INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a
Federally Enforceable State Operating Permit (FESOP)

for Pioneer Hi-Bred International, Inc. in Marshall County

FESOP Renewal No. F099-33467-00029

The Indiana Department of Environmental Management (IDEM) has received an application from Pioneer Hi-Bred International, Inc. located at 2300 Pioneer Drive, Plymouth, Indiana for a renewal of its FESOP No. F099-27419-00029 issued on April 28, 2009. If approved by IDEM's Office of Air Quality (OAQ), this proposed renewal would allow Pioneer Hi-Bred International, Inc. to continue to operate its existing source.

The applicant intends to construct and operate new exempt equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits or approvals have been corrected, changed or removed. These corrections, changes, and removals may include Title I changes (i.e., changes that add or modify synthetic minor emission limits). The potential to emit of any regulated pollutants and hazardous air pollutants will continue to be limited to less than the TV and PSD major threshold levels, respectively. IDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and several supporting documents, that would allow the applicant to make this change.

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

Plymouth Public Library
201 North Center Street
Plymouth, IN 46563

and

IDEM Northern Regional Office
300 N. Michigan Street, Suite 450
South Bend, IN 46601-1295

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

How can you participate in this process?

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

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

opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number F099-33467-00029 in all correspondence.

Comments should be sent to:

Donald McQuigg
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 4-4240
Or dial directly: (317) 234-4240
Fax: (317) 232-6749 attn: Donald McQuigg
E-mail: dmcquigg@idem.in.gov

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

For additional information about air permits and how you can participate, please see IDEM's **Guide for Citizen Participation** and **Permit Guide** on the Internet at: www.idem.in.gov.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public files room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251 and IDEM Northern Regional Office, 300 N. Michigan Street, Suite 450, South Bend, IN 46601-1295.

If you have any questions please contact Donald McQuigg of my staff at the above address.

Chrystal A. Wagner, Section Chief
Permits Branch
Office of Air Quality

CAW/dwm

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DRAFT

Federally Enforceable State Operating Permit Renewal
OFFICE OF AIR QUALITY

Pioneer Hi-Bred International, Inc.
2300 Pioneer Drive
Plymouth, Indiana 46563

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 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.

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.

Operation Permit No.: F099-33467-00029	
Issued by: Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date:

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SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary seed corn processing facility.

Source Address:	2300 Pioneer Drive, Plymouth, Indiana 46563
General Source Phone Number:	(574) 936-3243
SIC Code:	5153
County Location:	Marshall
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

(a) One (1) natural gas-fired ear corn dryer, identified as dryer 1, constructed in 1988, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 1).

(b) One (1) natural gas-fired ear corn dryer, identified as dryer 2, constructed in 1988, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 2).

(c) One (1) natural gas-fired ear corn dryer, identified as dryer 3, constructed in 1988, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 3).

(d) One (1) natural gas-fired ear corn dryer, identified as dryer 4, constructed in 1993, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 4).

(e) One (1) natural gas-fired ear corn dryer, identified as dryer 5, constructed in 2009, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 5).

(f) Two (2) green corn dump pits, identified as dump pit north and dump pit south, constructed in 1988, each with a maximum throughput of 2,500 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(g) One corn dump pit, identified as bulk dump pit, constructed in 1989, with a maximum throughput of 3,000 bushels per hour, using the general house dust baghouse, identified as CD12, as a control, and exhausting indoors.

(h) One corn dump pit, identified as agra dump pit, constructed in 2009, with a maximum throughput of 3,000 bushels per hour, using a baghouse, identified as CD08, as a control, and exhausting indoors.

(i) Headhouse and grain handling consisting of the following:

(1) Two (2) husking and sorting lines, each line containing nine (9) units, identified as sorting lines 1 and 2, constructed in 1988, each line with a maximum throughput of 2,000 bushels per hour, and exhausting indoors.

(2) One (1) bagged seed corn area, identified as corn rework, constructed in 1991, with a maximum throughput of 1,200 bushels per hour, using a baghouse, identified as CD04, as a control, and exhausting indoors.

(3) Ten (10) precision sizers, identified as sizers 1 through 10, constructed in 1989, each with a maximum throughput of 100 bushels per hour, using a baghouse, identified as CD06, as a control, and exhausting indoors.

(4) Nine (9) gravity separators, identified as separators 1 through 9, used to remove damaged seed, constructed in 1989, each with a maximum throughput of 110 bushels per hour, using nine (9) baghouses, collectively identified as CD03, as controls, and exhausting indoors.

(5) Two (2) seed treaters, identified as treater No. 1 and treater No. 2, each used to apply seed treatment to seed corn, constructed in 2011, each with a maximum throughput of 1,000 bushels per hour, using a baghouse, identified as CD09, as a control, and exhausting indoors.

(6) Enclosed transfer points, identified as enclosed, constructed in 1988, with a maximum throughput of 5,000 bushels per hour, using the general house dust baghouse, identified as CD12, as a control, and exhausting indoors.

(7) One (1) blending system, identified as blending, constructed in 2009, consisting of one (1) unloading station, two (2) blending surge bins, two (2) weigh belts, and a blended product elevator, with a maximum throughput of 2,000 bushels per hour, using a baghouse, identified as CD07, as a control, and exhausting indoors.

(8) Four (4) precision sizers, identified as sizers 11 through 14, approved in 2014 for construction, each with a maximum throughput of 540 bushels per hour, using the general house dust baghouse, identified as CD12, as a control, and exhausting indoors.

(9) Two (2) color sorters, identified as color sorter 1 and 2, approved in 2014 for construction, each with a maximum throughput of 800 bushels per hour, using the color sorter baghouse, identified as CD11, as a control, and exhausting indoors.

(j) Grain Cleaning consisting of the following:

(1) Two (2) corn sheller and cleaner units, identified as sheller north and sheller south, constructed in 1988 with a maximum throughput of 2,500 bushels per hour, using two (2) baghouses, identified as CD01, as controls, and exhausting indoors.

(2) One (1) aspirator, identified as aspirator 2, used for seed corn cleaning, approved in 2014 for construction, with a maximum throughput of 1,200 bushels per hour, using the cleaner baghouse, identified as CD10, as a control, and exhausting indoors.

(3) One (1) treater aspirator, identified as treater aspirator, used to clean seed corn prior to treatment, constructed in 1989, with a maximum throughput of 1,200 bushels per hour, using a baghouse, identified as CD09, as a control, constructed in 2011, and exhausting indoors.

(k) Grain Storage consisting of the following:

(1) Two (2) cob storage bins, identified as cob bin 1 and 2, constructed in 1988, each with a storage capacity of about 1,500 bushels, and exhausting indoors.

(2) One (1) discard bin, identified as discard bin, constructed in 1989, with a storage capacity of 1,500 bushels, and exhausting indoors.

(3) Sixteen (16) kernel size bins, identified as kernel bins 1 through 16, constructed in 1989, each with a storage capacity of 1,000 bushels of kernels, using a baghouse, identified as CD06, as a control, and exhausting indoors.

(4) Seven (7) treated corn packaging bins, identified as treated bins 1 through 7, constructed in 1989, four (4) with a storage capacity of 1,000 bushels of treated corn and three (3) with a storage capacity of 500 bushels of treated corn, using a baghouse, identified as CD04, as a control, and exhausting indoors.

(5) One (1) bulk storage building, identified as North Bulk Storage, constructed in 1989, with a maximum storage capacity of 370,000 bushels, using a baghouse, identified as CD08, as a control, exhausting to stack (SV bulk 1), and containing the following:

(A) Thirteen (13) storage bins, identified as Bins B-501 through B-512 and B-525, each with a storage capacity of 20,000 bushels.

(B) Ten (10) storage bins, identified as Bins B-513 through B-522, each with a storage capacity of 10,000 bushels.

(C) One (1) storage bin, identified as Bin B-2523, with a storage capacity of 10,000 bushels.

(6) One (1) bulk storage building, identified as South Bulk Storage, constructed in 1989, with a maximum storage capacity of 370,000 bushels, using a baghouse, identified as CD08, as a control, exhausting to stack (SV bulk 1), and containing the following:

(A) Thirteen (13) storage bins, identified as Bins B-601 through B-612 and B-625, each with a storage capacity of 20,000 bushels.

(B) Ten (10) storage bins, identified as Bins B-613 through B-622, each with a storage capacity of 10,000 bushels.

(C) One (1) storage bin, identified as Bin B-2623, with a storage capacity of 10,000 bushels.

(7) One (1) bulk storage building, identified as Agra Bulk Storage, constructed in 2009, with a maximum storage capacity of 520,000 bushels, using a baghouse, identified as CD08, as a control, exhausting to stack (SV bulk 2), and containing the following:

(A) Twenty-six (26) storage bins, identified as Bins B-1 through B-13 and B-70 through B-82, each with a storage capacity of 10,000 bushels.

(B) Forty-eight (48) storage bins, identified as Bins B-16 through B-39 and B-44 through B-67, each with a storage capacity of 5,000 bushels.

(C) Eight (8) storage bins, identified as Bins B-14 and B-15, B-40 through 43 and B-68 and B-69, each with a storage capacity of 2,500 bushels.

(l) Grain packaging consisting of the following:

(1) Two (2) untreated/treated corn packaging areas, identified as untreated/treated corn packaging, constructed in 1989, each with a maximum throughput of 1,500 bushels of seed per hour, using a baghouse, identified as CD04, as a control, and exhausting indoors.

(m) Grain loadout consisting of the following:

(1) One (1) mobile chopping unit, identified as tub grinder, used for chopping silage, approved in 2014 for construction, with a maximum throughput of 4,000 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(2) One (1) cob loadout, identified as cob loadout, used for loadout of cob and bees wings from the sheller, constructed in 1988, with a maximum throughput of 5,000 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(3) One (1) discard loadout, identified as discard loadout, used for loadout of damaged seeds, constructed in 1989, with a maximum throughput of 1,500 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(4) Two (2) bulk truck loadouts, identified as north and south bulk loadout, used for loadout of untreated seed corn, constructed in 1989 with a maximum throughput of 1,600 bushels per hour each, with fugitive emissions exhausting to the atmosphere.

