



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Michael R. Pence*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: April 9, 2013

RE: Monsanto Company / 073-32601-00035

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

## Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures  
FNPER.dot12/03/07



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April 9, 2013

John Sturges  
Monsanto Company  
P.O. Box 35, 15849 South U.S Highway 231  
Remington, IN 47977

Re: 073-32601-00035  
First Significant Revision to  
F073-30542-00035

Dear Mr. Sturges:

Monsanto Company was issued a Federally Enforceable State Operating Permit (FESOP) Renewal No. F073-30542-00035 on November 20, 2012 for a stationary hybrid corn seed processing plant located at 15849 S US Hwy 231, Remington, Indiana. On December 07, 2012, the Office of Air Quality (OAQ) received an application from the source for the following modifications and construction:

1. Huskers 1 and 2 will be modified to have one additional husking bed each.
2. Dry 5 and dry 6 will be modified to each have a drying rate of 778 bushels (43,568 pounds) per hour and heat input capacity of 252 MMBtu/hr (28 burners x 9 MMBtu/hr), equipped with twenty eight (28) storage bins, identified as Dry 5 and Dry 6 Bins, used for drying with capacity of 2,000 bushels (112,000 pounds) each.
3. One (1) corn sheller, identified as Sheller #3, exhausting to a baghouse for particulate control, identified as CE15c, with a capacity of 2,500 bushels (140,000 pounds) of corn per hour.
4. Two new sheller aspirators, identified as Sheller Aspirator 3 and Sheller Aspirator 4, exhausting to a new baghouse for particulate control, identified as CE16, with a capacity of 2,500 bushels (140,000 pounds) of corn per hour, each.
5. The removal of 12 bulk storage bins and the addition of 80 new ones. The bulk storage bins will be renumbered.
6. The shelled corn loadout constructed in 1976 will be demolished and a new shelled corn loadout operation will be added. The new shelled corn loadout operation will have a maximum capacity of 2,500 bushels per hour (140,000 pounds) and exhausting to a baghouse for particulate control, identified as CE-34r (House Dust System).
7. The 6 loadout bins will be replaced with 4 shelled corn loadout bins. Four (4) shelled corn loadout bins identified as 31.830, 31.840, 31.850, 31.860 with a capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34R (House Dust system). Each bin has a capacity of 2,580 bushels (144,480 lbs).
8. Four (4) cob bins identified as 31.810, 31.820, 31.870, and 31.880. Each has a capacity of 2,832 cubic feet (48,144 pounds) and is utilized for cob loadout exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust system).

9. One (1) dust bin identified as 31.900 with a capacity of 3,000 cubic feet (60,000 pounds) and utilized for dust loadout exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).
10. One shelled corn receiving operation identified as Shelled Corn Receiving with a capacity of 5,000 bushels per hour (280,000 pounds) exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust system).
11. One debagger, identified as small lot debagger EU106.
12. The addition of the following insignificant activities:
  - (a) One Central Vacuum system identified as Tower Central Vac for general clean up.
  - (b) One Central Vacuum system identified as Sheller Central Vac for general clean up.
  - (c) One husk chopper identified as Husk Chopper, with a capacity of 500 bushels per hour (28,000 pounds per hour); and
  - (d) Internal Handling operations

The attached Technical Support Document (TSD) provides additional explanation of the changes to the source/permit. Pursuant to the provisions of 326 IAC 2-8-11.1, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-8-11.1(f). Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

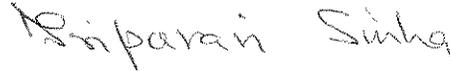
The following construction conditions are applicable to the proposed project:

1. General Construction Conditions  
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit  
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Ghassan Shalabi, of my staff, at 317-234-5378 or 1-800-451-6027, and ask for extension 4-5378.

Sincerely,



Tripurari P. Sinha Ph. D., Section Chief  
Permits Branch  
Office of Air Quality

Attachments: Technical Support Document and revised permit

TS/GS

cc: File - Jasper County  
Jasper County Health Department  
U.S. EPA, Region V  
Compliance and Enforcement Branch  
Billing, Licensing and Training Section



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**Federally Enforceable State Operating Permit Renewal  
OFFICE OF AIR QUALITY**

**Monsanto Company  
15849 S US Hwy 231  
Remington, Indiana 47977**

(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.: F073-30542-00035	
Issued by:  Nathan C. Bell, Section Chief Permits Branch Office of Air Quality	Issuance Date: November 20, 2012  Expiration Date: November 20, 2022

First Significant Permit Revisions No.: 073-32601-00035	
Issued by:  Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: April 9, 2013  Expiration Date: November 20, 2022

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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 hybrid corn seed processing plant.

