00	9,581.74
OCT	655,733.13	232,063.54	796,963.62	290,493.95	0.00	2,211.14
NOV	1,054,381.06	78,103.42	121,795.99	0.00	0.00	405.88
DEC	518,079.01	0.00	113,366.09	0.00	0.00	0.00
TOTAL	9,112,417.01	594,621.32	2,371,308.34	305,533.90	14,647.57	204,289.47
LBS/YR	510,295,352.56	33,298,793.92	132,793,267.04	17,109,898.40	878,854.20	12,257,368.20

TOTAL BUSHEL/HR	12,602,817.61					
TH GRAIN LBS/YR	643,967,473.80					
TH GRAIN LBS/HR	252,734.49	(2,548 HRS/YR)	X 1.2 =		303,281.38	
GROWER'S LBS/YR	62,666,060.52					
GROWER'S LBS/HR	47,474.29	(1,320 HRS/YR)	X 1.2 =		56,969.15	
TOTAL LBS/HR	300,208.78		X 1.2 =		360,250.53	

TERRE HAUTE GRAIN CALCULATIONS

CY2001

BUSHEL

	CORN-WEST	CORN-EAST	BEANS-WEST	BEANS-EAST	WHEAT-WEST	WHEAT-EAST
JAN	1,402,595.94	95,283.47	75,102.36	65,020.09	0.00	5,833.01
FEB	996,251.50	96,512.72	111,177.25	136,852.19	0.00	5,460.95
MAR	1,061,852.69	139,337.85	254,648.71	12,929.19	0.00	357.07
APR	982,184.01	71,833.59	46,733.57	4,397.71	0.00	21.00
MAY	811,313.88	0.00	120,154.19	58,976.54	0.00	3,998.44
JUN	878,740.82	91,761.09	255,820.01	0.00	0.00	156,316.22
JUL	1,364,834.56	27,186.85	321,352.91	2,790.05	0.00	49,709.51
AUG	601,758.22	0.00	181,666.51	0.00	0.00	37,636.83
SEP	478,436.16	31,741.29	360,596.39	0.00	0.00	40,641.76
OCT	792,501.11	506,781.71	1,010,567.32	0.00	0.00	9,298.63
NOV	1,335,680.14	248,959.55	278,838.03	0.00	0.00	0.00
DEC	835,050.09	0.00	128,127.46	0.00	0.00	8,090.79
TOTAL	11,541,199.12	1,309,398.12	3,144,784.71	280,965.77	0.00	317,364.21
LBS/YR	646,307,150.72	73,326,294.72	176,107,943.76	15,734,083.12	0.00	19,041,852.60

TOTAL BUSHEL/HR	16,593,711.93					
TH GRAIN LBS/YR	822,415,094.48					
TH GRAIN LBS/HR	322,768.88	(2,548 HRS/YR)	X 1.2 =		387,322.65	
GROWER'S LBS/YR	108,102,230.44					
GROWER'S LBS/HR	81,895.63	(1,320 HRS/YR)	X 1.2 =		98,274.75	
TOTAL LBS/HR	404,664.50		X 1.2 =		485,597.41	

CY2000

BUSHEL

	CORN-WEST	CORN-EAST	BEANS-WEST	BEANS-EAST	WHEAT-WEST	WHEAT-EAST
JAN	1,609,387.75	0.00	144,031.70	24,912.83	0.00	0.00
FEB	1,253,170.19	82,405.79	147,286.53	15,518.99	0.00	399.99
MAR	1,707,740.60	2,905.22	109,163.44	64,551.13	0.00	3,052.97
APR	683,676.89	13,344.90	60,661.97	12,713.47	0.00	867.97
MAY	584,313.39	75,978.75	79,573.52	877.53	1,687.18	0.00
JUN	799,150.76	0.00	172,610.23	36,665.35	514.41	214,370.51
JUL	811,994.75	0.00	124,659.62	1,724.33	0.00	115,447.38
AUG	827,793.89	0.00	168,187.41	0.00	0.00	29,803.87
SEP	884,561.85	0.00	335,016.32	65,428.73	0.00	107,638.00
OCT	1,289,945.26	561,212.15	889,791.27	344,527.74	0.00	9,482.64
NOV	1,583,777.88	239,584.78	67,007.68	37,490.26	0.00	2,425.46
DEC	719,557.62	7,540.21	48,055.62	904.67	0.00	0.00
TOTAL	12,755,070.83	982,971.80	2,346,045.31	605,315.03	2,201.59	483,488.79
LBS/YR	714,283,966.48	55,046,420.80	131,378,537.36	33,897,641.68	132,095.40	29,009,327.40

TOTAL BUSHEL/HR	17,175,093.35					
TH GRAIN LBS/YR	845,794,599.24					
TH GRAIN LBS/HR	331,944.51	(2,548 HRS/YR)	X 1.2 =		398,333.41	
GROWER'S LBS/YR	117,953,389.88					
GROWER'S LBS/HR	89,358.63	(1,320 HRS/YR)	X 1.2 =		107,230.35	
TOTAL LBS/HR	421,303.13		X 1.2 =		505,563.76	

TERRE HAUTE GRAIN CALCULATIONS

CY 1999

BUSHEL

TH GRAIN 13,660,505.00
GROWER'S 2,561,297.00

TH GRAIN LBS/YR	792,309,290.00		
TH GRAIN LBS/HR	310,953.41 (2,548 HRS/YR)	X 1.2 =	373,144.09
GROWER'S LBS/YR	148,555,226.00		
GROWER'S LBS/HR	112,541.84 (1,320 HRS/YR)	X 1.2 =	135,050.21
TOTAL LBS/HR	423,495.25	X 1.2 =	508,194.30

POUNDS/BUSHEL

CORN 56
BEANS 56
WHEAT 60