(5) One (1) bulk truck loadout, identified as Agra bulk loadout, used for loadout of untreated seed corn, constructed in 2009, with a maximum throughput of 3,000 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(6) One (1) discard loadout, identified as untreated discard loadout, used for loadout of damaged seeds, approved in 2014 for construction, with a maximum throughput of 1,500 bushels per hour, with fugitive emissions exhausting to the atmosphere.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

(1) Several natural gas-fired space heaters, with a total maximum heat input capacity of 0.7 Btu/hr.

(b) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

A.4 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) to renew 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][IC 13-15-3-6(a)]

(a) This permit, F099-33467-00029, is issued for a fixed term of ten (10) 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] [IC 13-17-12]

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

B.5 Severability [326 IAC 2-8-4(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. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

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

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

(1) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and

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

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

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 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. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

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

(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, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 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.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]

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

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

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

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

The Permittee shall implement the PMPs.

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

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

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

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

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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.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 describe the following:

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

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

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

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877**.**

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

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

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

The notice fulfills the requirement of 326 IAC 2-8-4(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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "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.

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

(a) All terms and conditions of permits established prior to F099-33467-00029 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 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 Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned

changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "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.16 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(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

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

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

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 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, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "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.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (c) without a prior permit revision, if each of the following conditions is met:

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

(2) Any 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to

326 IAC 2-8-15(b)(1) and (c). 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)(1) and (c).

(b) Emission Trades [326 IAC 2-8-15(b)]
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(b).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]
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.19 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.20 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.21 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "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.22 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 no later than 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.23 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

Emission 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) and greenhouse gases (GHGs), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(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.

(4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

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

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

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or

fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.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]

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

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

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

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

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

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project

supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "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 Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

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

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

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "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.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

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

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

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.11 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. The analog instrument shall be capable of measuring values outside of the normal range.

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

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

C.12 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.13 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

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

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

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

(1) initial inspection and evaluation;

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

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

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

(1) monitoring results;

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

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

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

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

C.14 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 submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.

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

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.15 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. Support information includes the following, where applicable:

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

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

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.

(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

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

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

C.16 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

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

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

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

Stratospheric Ozone Protection

C.17 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) natural gas-fired ear corn dryer, identified as dryer 1, constructed in 1988, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 1).

(b) One (1) natural gas-fired ear corn dryer, identified as dryer 2, constructed in 1988, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 2).

(c) One (1) natural gas-fired ear corn dryer, identified as dryer 3, constructed in 1988, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 3).

(d) One (1) natural-gas fired ear corn dryer, identified as dryer 4, constructed in 1993, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 4).

(e) One (1) natural-gas fired ear corn dryer, identified as dryer 5, constructed in 2009, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 5).

(f) Two (2) green corn dump pits, identified as dump pit north and dump pit south, constructed in 1988, each with a maximum throughput of 2,500 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(g) One corn dump pit, identified as bulk dump pit, constructed in 1989, with a maximum throughput of 3,000 bushels per hour, using the general house dust baghouse, identified as CD12, as a control, and exhausting indoors.

(h) One corn dump pit, identified as agra dump pit, constructed in 2009, with a maximum throughput of 3,000 bushels per hour, using a baghouse, identified as CD08, as a control, and exhausting indoors.

(i) Headhouse and grain handling consisting of the following:

(1) Two (2) husking and sorting lines, each line containing nine (9) units, identified as sorting lines 1 and 2, constructed in 1988, each line with a maximum throughput of 2,000 bushels per hour, and exhausting indoors.

(2) One (1) bagged seed corn area, identified as corn rework, constructed in 1991, with a maximum throughput of 1,200 bushels per hour, using a baghouse, identified as CD04, as a control, and exhausting indoors.

(3) Ten (10) precision sizers, identified as sizers 1 through 10, constructed in 1989, each with a maximum throughput of 100 bushels per hour, using a baghouse, identified as CD06, as a control, and exhausting indoors.

(4) Nine (9) gravity separators, identified as separators 1 through 9, used to remove damaged seed, constructed in 1989, each with a maximum throughput of 110 bushels per hour, using nine (9) baghouses, collectively identified as CD03, as controls, and exhausting indoors.

(5) Two (2) seed treaters, identified as treater No. 1 and treater No. 2, each used to apply seed treatment to seed corn, constructed in 2011, each with a maximum throughput of 1,000 bushels per hour, using a baghouse, identified as CD09, as a control, and exhausting indoors.

(6) Enclosed transfer points, identified as enclosed, constructed in 1988, with a maximum throughput of 5,000 bushels per hour, using the general house dust baghouse, identified as CD12, as a control, and exhausting indoors.

(7) One (1) blending system, identified as blending, constructed in 2009, consisting of one (1) unloading station, two (2) blending surge bins, two (2) weigh belts, and a blended product elevator, with a maximum throughput of 2,000 bushels per hour, using a baghouse, identified as CD07, as a control, and exhausting indoors.

(8) Four (4) precision sizers, identified as sizers 11 through 14, approved in 2014 for construction, each with a maximum throughput of 540 bushels per hour, using the general house dust baghouse, identified as CD12, as a control, and exhausting indoors.

(9) Two (2) color sorters, identified as color sorter 1 and 2, approved in 2014 for construction, each with a maximum throughput of 800 bushels per hour, using the color sorter baghouse, identified as CD11, as a control, and exhausting indoors.

(j) Grain Cleaning consisting of the following:

(1) Two (2) corn sheller and cleaner units, identified as sheller north and sheller south, constructed in 1988 with a maximum throughput of 2,500 bushels per hour, using two (2) baghouses, identified as CD01, as controls, and exhausting indoors.

(2) One (1) aspirator, identified as aspirator 2, used for seed corn cleaning, approved in 2014 for construction, with a maximum throughput of 1,200 bushels per hour, using the cleaner baghouse, identified as CD10, as a control, and exhausting indoors.

(3) One (1) treater aspirator, identified as treater aspirator, used to clean seed corn prior to treatment, constructed in 1989, with a maximum throughput of 1,200 bushels per hour, using a baghouse, identified as CD09, as a control, constructed in 2011, and exhausting indoors.

(k) Grain Storage consisting of the following:

(1) Two (2) cob storage bins, identified as cob bin 1 and 2, constructed in 1988, each with a storage capacity of about 1,500 bushels, and exhausting indoors.

(2) One (1) discard bin, identified as discard bin, constructed in 1989, with a storage capacity of 1,500 bushels, and exhausting indoors.

(3) Sixteen (16) kernel size bins, identified as kernel bins 1 through 16, constructed in 1989, each with a storage capacity of 1,000 bushels of kernels, using a baghouse, identified as CD06, as a control, and exhausting indoors.

(4) Seven (7) treated corn packaging bins, identified as treated bins 1 through 7,

constructed in 1989, four (4) with a storage capacity of 1,000 bushels of treated corn and three (3) with a storage capacity of 500 bushels of treated corn, using a baghouse, identified as CD04, as a control, and exhausting indoors.

(5) One (1) bulk storage building, identified as North Bulk Storage, constructed in 1989, with a maximum storage capacity of 370,000 bushels, using a baghouse, identified as CD08, as a control, exhausting to stack (SV bulk 1), and containing the following:

(A) Thirteen (13) storage bins, identified as Bins B-501 through B-512 and B-525, each with a storage capacity of 20,000 bushels.

(B) Ten (10) storage bins, identified as Bins B-513 through B-522, each with a storage capacity of 10,000 bushels.

(C) One (1) storage bin, Bin B-2523, with a storage capacity of 10,000 bushels.

(6) One (1) bulk storage building, identified as South Bulk Storage, constructed in 1989, with a maximum storage capacity of 370,000 bushels, using a baghouse, identified as CD08, as a control, exhausting to stack (SV bulk 1), and containing the following:

(A) Thirteen (13) storage bins, identified as Bins B-601 through B-612 and B-625, each with a storage capacity of 20,000 bushels.

(B) Ten (10) storage bins, identified as Bins B-613 through B-622, each with a storage capacity of 10,000 bushels.

(C) One (1) storage bin, identified as Bin B-2623, with a storage capacity of 10,000 bushels.

(7) One (1) bulk storage building, identified as Agra Bulk Storage, constructed in 2009, with a maximum storage capacity of 520,000 bushels, using a baghouse, identified as CD08, as a control, exhausting to stack (SV bulk 2), and containing the following:

(A) Twenty-six (26) storage bins, identified as Bins B-1 through B-13 and B-70 through B-82, each with a storage capacity of 10,000 bushels.

(B) Forty-eight (48) storage bins, identified as Bins B-16 through B-39 and B-44 through B-67, each with a storage capacity of 5,000 bushels.

(C) Eight (8) storage bins, identified as Bins B-14 and B-15, B-40 through 43 and B-68 and B-69, each with a storage capacity of 2,500 bushels.

(l) Grain packaging consisting of the following:

(1) Two (2) untreated/treated corn packaging areas, identified as untreated/treated corn packaging, constructed in 1989, each with a maximum throughput of 1,500 bushels of seed per hour, using a baghouse, identified as CD04, as a control, and exhausting indoors.

(m) Grain loadout consisting of the following:

(1) One (1) mobile chopping unit, identified as tub grinder, used for chopping silage, approved in 2014 for construction, with a maximum throughput of 4,000 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(2) One (1) cob loadout, identified as cob loadout, used for loadout of cob and bees wings from the sheller, constructed in 1988, with a maximum throughput of 5,000 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(3) One (1) discard loadout, identified as discard loadout, used for loadout of damaged seeds, constructed in 1989, with a maximum throughput of 1,500 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(4) Two (2) bulk truck loadouts, identified as north and south bulk loadout, used for loadout of untreated seed corn, constructed in 1989 with a maximum throughput of 1,600 bushels per hour each, with fugitive emissions exhausting to the atmosphere.

(5) One (1) bulk truck loadout, identified as Agra bulk loadout, used for loadout of untreated seed corn, constructed in 2009, with a maximum throughput of 3,000 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(6) One (1) discard loadout, identified as untreated discard loadout, used for loadout of damaged seeds, approved in 2014 for construction, with a maximum throughput of 1,500 bushels per hour, with fugitive emissions exhausting to the atmosphere.

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

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

D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each process shall be limited by one of the following:

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

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

or

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

Emissions Units	Maximum (bushels/hr) for each unit of that type	Maximum Process Weight (tons/hour)[1] for each unit of that type	326 IAC 6-3 Allowable Emission Rate (lbs/hr) for each unit of that type
Grain Dryers (1 through 5)	1,200	48.75	44.34
Green Corn Dump Pits (North & South)	2,500	101.56	51.43
Bulk Dump Pit	3,000	84.00	49.54
Agra Dump Pit	3,000	84.00	49.54
Husking and Sorting Lines (1 and 2)	2,000	81.25	49.22
Corn Rework	1,200	33.60	40.96
Seed Treaters (1 and 2)	1,000	28.0	38.23
Enclosed Transfer Points	5,000	140.00	54.72
Blending System	2,000	56.00	45.64
Two (2) Sheller and Cleaners (north and south)	2,500	101.56	51.43
Aspirator 2	1,200	33.60	40.96
Treater Aspirator	1,200	33.60	40.96
Two (2) Packaging Areas (untreated and treated)	1,500	42.00	42.97
Mobile Chopping Unit	4,000	162.50	56.28
Discard Loadout	1,500	42.00	42.97
Cob Loadout	5,000	140.00	54.72
Untreated Discard Loadout	1,500	42.00	42.97
North and South Bulk Loadout	1,600	44.80	43.56
Agra Dump Loadout	3,000	84.00	48.54
Color sorters (1 and 2), each	800	22.00	32.90
Precision sizers (11 through 14), each	540	15.00	25.30

[1]Maximum Process Weight (tons/hour) calculated assuming 81.25 pounds per bushel for all units handling corn still on the cob: Dump Pits (1 and 2), Husking and Sorting Lines (1 and 2), Grain Dryers (1 through 5), and Sheller and Cleaners (north and south), as well as for the mobile chopping unit. All other units handle shelled corn for which a conversion of 56 pounds per bushel is assumed.

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

A Preventive Maintenance Plan is required for the Grain Dryers (1 through 5), the two (2) seed treaters, and the following control devices: CD01, CD03, CD04, CD06, CD07, CD08, CD09, CD10, CD11, and CD12. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.3 Particulate Control

(a) In order to comply with Condition D.1.1, the baghouse, identified as CD01, for particulate control shall be in operation and control emissions from the two (2) sheller and cleaners at all times the two (2) sheller and cleaners 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.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(i) Headhouse and grain handling consisting of the following:

(5) Two (2) seed treaters, identified as treater No. 1 and treater No. 2, each used to apply seed treatment to seed corn, constructed in 2011, each with a maximum throughput of 1,000 bushels per hour, using a baghouse, identified as CD09, as a control, and exhausting indoors.

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

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

D.2.1 VOC Limits [326 IAC 8-1-6] [326 IAC 2-8]

In order to render the requirements of 326 IAC 8-1-6 (New facilities; general reduction requirements) not applicable and to comply with the requirements of 326 IAC 2-8-4 (FESOP), the Permittee shall comply with the following:

(1) Treater No. 1 shall use less than twenty-five (25) tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month, including coatings, dilution solvents, and cleaning solvents. Compliance with this limit renders the provisions of 326 IAC 8-1-6 (New Facilities; VOC Reduction Requirements) not applicable.

(2) Treater No. 2 shall use less than twenty-five (25) tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month, including coatings, dilution solvents, and cleaning solvents. Compliance with this limit renders the provisions of 326 IAC 8-1-6 (New Facilities; VOC Reduction Requirements) not applicable.

Compliance with the above limits, combined with VOC emissions from all other emission units at the source, shall limit VOC emissions from the entire source to less than one hundred (100) tons per twelve (12) consecutive month period and render 326 IAC 2-7 not applicable.

Compliance Determination Requirements

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-2][326 IAC 8-1-4]

Compliance with the VOC usage limit contained in Condition D.2.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ**,** reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

D.2.3 Record Keeping Requirement

(a) To document the compliance status with condition D.2.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in condition D.2.1.

(1) The VOC content of each coating material and solvent used.

(2) The amount of coating material and solvent used on a monthly basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(3) The total VOC usage for each month for each seed treater.

(b) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.2.4 Reporting Requirement

(a) A quarterly summary of the information to document the compliance status with condition D.2.1 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported.

(b) Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) natural gas-fired ear corn dryer, identified as dryer 1, constructed in 1988, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 1).

(b) One (1) natural gas-fired ear corn dryer, identified as dryer 2, constructed in 1988, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 2).

(c) One (1) natural gas-fired ear corn dryer, identified as dryer 3, constructed in 1988, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 3).

(d) One (1) natural gas-fired ear corn dryer, identified as dryer 4, constructed in 1993, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 4).

(e) One (1) natural gas-fired ear corn dryer, identified as dryer 5, constructed in 2009, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 5).

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

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

D.3.1 FESOP Limit [326 IAC 2-8]

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the combined natural gas fuel usage for the five (5) natural gas-fired ear corn dryers, identified as dryer 1 through dryer 5, shall be no greater than 885.6 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit shall limit the source-wide NO_X and CO emissions to less than one hundred (100) tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) not applicable.

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

D.3.2 Record Keeping Requirement

(a) To document the compliance status with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the fuel and process gas usage limits established in Condition D.3.1.

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

(2) Actual natural gas usage per month for the five (5) natural gas-fired ear corn dryers, identified as dryer 1 through dryer 5, since last compliance determination period;

(b) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.3.3 Reporting Requirement

(a) A quarterly summary of the information to document the compliance status with Condition D.3.1 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported.

(b) Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

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

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Pioneer Hi-Bred International, Inc.
Source Address: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Permit No.: F099-33467-00029

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 AND ENFORCEMENT 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: Pioneer Hi-Bred International, Inc.
Source Address: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Permit No.: F099-33467-00029

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: _____

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

FESOP Quarterly Report

Source Name: Pioneer Hi-Bred International, Inc.
Source Address: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Permit No.: F099-33467-00029
Facility: Treater No. 1
Parameter: VOC Usage
Limit: Less than twenty-five (25) 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: _____

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

FESOP Quarterly Report

Source Name: Pioneer Hi-Bred International, Inc.
Source Address: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Permit No.: F099-33467-00029
Facility: Treater No. 2
Parameter: VOC Usage
Limit: Less than twenty-five (25) 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: _____

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

FESOP Quarterly Report

Source Name: Pioneer Hi-Bred International, Inc.
Source Address: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Permit No.: F099-33467-00029
Facility: Five (5) natural gas-fired corn dryers (dryer 1 through dryer 5)
Parameter: Natural gas usage
Limit: No greater than 885.6 million cubic feet 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: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Pioneer Hi-Bred International, Inc.
Source Address: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Permit No.: F099-33467-00029

Months: _____ to _____ Year: _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

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

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

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit Renewal

Source Background and Description

Source Name:	Pioneer Hi-Bred International, Inc.
Source Location:	2300 Pioneer Drive, Plymouth, Indiana 46563
County:	Marshall
SIC Code:	5153
Permit Renewal No.:	F099-33467-00029
Permit Reviewer:	Donald McQuigg

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Pioneer Hi-Bred International, Inc. relating to the operation of a stationary seed corn processing facility. On July 25, 2013, Pioneer Hi-Bred International, Inc. submitted an application to the OAQ requesting to renew its operating permit. Pioneer Hi-Bred International, Inc. was issued FESOP No. F099-27410-00029 on April 28, 2009.

On August 30, 2013, the Office of Air Quality (OAQ) received an application from the source requesting to remove one (1) existing aspirator and add one (1) aspirator cleaner, two (2) color sorters, and four (4) precision sorters. In addition, two (2) existing baghouses will be removed and three (3) new baghouses will be added. Pursuant to 326 IAC 2-1.1-3(e), the modification to construct the one (1) aspirator cleaner, two (2) color sorters, and four (4) precision sorters meets the criteria for an exemption because the total PTE of this modification is less than exemption level thresholds. The removal and construction of air pollution control devices is an exempt activity, pursuant to 326 IAC 2-1.1-3(h)(2)(A)(ii). Pursuant to 326 IAC 2-7-11(a)(8)(A), this change to the permit is considered an administrative amendment because the permit is amended to incorporate exempt emission units as described in 326 IAC 2-1.1-3. Therefore, these emission units are included in this FESOP renewal permit action.

Permitted Emission Units and Pollution Control Equipment

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

(a) One (1) natural gas-fired ear corn dryer, identified as dryer 1, constructed in 1988, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 1).

(b) One (1) natural gas-fired ear corn dryer, identified as dryer 2, constructed in 1988, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 2).

(c) One (1) natural gas-fired ear corn dryer, identified as dryer 3, constructed in 1988, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 3).

(d) One (1) natural gas-fired ear corn dryer, identified as dryer 4, constructed in 1993, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 4).

(e) One (1) natural gas-fired ear corn dryer, identified as dryer 5, constructed in 2009, with a rated heat input capacity of 60 MMBtu per hour, with a maximum throughput of 1,200 bushels per hour, and exhausting to stack (SV dryer 5).

(f) Two (2) green corn dump pits, identified as dump pit north and dump pit south, each classified as a "walking floor" style unloading station, constructed in 1988, each with a maximum throughput of 2,500 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(g) One corn dump pit, identified as bulk dump pit, constructed in 1989, with a maximum throughput of 3,000 bushels per hour, using a baghouse, identified as CD05, as a control, and exhausting indoors.

(h) One corn dump pit, identified as agra dump pit, constructed in 2009, with a maximum throughput of 3,000 bushels per hour, using a baghouse, identified as CD08, as a control, and exhausting indoors.

(i) Headhouse and grain handling consisting of the following:

(1) Two (2) husking and sorting lines, each line containing nine (9) units, identified as sorting lines 1 and 2, constructed in 1988, each line with a maximum throughput of 2,000 bushels per hour, and exhausting indoors.

(2) One (1) bagged seed corn area, identified as corn rework, constructed in 1991, with a maximum throughput of 1,200 bushels per hour, using a baghouse, identified as CD04, as a control, and exhausting indoors.

(3) Ten (10) precision sizers, identified as sizers 1 through 10, constructed in 1989, each with a maximum throughput of 100 bushels per hour, using a baghouse, identified as CD06, as a control, and exhausting indoors.

(4) Nine (9) gravity separators, identified as separators 1 through 9, used to remove damaged seed, constructed in 1989, each with a maximum throughput of 110 bushels per hour, using nine (9) baghouses, collectively identified as CD03, as controls, and exhausting indoors.

(5) Two (2) seed treaters, identified as treater No. 1 and treater No. 2, each used to apply seed treatment to seed corn, constructed in 2011, each with a maximum throughput of 1,000 bushels per hour, using a baghouse, identified as CD09, as a control, and exhausting indoors.

(6) Enclosed transfer points, identified as enclosed, constructed in 1988, with a maximum throughput of 5,000 bushels per hour, using a baghouse, identified as CD05, as a control, and exhausting indoors.

(7) One (1) blending system, identified as blending, constructed in 2009, consisting of one (1) unloading station, two (2) blending surge bins, two (2) weigh belts, and a blended product elevator, with a maximum throughput of 2,000 bushels per hour, using a baghouse, identified as CD07, as a control, and exhausting indoors.

(j) Grain Cleaning consisting of the following:

(1) Two (2) corn sheller and cleaner units, identified as sheller north and sheller south, constructed in 1988 with a maximum throughput of 2,500 bushels per hour, using two (2) baghouses, identified as CD01, as controls, and exhausting indoors.

(2) One (1) aspirator, identified as aspirator, used for seed corn cleaning, constructed in 1989, with a maximum throughput of 1,200 bushels per hour, using a baghouse, identified as CD02, as a control, and exhausting indoors.

(3) One (1) treater aspirator, identified as treater aspirator, used to clean seed corn prior to treatment, constructed in 1989, with a maximum throughput of 1,200 bushels per hour, using a baghouse, identified as CD09, as a control, constructed in 2011, and exhausting indoors.

(k) Grain Storage consisting of the following:

(1) Two (2) cob storage bins, identified as cob bin 1 and 2, constructed in 1988, each with a storage capacity of about 1,500 bushels, and exhausting indoors.

(2) One (1) discard bin, identified as discard bin, constructed in 1989, with a storage capacity of 1,500 bushels, and exhausting indoors.

(3) Sixteen (16) kernel size bins, identified as kernel bins 1 through 16, constructed in 1989, each with a storage capacity of 1,000 bushels of kernels, using a baghouse, identified as CD06, as a control, and exhausting indoors.

(4) Seven (7) treated corn packaging bins, identified as treated bins 1 through 7, constructed in 1989, four (4) with a storage capacity of 1,000 bushels of treated corn and three (3) with a storage capacity of 500 bushels of treated corn, using a baghouse, identified as CD04, as a control, and exhausting indoors.

(5) One (1) bulk storage building, identified as North Bulk Storage, constructed in 1989, with a maximum storage capacity of 370,000 bushels, using a baghouse, identified as CD08, as a control, exhausting to stack (SV bulk 1), and containing the following:

(A) Thirteen (13) storage bins, identified as Bins B-501 through B-512 and B-525, each with a storage capacity of 20,000 bushels.

(B) Ten (10) storage bins, identified as Bins B-513 through B-522, each with a storage capacity of 10,000 bushels.

(C) Two (2) storage bins, Bins B-523 and B-524, each with a storage capacity of 5,000 bushels.

(6) One (1) bulk storage building, identified as South Bulk Storage, constructed in 1989, with a maximum storage capacity of 370,000 bushels, using a baghouse, identified as CD08, as a control, exhausting to stack (SV bulk 1), and containing the following:

(A) Thirteen (13) storage bins, identified as Bins B-601 through B-612 and B-625, each with a storage capacity of 20,000 bushels.

(B) Ten (10) storage bins, identified as Bins B-613 through B-622, each with a storage capacity of 10,000 bushels.

(C) Two (2) storage bins, identified as Bins B-623 and B-624, each with a storage capacity of 5,000 bushels.

(7) One (1) bulk storage building, identified as Agra Bulk Storage, constructed in 2009, with a maximum storage capacity of 520,000 bushels, using a baghouse, identified as CD08, as a control, exhausting to stack (SV bulk 2), and containing the following:

(A) Twenty-six (26) storage bins, identified as Bins B-1 through B-13 and B-70 through B-82, each with a storage capacity of 10,000 bushels.

(B) Forty-eight (48) storage bins, identified as Bins B-16 through B-39 and B-44 through B-67, each with a storage capacity of 5,000 bushels.

(C) Eight (8) storage bins, identified as Bins B-14 and B-15, B-40 through 43 and B-68 and B-69, each with a storage capacity of 2,500 bushels.

(l) Grain packaging consisting of the following:

(1) Two (2) untreated/treated corn packaging areas, identified as untreated/treated corn packaging, constructed in 1989, each with a maximum throughput of 1,500 bushels of seed per hour, using a baghouse, identified as CD04, as a control, and exhausting indoors.

(m) Grain loadout consisting of the following:

(1) One (1) silage chopper loadout, identified as chopper loadout, used for chopping husk and rogue ears and loadout onto trucks, constructed in 1988, with a maximum throughput of 4,000 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(2) One (1) cob loadout, identified as cob loadout, used for loadout of cob and bees wings from the sheller, constructed in 1988, with a maximum throughput of 5,000 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(3) One (1) discard loadout, identified as discard loadout, used for loadout of damaged seeds, constructed in 1989, with a maximum throughput of 1,500 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(4) Two (2) bulk truck loadouts, identified as north and south bulk loadout, used for loadout of untreated seed corn, constructed in 1989 with a maximum throughput of 1,600 bushels per hour each, with fugitive emissions exhausting to the atmosphere.

(5) One (1) bulk truck loadout, identified as Agra bulk loadout, used for loadout of untreated seed corn, constructed in 2009, with a maximum throughput of 3,000 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(6) One (1) discard loadout, identified as untreated discard loadout, used for loadout of damaged seed, constructed in 2012, with a maximum throughput of 1,500 bushels per hour, with fugitive emissions exhausting to the atmosphere.

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

(a) One (1) silage chopper loadout, identified as chopper loadout, used for chopping husk and rogue ears and loadout onto trucks, constructed in 1988, with a maximum throughput of 4,000 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(b) One (1) aspirator, identified as aspirator, used for seed corn cleaning, constructed in 1989, with a maximum throughput of 1,200 bushels per hour, using a baghouse, identified as CD02, as a control, and exhausting indoors.

(c) Two (2) existing baghouses, identified as CD02 and CD05.

New Emission Units and Pollution Control Equipment

The source is adding the following new emission units included in the renewal application:

(a) One (1) mobile chopping unit, identified as tub grinder, used for chopping silage, approved in 2014 for construction, with a maximum throughput of 4,000 bushels per hour, with fugitive emissions exhausting to the atmosphere.

(b) One (1) discard loadout, identified as untreated discard loadout, used for loadout of damaged seeds, approved in 2014 for construction, with a maximum throughput of 1,500 bushels per hour, with fugitive emissions exhausting to the atmosphere.

The addition of the discard loadout and the replacement chopping unit will not alter the maximum annual throughput or debottleneck any upstream or downstream processes. The addition of the discard loadout unit will not constitute a new step in the process, as all discarded materials were already loaded out through existing loadouts; therefore, the source-wide potential annual emissions are not affected.

The source is adding the following new emission units and control devices during this permit renewal as specified in the administrative amendment request received on August 30, 2013:

(a) One (1) aspirator, identified as aspirator 2, used for seed corn cleaning, approved in 2014 for construction, with a maximum throughput of 1,200 bushels per hour, using the cleaner baghouse, identified as CD10, as a control, and exhausting indoors.

(b) Four (4) precision sizers, identified as sizers 11 through 14, approved in 2014 for construction, each with a maximum throughput of 540 bushels per hour, using the general house dust baghouse, identified as CD12, as a control, and exhausting indoors.

(c) Two (2) color sorters, identified as color sorter 1 and 2, approved in 2014 for construction, each with a maximum throughput of 800 bushels per hour, using the color sorter baghouse, identified as CD11, as a control, and exhausting indoors.

The source is converting one (1) green corn dump pit from a "clam shell" style to a "walking floor" style unloading station, resulting in a change in the maximum hourly throughput capacity. This conversion from a clam shell to walking floor style of unloading station does not constitute a new step in the process or a debottlenecking of any upstream or downstream processes; therefore, the source-wide potential annual emissions are not affected. The following emission unit description is revised, as indicated in the bold and strike-out text below, to reflect this change:

(a) Two (2) green corn dump pits, identified as dump pit north and dump pit south constructed in 1988, each with a maximum throughput of ~~2,000~~ **2,500** bushels per hour, with fugitive emissions exhausting to the atmosphere.

The source has converted two (2) storage bins, Bins B-523 and B-524, each with a storage capacity of 5,000 bushels, into one (1) storage bin, identified as Bin B-2523, with a storage capacity of 10,000 bushels. This modification did not alter the overall capacity; therefore, the source-wide potential annual emissions are not affected. The following emission unit description is revised, as indicated in the bold and strike-out text below, to reflect this change.

(a) ~~Two~~ **One** (~~2~~ **1**) storage bin~~s~~, **identified as Bin B-2523**~~Bins B-523 and B-524~~, ~~each~~ with a storage capacity of ~~5,000~~ **10,000** bushels.

The source has also converted two (2) storage bins, Bins B-623 and B-624, each with a storage capacity of 5,000 bushels, into one (1) storage bin, identified as Bin B-2623, with a storage capacity of 10,000 bushels. This modification did not alter the overall capacity; therefore, the source-wide potential annual emissions are not affected. The following emission unit description is revised, as indicated in the bold and strike-out text below, to reflect this change.

(a) ~~Two~~ **One** (~~2~~ **1**) storage bin~~s~~, **identified as Bin B-2623**~~Bins B-623 and B-624~~, ~~each~~ with a storage capacity of ~~5,000~~ **10,000** bushels.

As part of a control device update project, emission units controlled by CD05 will now be controlled by CD12. The following emission unit descriptions are revised, as indicated in the bold and strike-out text below, to reflect this change:

(a) One corn dump pit, identified as bulk dump pit, constructed in 1989, with a maximum throughput of 3,000 bushels per hour, using **the general house dust** baghouse, identified as ~~CD05~~ **CD12**, as a control, and exhausting indoors.

(b) Enclosed transfer points, identified as enclosed, constructed in 1988, with a maximum throughput of 5,000 bushels per hour, using **the general house dust** baghouse, identified as ~~CD05~~ **CD12**, as a control, and exhausting indoors.

Insignificant Activities

The source also consists of the following insignificant activities:

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

(1) Several natural gas-fired space heaters, with a total maximum heat input capacity of 0.7 Btu/hr.

(b) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

Existing Approvals

Since the issuance of the FESOP No. F099-27410-00029 on April 28, 2009, the source has constructed or has been operating under the following additional approvals:

(a) Administrative Amendment No. 099-28026-00029 issued on June 15, 2009;

(b) Minor Permit Revision No. 099-29535-00029 issued on September 23, 2010; and

(c) Administrative Amendment No. 099-30517-00029 issued on July 13, 2011.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Historically, one of the green corn dump pits utilized a "walking floor" style of unloading station and the other utilized a "clam shell" style of unloading station. The dump pit which previously utilized the "clam shell" style unloading station has been modified to use the "walking floor" style unloading station. This conversion from a clam shell to walking floor style of unloading station does not constitute a new step in the process or a debottlenecking of any upstream or downstream processes. Due to this modification, Pioneer is requesting to increase the maximum hourly throughput capacity from 2,000 to 2,500 bushels per hour for each of the green corn dump pits. Since the source-wide and emission unit potential emissions are based on the maximum annual

throughput, this increase in the maximum hourly throughput capacity for the green corn dump pits will not increase the annual maximum green corn throughput.

Pioneer has updated its potential corn throughput based on the maximum received green corn during the previous five (5) years in accordance with U.S. EPA's *Calculating Potential to Emit (PTE) and Other Guidance for Grain Handling Facilities (14 NOV 1995)*. Based on this revision, Pioneer's new potential maximum corn throughput is increased to 2,159,300 bushels per year.

Pioneer has updated the seed treater formulations used to treat seed corn at the Plymouth Facility. The updated treater formulations contain no HAPs; therefore, there will be no HAP emissions from the seed treaters. The PTE for VOC is reduced to the extent that the current VOC usage limits in Section D.2.1 of the previous permit will no longer be required to avoid VOC best available control technology (BACT) requirements; however, Pioneer is not requesting to remove these VOC usage limits at this time.

The seed treater aggregate VOC FESOP limit of less than fifty (50) tons per year is removed from the permit, as it was deemed unnecessary. The 326 IAC 8-1-6 (BACT) VOC avoidance limit of less than twenty-five (25) tons per year for each seed treater is adequate.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Marshall County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Unclassifiable or attainment effective April 5, 2005, for $PM_{2.5}$.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Marshall County has been classified as attainment for $PM_{2.5}$. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$

emissions. These rules became effective on July 15, 2008. On May 4, 2011, the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective June 28, 2011. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Marshall 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.

Fugitive Emissions

Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	162.85
PM_{10}	61.09
$PM_{2.5}$	18.42
SO_2	0.77
VOC	19.59
CO	108.46
NO_x	129.12
GHG as CO_2e	155,892
Single HAP (hexane)	2.33
Total HAP	2.44

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of NO_X and CO, is equal to or greater than one hundred (100) tons per year. However, the Permittee has agreed to limit the source's NO_X and CO emissions to less than Title V levels; therefore, the Permittee will be issued a FESOP Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than one hundred (100) tons per year.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHGs is equal to or greater than one hundred thousand (100,000) tons of CO_2 equivalent (CO_2e) emissions per year. However, the Permittee has agreed to limit the source's GHGs emissions to less than Title V levels; therefore, the Permittee will be issued a FESOP Renewal.

(d) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

Potential to Emit After Issuance

The source has opted to remain 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 of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM_{10}*	$PM_{2.5}$**	SO_2	NO_x	VOC	CO	GHG as CO_2e	Total HAPs	Worst Single HAP
Grain receiving	0.80	0.18	0.03	-	-	-	-	-	-	-
Grain shipping and packaging	1.96	0.66	0.11	-	-	-	-	-	-	-
Headhouse and grain handling	0.33	0.18	0.03	-	-	-	-	-	-	-
Grain column dryer	9.65	2.41	0.41	-	-	-	-	-	-	-
Grain cleaning	0.99	0.25	0.04	-	-	-	-	-	-	-
Grain storage	4.39	1.11	0.19	-	-	-	-	-	-	-
Seed treater No. 1(2)	-	-	-	-	-	<25.0	-	-	-	-
Seed treater No. 2(2)	-	-	-	-	-	<25.0	-	-	-	-
Natural gas combustion: five (5) grain dryers(1)	0.84	3.37	3.37	0.27	44.28	2.44	37.2	53,459	0.84	0.80(hexane)
Natural gas combustion: Insignificant	0.006	0.02	0.02	0.002	0.30	0.02	0.25	363	0.006	0.005 (hexane)
Paved roads: fugitives	0.356	0.071	0.017	-	-	-	-	-	-	-
Unpaved roads: fugitives	0.093	0.025	0.003	-	-	-	-	-	-	-
Total PTE of Entire Source	**19.41**	**8.28**	**4.23**	**0.27**	**44.58**	**<52.5**	**37.45**	**53,822**	**<25**	**<10 (hexane)**
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

negl. = negligible
* Under the Part 70 Permit program (40 CFR 70), PM_{10} and $PM_{2.5}$, not particulate matter (PM), are each considered as a regulated air pollutant".
**$PM_{2.5}$ listed is direct $PM_{2.5}$.
(1) Pursuant to FESOP No. F099-27410-00029, PTE based on a natural gas usage limitation of no greater than 885.6 MMCF per year for all five (5) dryers.
(2) Pursuant to FESOP No. F099-27410-00029, the total VOC emissions from each seed treater are limited to less than twenty-five (25) tons per year.

(a) FESOP Status
This existing source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source will be limited to less than the Title V major source threshold levels. In addition, this existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the potential to emit HAPs is less than ten (10) tons per year for a single HAP and twenty-

five (25) tons per year of total HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-8 (FESOP).

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

(1) The combined natural gas fuel usage for the five (5) natural gas fired ear corn dryers, identified as dryer 1 through dryer 5, shall be no greater than 885.6 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) Seed treater No. 1 shall use less than twenty-five (25) tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month, including coatings, dilution solvents, and cleaning solvents.

(3) Seed treater No. 2 shall use less than twenty-five (25) tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month, including coatings, dilution solvents, and cleaning solvents.

Compliance with these limits, combined with the potential to emit NO_X and CO from all other emission units at this source, shall limit the source-wide total potential to emit of NO_X, CO, and VOC to less than one hundred (100) tons per twelve (12) consecutive month period*,* each*,* and greenhouse gases (GHGs) to less than 100,000 tons of CO_2 equivalent (CO_2e) emissions per twelve (12) consecutive month period**,** and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), not applicable.

(b) PSD Minor Source
This existing source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit all attainment regulated criteria pollutants are less than two hundred fifty (250) tons per year, and this source is not one (1) of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1). The potential to emit greenhouse gases (GHGs) is limited to less than the PSD subject-to-regulation threshold of one hundred thousand (100,000) tons of CO_2 equivalent (CO_2e) emissions per year. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability

New Source Performance Standards (NSPS)

(a) The requirements of the New Source Performance Standard for Grain Elevators, 40 CFR 60, Subpart DD, are not included in the permit for the grain elevator because it has a permanent storage capacity less than 2.5 million U.S. bushels. The maximum capacity of the source is less than 1.3 million U.S. bushels.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63, Subpart DDDDDDD are not included in this permit renewal, since this source is not considered a prepared feeds manufacturing facility as defined by 40 CFR 63.11627. This source does not manufacture animal feed. This source only consists of a grain elevator.

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

Compliance Assurance Monitoring (CAM)

(e) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)
The source is subject to 326 IAC 1-6-3.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
This source is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the entire source is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.

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), the source is not located in Lake, Porter, or LaPorte County, 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 2-8-4 (FESOP)
FESOP applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

326 IAC 5-1 (Opacity Limitations)
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).

326 IAC 6.5 PM Limitations Except Lake County
This source is not subject to 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

State Rule Applicability – Individual Facilities

Grain Elevator Operations

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The five (5) natural gas-fired ear corn dryers are not subject to the requirements of 326 IAC 6-2, because they are not sources of indirect heating.

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

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

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

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

or

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

Emissions Units	Maximum (bushels/hr) for each unit of that type	Maximum Process Weight (tons/hr)[1] for each unit of that type	326 IAC 6-3 Allowable Emission Rate (lbs/hr) for each unit of that type	Maximum Particulate Emissions before control (lbs/hr)
Grain Dryers (1 through 5)	1,200	48.75	44.34	10.73
Green Corn Dump Pits (North and South)	2,500	101.56	51.43	3.55
Bulk Dump Pit	3,000	84.00	49.54	2.94
Agra Dump Pit	3,000	84.00	49.54	2.94
Husking and Sorting Lines (1 and 2)	2,000	81.25	49.22	4.96
Corn Rework	1,200	33.60	40.96	2.05
Seed Treaters (1 and 2)	1,000	28.00	38.23	1.71
Enclosed Transfer Points	5,000	140.00	54.72	26.47
Blending System	2,000	56.00	45.64	13.66
Two (2) Sheller and Cleaners (north and south)	2,500	101.56	51.43	76.17
Aspirator 2	1,200	33.60	40.96	25.20
Two (2) Packaging Areas (untreated and treated)	1,500	42.00	42.97	3.61
Mobile Chopping Unit	4,000	162.50	56.28	9.91
Discard Loadout	1,500	42.00	42.97	3.61
Cob Loadout	5,000	140.00	54.72	6.02
Untreated Discard Loadout	1,500	42.00	42.97	3.61
Bulk Loadout	1,600	44.80	43.56	3.85
Agra Dump Loadout	3,000	84.00	48.54	7.22
Color sorters (1 and 2), each	800	22.00	32.90	0.061
Precision sizers (11 through 14), each	540	15.00	25.30	0.061

[1]Maximum Process Weight (tons/hour) calculated assuming 81.25 pounds per bushel for all units handling corn still on the cob: Dump Pits (North and South), Husking and Sorting Lines (1 and 2), Grain Dryers (1 through 5), and Sheller and Cleaners (north and south), as well as for the mobile chopping unit. All other units handle shelled corn for which a conversion of 56 pounds per bushel is assumed.

In order to comply with 326 IAC 6-3, the baghouses for particulate control shall be in operation and control emissions from the two (2) sheller and cleaners at all times the two (2) sheller and cleaners are in operation.

Baghouses are used to control particulate from the following emission units: bulk dump pit, agra dump pit, corn rework, precision sizers, gravity separater bins, seed treaters (1 and 2), enclosed transfer points, blending system, aspirator, treater aspirator, bulk storage buildings, kernel bins, treated corn packaging bins, untreated and treated, and packaging areas; however, these facilities are able to comply with 326 IAC 6-3 without the use of a control device.

(b) The ten (10) precision sizers (sizers 1 through 10), the five (5) natural gas-fired grain dryers, and the gravity separator bins each have potential particulate emissions of less than 0.551 lbs per hour. Therefore, pursuant to 326 IAC 6-3-1(14), these facilities are exempt from the requirements of 326 IAC 6-3.

Color sorters/aspirator cleaner/precision sizers

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

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

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

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

Emission Unit	Maximum Capacity per Unit (bu/hr)	Maximum Capacity per Unit (ton/hr)	Type of Unit	Uncontrolled Emission Factor (lb/ton)	Uncontrolled PM PTE (lb/hr)	326 IAC 6-3-2 PM Limit (lb/hr)	Control Device Required to Meet Limit?
Aspirator 2	1,200	34	Cleaning	0.75	25.2	40.96	No
Color Sorters	800	22	Handling	0.061	1.4	32.90	No
Precision Sizers	540	15	Handling	0.061	0.9	25.30	No

Calculations based on AP-42 emission factors indicate that each of the above emission units is able to comply with its 326 IAC 6-3-2 limit without the use of a control device.

Seed Treaters

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)

(a) Seed treater No. 1 shall use less than twenty-five (25) tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month, including coatings, dilution solvents, and cleaning solvents. Compliance with this limit renders the provisions of 326 IAC 8-1-6 (New Facilities; VOC Reduction Requirements) not applicable.

(b) Seed treater No. 2 shall use less than twenty-five (25) tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month, including coatings, dilution solvents, and cleaning solvents. Compliance with this limit renders the provisions of 326 IAC 8-1-6 (New Facilities; VOC Reduction Requirements) not applicable.

There are no other 326 IAC 8 Rules that are applicable to the seed treaters.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section

D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

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

The two (2) seed treaters have applicable compliance determination conditions as specified below:

(1) Treater No. 1 shall use less than twenty-five (25) tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month, including coatings, dilution solvents, and cleaning solvents.

(2) Treater No. 2 shall use less than twenty-five (25) tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month, including coatings, dilution solvents, and cleaning solvents.

The five (5) natural gas-fired corn dryers have applicable compliance determination conditions as specified below:

(1) The combined natural gas fuel usage for the five (5) natural gas-fired corn dryers, identified as dryer 1 through dryer 5, shall be no greater than 885.6 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month.

Recommendation

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

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

An application for the purposes of this review was received on July 25, 2013.

Conclusion

The operation of this stationary seed corn processing facility shall be subject to the conditions of the attached FESOP Renewal No. F099-33467-00029.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Donald McQuigg at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-4240 or toll free at 1-800-451-6027 extension 4-4240.

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

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emission Calculations
Summary of Emissions

Company Name: Pioneer Hi-Bred International, Inc.
Address City IN Zip: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Renewal Number: F099-33467-00029
Reviewer: Donald McQuigg
Date: December 1, 2013

	Unlimited Potential To Emit (tons/year)									
Emission Units	PM	PM_{10}	$PM_{2.5}$	SO_2	NOx	VOC	CO	GHG as CO_2e	Worst Single HAP	Total HAP
Grain receiving	2.30	0.51	0.09	-	-	-	-	-	-	-
Grain shipping/packaging	7.17	2.42	0.41	-	-	-	-	-	-	-
Headhouse & grain handling	33.18	18.49	3.15	-	-	-	-	-	-	-
Grain drying (column dryer)	9.65	2.41	0.41							
Grain cleaning	98.69	25.00	4.21	-	-	-	-	-	-	-
Grain storage	4.39	1.11	0.19	-	-	-	-	-	-	-
Seed treater No. 1	-	-	-	-	-	6.24	-	-	-	-
Seed treater No. 2	-	-	-	-	-	6.24	-	-	-	-
Natural gas combustion: grain dryers	2.45	9.79	9.79	0.77	128.82	7.09	108.21	155,529	2.32 (hexane)	2.431
Natural gas combustion: insignificant	0.006	0.023	0.023	0.002	0.301	0.017	0.252	363	0.005 (hexane)	0.006
Total Non-Fugitive Emissions[(1)]	**157.82**	**59.75**	**18.28**	**0.77**	**129.12**	**19.59**	**108.46**	**155,892**	**2.33 (hexane)**	**2.44**
Paved roads[(2)]	0.356	0.071	0.017	-	-	-	-	-	-	-
Unpaved roads[(2)]	4.67	1.26	0.13	-	-	-	-	-	-	-
Total Emissions	**162.85**	**61.09**	**18.42**	**0.77**	**129.12**	**19.59**	**108.46**	**155,892**	**2.33 (hexane)**	**2.44**

	Limited/controlled Potential to Emit After Issuance (tons/year)									
Emission Units	PM	PM_{10}	$PM_{2.5}$	SO_2	NOx	VOC	CO	GHG as CO_2e	Worst Single HAP	Total HAP
Grain receiving	0.80	0.18	0.03	-	-	-	-	-	-	-
Grain shipping/packaging	1.96	0.66	0.11	-	-	-	-	-	-	-
Headhouse & grain handling	0.33	0.18	0.03	-	-	-	-	-	-	-
Grain drying	9.65	2.41	0.41	-	-	-	-	-	-	-
Grain cleaning	0.99	0.25	0.04	-	-	-	-	-	-	-
Grain storage	4.39	1.11	0.19	-	-	-	-	-	-	-
Seed treater No. 1	-	-	-	-	-	< 25.00	-	-	-	-
Seed treater No. 2	-	-	-	-	-	< 25.00	-	-	-	-
Natural gas combustion: dryers[(4)]	0.841	3.365	3.365	0.266	44.280	2.435	37.195	53,459.4	0.80 (hexane)	0.836
Natural gas combustion: insignificant	0.006	0.023	0.023	0.002	0.301	0.017	0.252	363	0.005 (hexane)	0.006
Total Non-Fugitive Emissions[(1)]	**18.957**	**8.179**	**4.208**	**0.267**	**44.581**	**< 52.452**	**37.448**	**53,822.3**	**0.81 (hexane)**	**0.84**
Paved roads[(2)]	0.356	0.071	0.017	-	-	-	-	-	-	-
Unpaved roads[(3)]	0.093	0.025	0.003	-	-	-	-	-	-	-
Total Emissions	**19.41**	**8.28**	**4.23**	**0.27**	**44.58**	**< 52.45**	**37.45**	**53,822**	**0.81 (hexane)**	**0.84**

[(1)] Total non-fugitive emissions conservatively do not exclude fugitives from grain receiving, corn silage by tub grinder, or cob/beeswing loadouts.

[(2)] mitigated fugitive emissions; [(3)] controlled fugitive emissions

[(4)]Pursuant to FESOP No. F099-27410-00029, the total limited PTE based on a natural gas usage limitation of no greater than 885.6 MMCF per year for all five dryers.

Appendix A: Emission Calculations
Updated Corn Production Rate

Company Name: Pioneer Hi-Bred International, Inc.
Address City IN Zip: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Renewal Number: F099-33467-00029
Reviewer: Donald McQuigg
Date: December 1, 2013

Production Data	2008	2009	2010	2011	2012	Max
Production Input - Green Corn (bu/yr)	1,681,339	1,771,182	1,605,574	1,667,219	1,799,417	1,799,417
Production Input - Green Corn (ton/yr)	68,304	71,954	65,226	67,731	73,101	73,101
Production Input - Shelled Corn (bu/yr)	1,261,004	1,328,387	1,204,181	1,250,414	1,349,563	1,349,563
Production Input - Shelled Corn (ton/yr)	35,308	37,195	33,717	35,012	37,788	37,788

Potential Corn Production Capacity*

Total Green Corn (bu/yr) =	2,159,300
Total Green Corn (ton/yr) =	87,721

* Potential production capacity calculated in accordance with U.S. EPA's *Calculating Potential to Emit (PTE) and Other Guidance for Grain Handling Facilities (14 NOV 1995)*

Methodology
81.25 lb green corn/bushel at 12% moisture
56 lb shelled corn/bushel at 15.5% moisture
Total Green Corn (bu/yr) = Green Corn Maximum Production (bu/yr) * 1.2
Total Green Corn (ton/yr) = Green Corn Maximum Production (ton/yr) * 1.2

Appendix A: Emissions Calculations
Precision Sizer/Color Sorter Project PTE Increase Summary and
326 IAC 6-3-2 Emission Limit Calculation

Company Name: Pioneer Hi-Bred International, Inc.
Address City IN Zip: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Renewal Number: F099-33467-00029
Reviewer: Donald McQuigg
Date: December 1, 2013

Uncontrolled Potential Emissions Increase (tons/year)

	Emissions Generating Activity	
Pollutant	Headhouse and Grain Handling*	Grain Cleaning**
PM	2.68	0.00
PM10	1.49	0.00
PM2.5	0.25	0.00

* The addition of of the new precision sizers will add one (1) new grain handling step, accounted for in the headhouse and handling operations. The new color sorters do not involve the addition of a new grain handling step, therefore, potential annual emissions will not change.
** The aspirator cleaner does not involve the addition of a new grain handling step, therefore, potential annual emissions will not change.

Controlled Potential Emissions Increase (tons/year)

	Emissions Generating Activity	
Pollutant	Headhouse and Grain Handling	Grain Cleaning
PM	0.027	0.00
PM10	0.015	0.00
PM2.5	0.003	0.00

Qty	Emission Unit	Maximum Capacity per Unit (bu/hr)	Maximum Capacity per Unit[1] (ton/hr)	Type of Unit	Uncontrolled Emission Factor (lb/ton)	Uncontrolled PM PTE (lb/hr)	326 IAC 6-3-2 PM Limit[2] (lb/hr)	Control Device Required to Meet Limit?
1	Aspirator 2	1,200	34	Cleaning	0.75	25.2	41.0	No
2	Color Sorters	800	22	Handling	0.061	1.4	32.9	No
4	Precision Sizers	540	15	Handling	0.061	0.9	25.3	No

[1] Maximum capacity per unit calculated in ton/hr based on 56 lbs/bu (shelled corn).
[2] In accordance with 326 IAC 6-3-2(e), PM emission limits are calculated according to the following formulas:
For units with a process weight up to 30 tons per hour: $E = 4.10 * P^{0.67}$
For units with a process weight in excess of 30 tons per hour: $E = 55.0 * P^{0.11} - 40$
Where: E = Emission rate (lb/hr)

Type of Unit	PM Emission Factor (lb/ton)
Cleaning	0.75
Handling	0.061

Appendix A: Emissions Calculations
Seed Additive Formula

Company Name: Pioneer Hi-Bred International, Inc.
Address City IN Zip: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Renewal Number: F099-33467-00029
Reviewer: Donald McQuigg
Date: December 1, 2013

		Additive Properties				Seed Production Data	Additive Usage Data			Uncontrolled VOC Emissions[4]	Uncontrolled HAP Emissions [1]
Emisison Unit	Seed Additive	Constituent	% by Weight	Density (lb/gal)	Emission Factor (lb/gal)	Annual Capacity[2] (tons/year)	Seed Additive Usage[3] (ounce/cwt)	Seed Additive Usage[3] (ounce/ton)	Annual Capacity (gal/yr)	PTE (tons/yr)	PTE (tons/yr)
Seed Treaters 1 & 2	Cruiser 5FS Insecticide	VOC	2.6%	10.51	0.27	70,177	2.27	45.4	24,891	3.40	-
	Raxil 2.6F	VOC	17.0%	9.20	1.56	70,177	0.74	14.8	8,114	6.35	-
	Poncho 600	VOC	0.0%	10.41	0.00	70,177	11.29	225.8	123,797	0.00	-
	Poncho Votivo	VOC	0.0%	10.50	0.00	70,177	12.18	243.6	133,556	0.00	-
	PSF 1006	VOC	0.0%	9.33	0.00	70,177	6.00	120	65,791	0.00	-
	PSF 1007	VOC	0.0%	8.70	0.00	70,177	1.00	20	10,965	0.00	-
	Polymer L323	VOC	0.0%	9.75	0.00	70,177	2.46	49.2	26,974	0.00	-
	Maxim Quattro	VOC	5.8%	9.37	0.54	70,177	0.92	18.4	10,088	2.74	-
	PPCT 2012 Red Colorant	VOC	0.0%	9.50	0.00	70,177	2.00	40	21,930	0.00	-
	PPCT 2013 Purple Colorant	VOC	0.0%	10.00	0.00	70,177	2.00	40	21,930	0.00	-
									Total Uncontrolled VOC Emissions (tons/yr) =	**12.49**	
									Treater No. 1 Uncontrolled VOC Emissions (tons/yr)=	**6.24**	
									Treater No. 2 Uncontrolled VOC Emissions (tons/yr)=	**6.24**	

Note 1. Seed treater additives contain no HAP.
Note 2. Annual capacity is equal to total potential green corn received mutiplied by 80% to account for 20% silage and cobs.
Note 3. Usage based on current seed treatment formula utilized at the plant.

Methodology
Emission Factor = Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Annual Capacity in tons/year = Grain Product Throughput in tons/year * 80%
Annual Capacity in gal/year = Annual Capacity in tons/year * Seed Additive Usage in ounce/ton * (1 gal / 128 ounces)
Potential VOC or HAP Emissions in Tons per Year = Annual Capacity in gal/year * Emission Factor in lb/gal * (1 ton /2000 lbs)

Appendix A: Emissions Calculations
Grain Elevator

Company Name: Pioneer Hi-Bred International, Inc.
Address City IN Zip: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Renewal Number: F099-33467-00029
Reviewer: Donald McQuigg
Date: December 1, 2013

Grain	[1]bushels/year	bushels/hr	[2]lbs / bushel	lbs / hour	[3] Grain Throughput (tons/hr)	Grain Throughput (tons/year)
Corn	2,159,300	1374.77	81.25	111,700	55.850	87,721.6
Corn shipped equals 2MM bushels	2,159,300	1374.77	81.25	111,700	55.850	87,721.6
Total Grain Received (tons of grain handled or processed per hour) =					55.850	**87,721.6**

Note 1: Revised green corn production capacity for this renewal based on maximum grain processed between 2008 and 2012 multiplied by a factor of 1.2.
Note 2: Assumes 81.25 lb/bushel based on green bushel at 12% moisture.
Note 3: Maximum hourly throughput based on dryer capacity is 11.17 ton/hr for each of the five dryers.

Unloading/Receiving		
[4]Hopper Truck (lb/ton)		
PM	PM-10	PM2.5
0.035	0.0078	0.0013

Unloading/Receiving	PM	PM10	PM2.5
Green Corn	0.768	0.171	0.029
Shelled Corn	1.535	0.342	0.057
Total uncontrolled	2.303	0.513	0.086
Controlled (efficiency	0.798	0.178	0.030

Note 4: 100% of unloading is done through Hopper truck. 50% reduction for green corn unloading uncontrolled emissions due to inherent mositure content (green corn is still contained is husks and has a high moisture content). 98% control of shelled corn unloading emissions by baghouse.

Drying		
Column Dryer		
PM	PM-10	PM2.5
0.22	0.055	0.0094

Drying	PM	PM10	PM2.5
Total uncontrolled	9.649	2.412	0.412

[5]Grain Cleaning		
PM	PM-10	PM2.5
0.75	0.19	0.032

Cleaning	PM	PM-10	PM2.5
Total uncontrolled	98.687	25.001	4.211
Controlled (efficiency 99%)	0.987	0.250	0.042

Note 5: The AP-42 factors were given with a cyclone, so assume a cyclone control of 90% to get uncontrolled emission factors. A multiply factor of 3 is used to account for emissions from all grain cleaning units - Two (2) Sheller/Cleaner, Aspirator, and Treater Aspirator.

[6]Headhouse and Grain Handling		
PM	PM-10	PM2.5
0.061	0.034	0.0058

	PM	PM10	PM2.5
Corn	2.676	1.491	0.254
Total uncontrolled	33.176	18.492	3.154
Controlled (efficiency 99%)	0.332	0.185	0.032

Note 6: A multiply factor of 12.1 is used to account for emissions from all the headhouse and grain handling units and any internal transfer points associated with these units. Units included are the Husking Beds/Sorting Tables Lines 1 and 2, Enclosed Internal Transfers, Precision Sizers, Gravity Beds/Separators, Blending System, and seed treaters. An additional factor of 0.3 was added to account for transfer of material in the corn rework process, a stand-alone process with a throughput typically less than 30% of the corn production rate. The total multiplication factor is 12.4.

[7]Storage		
PM	PM-10	PM2.5
0.025	0.0063	0.0011

storage	PM	PM10	PM2.5
uncontrolled	4.386	1.105	0.193

Note 7: A multiply factor of 4 is used to account for emissions from the 4 main storage units - bulk storage (North/South/Agra Bulk Storage), Kernel Size Bins, Blending System bins, and Treated and Untreated Corn Packaging Bins. Also, total green corn processing capacity is used to account for storage of all non-seed products including silage, cob, bees wing, and seed discard.

[8]Shipping and packaging		
Truck (unspecified)		
PM	PM-10	PM2.5
0.086	0.029	0.0049

Shipping	PM	PM10	PM2.5
Corn by truck	3.018	1.018	0.172
[9]Corn Silage by chopper	0.094	0.032	0.005
[9]Corn loadout by cob or bees wing	0.283	0.095	0.016
Packaging	3.772	1.272	0.215
Total uncontrolled	7.167	2.417	0.408
Controlled (efficiency 50%)	1.958	0.660	0.112

Note 8: 100% of shipping is done by truck, only a portion of shipping is controlled. Corn by truck includes emissions from bulk and agra loading of trucks for untreated seed and seed discards and corn packing into bags and boxes.

Note 9: Since AP-42 does not have a emission factor for Silage chopper/loadout, cob loadouts, and bees wing loadout, it was estimated that Silage chopper/loadout, cob loadout, and bees wing loadout will all have 50% less PM emissions than the truck loadout. Assuming 5% of the green corn throughput is silage, and assuming 15% of the throughput is cobs going out and 1% of cobs is bees wing. 50% control of Corn by truck emissions by loading sock and 99% control of Packaging emissions by baghouse.

Methodology

Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (3/03)

Potential Emissions (ton/yr) = Throughput (ton/yr)* Emission factor (lb/ton) / 2000 (lbs/ton)

Controlled Potential Emissions (ton/yr) = Throughput (ton/yr) * Emission factor (lb/ton) / 2000 (lbs/ton)* (1-Control Efficiency)

Appendix A: Emissions Calculations
Natural Gas Combustion Only
Unlimited PTE for the Five (5) Natural Gas-Fired Grain Dryers

Company Name: Pioneer Hi-Bred International, Inc.
Address City IN Zip: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Renewal Number: F099-33467-00029
Reviewer: Donald McQuigg
Date: December 1, 2013

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
300.0	1020	2576.5

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	2.448	9.791	9.791	0.773	128.824	7.085	108.212

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

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

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	2.705E-03	1.546E-03	9.662E-02	2.319E+00	4.380E-03	**2.424E+00**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	6.441E-04	1.417E-03	1.804E-03	4.895E-04	2.705E-03	**7.060E-03**
					Total HAPs	**2.431E+00**
Methodology is the same as above.					**Worst HAP**	**2.319E+00**

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Greenhouse Gas Calculations

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	154,588	3.0	2.8
Summed Potential Emissions in tons/yr	154,594		
CO2e Total in tons/yr based on 11/29/2013 federal GWPs	155,507		
CO2e Total in tons/yr based on 10/30/2009 federal GWPs	155,529		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) based on 11/29/2013 federal GWPs= CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

CO2e (tons/yr) based on 10/30/2009 federal GWPs = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emissions Calculations
Natural Gas Combustion Only
Limted PTE for the Five (5) Natural Gas-Fired Grain Dryers

Company Name: Pioneer Hi-Bred International, Inc.
Address City IN Zip: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Renewal Number: F099-33467-00029
Reviewer: Donald McQuigg
Date: December 1, 2013

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr	***Limited Potential Throughput MMCF/yr
300.0	1020	2576.5	885.6

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.841	3.365	3.365	0.266	44.280	2.435	37.195

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

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

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	9.299E-04	5.314E-04	3.321E-02	7.970E-01	1.506E-03	**8.332E-01**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	2.214E-04	4.871E-04	6.199E-04	1.683E-04	9.299E-04	**2.427E-03**
					Total HAPs	**8.356E-01**
					Worst HAP	**7.970E-01**

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Greenhouse Gas Calculations

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	53,136	1.0	1.0
Summed Potential Emissions in tons/yr	53,138		
CO2e Total in tons/yr based on 11/29/2013 federal GWPs	53,452		
CO2e Total in tons/yr based on 10/30/2009 federal GWPs	53,459		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) based on 11/29/2013 federal GWPs= CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).
CO2e (tons/yr) based on 10/30/2009 federal GWPs = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emissions Calculations
Natural Gas Combustion Only: Insignificant Space Heaters
MM BTU/HR <100

Company Name: Pioneer Hi-Bred International, Inc.
Address City IN Zip: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Renewal Number: F099-33467-00029
Reviewer: Donald McQuigg
Date: December 1, 2013

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
0.7	1020	6.0

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.006	0.023	0.023	0.002	0.301	0.017	0.252

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

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

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	6.312E-06	3.607E-06	2.254E-04	5.411E-03	1.022E-05	**5.656E-03**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.503E-06	3.306E-06	4.208E-06	1.142E-06	6.312E-06	**1.647E-05**
					Total HAPs	**5.673E-03**
					Worst HAP	**5.411E-03**

Methodology is the same as above.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Greenhouse Gas Calculations

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	361	0.0	0.0
Summed Potential Emissions in tons/yr	361		
CO2e Total in tons/yr based on 11/29/2013 federal GWPs	363		
CO2e Total in tons/yr based on 10/30/2009 federal GWPs	363		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) based on 11/29/2013 federal GWPs= CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

CO2e (tons/yr) based on 10/30/2009 federal GWPs = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emissions Calculations
Fugitive Dust Emissions - Unpaved Roads

Company Name: Pioneer Hi-Bred International, Inc.
Address City IN Zip: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Renewal Number: F099-33467-00029
Reviewer: Donald McQuigg
Date: December 1, 2013

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).

Maximum Annual Grain Received =	2,159,300	bushels/yr
Bulk Density of Grain Received=	0.028	tons/bushel (0.028 tons/bushel for corn)
Maximum Annual Grain Received =	60,460	tons/yr

Process	Vehicle Type	Maximum Weight of Vehicle (tons)	Maximum Weight of Load (tons)	Maximum Weight of Vehicle and Load (tons/trip)	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)
Receiving Truck Scale to Pit Entering Full	Truck	17.5	22.5	40.0	2,687	107,485	1,600	0.303	814
Receiving Truck Scale to Pit Leaving Empty	Truck	17.5	0	17.5	2,687	47,025	1,600	0.303	814
	Total				**5,374**	**154,510**			**1,629**

Average Vehicle Weight Per Trip =	28.8	tons/trip
Average Miles Per Trip =	0.303	miles/trip

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

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	6.4	6.4	6.4	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 solid waste landfills plant road)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2)
W =	28.8	28.8	28.8	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2)

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

	PM	PM10	PM2.5		
Unmitigated Emission Factor, Ef =	8.73	2.36	0.24	lb/mile	
Mitigated Emission Factor, Eext =	5.74	1.55	0.15	lb/mile	
Dust Control Efficiency 1 =	90%	90%	90%	Chemical Stabilization	OEPA RACM Guide (Section 2.1.1)
Dust Control Efficiency 2 =	80%	80%	80%	Speed Limit of 15 mph	OEPA RACM Guide (Section 2.1.1)

Process	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Receiving Truck Scale to Pit Entering Full	Grain truck (650 bushel)	3.55	0.96	0.10	2.34	0.63	0.06	0.05	0.01	0.001
Receiving Truck Scale to Pit Leaving Empty	Grain truck (650 bushel)	3.55	0.96	0.10	2.34	0.63	0.06	0.05	0.01	0.001
	Totals	**7.10**	**1.92**	**0.19**	**4.67**	**1.26**	**0.13**	**0.09**	**0.03**	**0.003**

Methodology
Maximum Annual Grain Throughput (tons/yr) = [Maximum Annual Grain Throughput (bushels/yr)] * [Bulk Density of Grain (tons/bushel)]
Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
Maximum trips per year (trip/yr) = [Throughput (tons/yr)] / [Maximum Weight of Load (tons/trip)]
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 1)* (1 - Dust Control Efficiency 2)

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PTE = Potential to Emit

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Pioneer Hi-Bred International, Inc.
Address City IN Zip: 2300 Pioneer Drive, Plymouth, Indiana 46563
FESOP Renewal Number: F099-33467-00029
Reviewer: Donald McQuigg
Date: December 1, 2013

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Maximum Annual Grain Received =	2,159,300	bushels/yr
Bulk Density of Grain Received=	0.028	tons/bushel (0.028 tons/bushel for corn)
Maximum Annual Grain Received =	60,460	tons/yr

Maximum Annual Grain Shipped =	2,159,300	bushels/yr
Bulk Density of Grain Shipped=	0.028	tons/bushel (0.028 tons/bushel for corn)
Maximum Annual Grain Shipped =	60,460	tons/yr

Vehicle Informtation

Process	Maximum Weight of Vehicle (tons)	Maximum Weight of Load (tons)	Maximum Weight of Vehicle and Load (tons)	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)
Receiving Truck to Scale (full)	17.5	22.5	40.0	2,687	107,485	1,200	0.227	611
Receiving Truck from Scale (empty)	17.5	0.0	17.5	2,687	47,025	1,200	0.227	611
Shipping Grain & Waste Truck (entering empty)	17.5	0.0	17.5	2,687	47,025	2,400	0.455	1,221
Shipping Grain & Waste Truck (leaving full)	17.5	22.5	40.0	2,687	107,485	2,400	0.455	1,221
Total				**10,749**				**3,664**

Average Vehicle Weight Per Trip =	28.8	tons/trip
Average Miles Per Trip =	0.341	miles/trip

Unmitigated Emission Factor, Ef = k * (sL)^0.91 * (W)^1.02 (Equation 1 from AP-42 13.2.1)

	PM	PM_{10}	$PM_{2.5}$	
where k =	0.011	0.0022	0.00054	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
W =	28.8	28.8	28.8	tons = average vehicle weight (provided by source)
sL =	0.6	0.6	0.6	g/m^2 = Ubiquitous Baseline Silt Loading Values of paved roads (Table 13.2.1 for summer months)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)]
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]

where p =	125	days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N =	365	days per year

	PM	PM_{10}	$PM_{2.5}$	
Unmitigated Emission Factor, Ef =	0.212	0.042	0.010	lb/mile
Mitigated Emission Factor, Eext =	0.194	0.039	0.010	lb/mile
Dust Control Efficiency =	0%	0%	0%	

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM_{10} (tons/yr)	Unmitigated PTE of $PM_{2.5}$ (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM_{10} (tons/yr)	Mitigated PTE of $PM_{2.5}$ (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM_{10} (tons/yr)	Controlled PTE of $PM_{2.5}$ (tons/yr)
Receiving Truck to Scale (full)	0.065	0.013	0.003	0.059	0.012	0.003	0.059	0.012	0.003
Receiving Truck from Scale (empty)	0.065	0.013	0.003	0.059	0.012	0.003	0.059	0.012	0.003
Shipping Grain & Waste Truck (entering empty)	0.130	0.026	0.006	0.119	0.024	0.006	0.119	0.024	0.006
Shipping Grain & Waste Truck (leaving full)	0.130	0.026	0.006	0.119	0.024	0.006	0.119	0.024	0.006
Total	**0.39**	**0.078**	**0.019**	**0.356**	**0.071**	**0.017**	**0.356**	**0.071**	**0.017**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM_{10} = Particulate Matter (<10 um)
$PM_{2.5}$ = Particulate Matter (<2.5 um)
PTE = Potential to Emit

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

March 25, 2014

Mr. Mark Letsinger
Pioneer Hi-Bred International, Inc.
2300 Pioneer Dr
Plymouth, IN 46563

Re: Public Notice
Pioneer Hi-Bred International, Inc.
Permit Level: FESOP - Renewal
Permit Number: 099 - 33467 - 00029

Dear Mr. Letsinger:

Enclosed is a copy of your draft FESOP - Renewal, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has submitted the draft permit package to the Plymouth Public Library, 201 North Center Street in Plymouth IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper. The OAQ has requested that the Plymouth Pilot News in Plymouth, In publish this notice no later than March 29, 2014.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Don McQuigg, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-4240 or dial (317) 234-4240.

Sincerely,
Len Pogost

Len Pogost
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter. dot 3/27/08

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Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

March 25, 2014

Plymouth Pilot News
Attn: Classifieds
P.O. Box 220
Plymouth, IN 46563

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Pioneer Hi-Bred International, Inc., Marshall County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than March 29, 2014.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Len Pogost at 800-451-6027 and ask for extension 3-2803 or dial 317-233-2803.

Sincerely,

Len Pogost

Len Pogost
Permit Branch
Office of Air Quality

Permit Level: FESOP - Renewal
Permit Number: 099 - 33467 - 00029

Enclosure
PN Newspaper.dot 6/13/2013

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

March 25, 2014

To: Plymouth Public Library 201 North Center Street Plymouth IN

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Pioneer Hi-Bred International, Inc.
Permit Number: 099 - 33467 - 00029

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 6/13/2013

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

Notice of Public Comment

March 25, 2014
Pioneer Hi-Bred International, Inc.
099 - 33467 - 00029

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover.dot 6/13/13

Mail Code 61-53

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1		Mark Letsinger Pioneer Hi-Bred International, Inc. 2300 Pioneer Dr Plymouth IN 46563 (Source CAATS)									
2		Marshall County Commissioners 112 West Jefferson Street Plymouth IN 46563 *(Local Official)*									
3		Plymouth Public Library 201 North Center Street Plymouth IN 46563-2103 *(Library)*									
4		Pymouth City Council and Mayors Office 124 N Michigan St Plymouth IN 46563 *(Local Official)*									
5		Marshall County Health Department 112 W Jefferson Street, Suite 103 Plymouth IN 46563-1764 *(Health Department)*									
6		LaPaz Town Council PO Box 0820 LaPaz IN 46537 *(Local Official)*									
7		Ms. Julie Grzesiak 139 N. Michigan St. Argos IN 46501 *(Affected Party)*									
8		Brooke A. Myer Trinity Consultants 7330 Woodland Drive, Suite 225 Indianapolis IN 46278 *(Consultant)*									
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