Source Address:	15849 S US Hwy 231, Remington, Indiana 47977
General Source Phone Number:	219-261-2122
SIC Code:	0723
County Location:	Jasper
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules 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)]

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

#### (a) Husking Receiving

- (1) Two (2) receiving lines, identified as Corn Receiving 1 and Corn Receiving 2, consisting of two (2) huskers, identified as Husker 1 and Husker 2, which each consist of seven (7) husking beds, constructed in 1976, modified in 1995, 2007, 2008, and 2013 exhausting to general ventilation, capacity: 2,000 bushels (112,000 pounds) of ear corn per hour for each line and each husker.
- (2) Two (2) corn receiving lines identified as Corn Receiving 3 and Corn Receiving 4, consisting of two (2) huskers, identified as Husker 3 and Husker 4, which each consist of seven (7) husking beds, constructed in 2007 and modified in 2008, exhausting to general ventilation, capacity: 2,000 bushels (112,000 pounds) of ear corn per hour for each line and each husker.

#### (b) Drying

- (1) Two (2) natural gas-fired bin dryers, identified as Dry 1 and Dry 2, exhausting to Stacks Dry 1 and Dry 2, constructed in 1976, with heat input capacities of sixty (60) million British thermal units per hour, each, and a dry rate of 20,238 bushels per batch (500 bushels (28,000 pounds) per hour, each).
- (2) Two (2) gas-fired bin dryers, identified as Dry 3 and Dry 4, approved for construction in 2007 and 2008, exhausting to Stack Dry 3 and Stack Dry 4, with a drying rate of 500 bushels (28,000 pounds) per hour and a heat input capacity of 160 million British thermal units per hour, equipped with eighteen (18) storage bins each, identified as Dry 3 Bins and Dry 4 Bins, used for drying with a capacity of 2,000 bushels (112,000 pounds), each.
- (3) Two (2) gas-fired bin dryers, identified as Dry 5 and Dry 6, approved for construction in 2008, 2009 and approved for modification in 2013, exhausting to Stack Dry 5 and Stack Dry 6, with a drying rate of 778 bushels (43,568 pounds)

per hour and a heat input capacity of 252 million British thermal units per hour (28 burners x 9 MMBtu/burner), equipped with eighteen (28) storage bins each, identified as Dry 5 Bins and Dry 6 Bins, used for drying with a capacity of 2,000 bushels (112,000 pounds), each.

(c) Shelling/Bulk Storage

- (1) One (1) corn sheller, identified as Sheller 1, constructed in 2007, exhausting to a baghouse for particulate control, identified as CE15a, capacity: 2,500 bushels (140,000 pounds) of corn per hour.
- (2) One (1) corn sheller, identified as Sheller 2, constructed in 2007, exhausting to a baghouse for particulate control, identified as CE15b, capacity: 2,500 bushels (140,000 pounds) of corn per hour.
- (3) One (1) corn sheller, identified as Sheller 3, approved for construction in 2013, exhausting to a baghouse for particulate control, identified as CE15c, capacity: 2,500 bushels (140,000 pounds) of corn per hour.
- (4) Four (4) aspirators, identified as Sheller Aspirator 1 and Sheller Aspirator 2, constructed in 2009, Sheller Aspirator 3, and Sheller Aspirator 4, approved for construction in 2013, exhausting to baghouse CE16 for particulate control, with a capacity of 2,500 bushels (140,000 pounds) of corn per hour, each.
- (5) Two hundred and forty eight (248) bulk storage bins, identified as 451.01-451.31, 452.01-452.31, 453.01-453.31, 454.01-454.31, 455.01-455.31, 456.01-456.31, 457.01-457.31 and 458.01-458.31 constructed in 1999, 2007, 2008, 2009, and 2013 exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).
  - (a) Storage bins 451.01-451.31, 454.01-454.31, 455.01-455.31 and 458.01-458.31 have a capacity of 7,500 bushels (420,000 pounds) each.
  - (b) Storage bins 452.01-452.31, 453.01-453.31, 456.01-456.31 and 457.01-457.31 have a capacity of 5,000 bushels (280,000 pounds) each.
- (6) One (1) shelled corn loadout operation, identified as Shelled Corn Loadout, approved for construction in 2013, with a maximum capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34r (House Dust System).
- (7) Four (4) shelled corn loadout bins, identified as 31.830, 31.840, 31.850 and 31.860 approved for construction in 2013 with a capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34R (House Dust System). Each bin has a capacity of 2,580 bushels (144,480 Lbs).
- (8) Four (4) cob bins, identified as 31.810, 31.820, 31.870 and 31.880 approved for construction in 2013. Each has a capacity of 2,832 cubic feet (48,144 pounds) and are utilized for cob loadout exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).
- (9) One (1) dust bin, identified as 31.900 approved for construction in 2013 and has a capacity of 3,000 cubic feet (60,000 pounds) and utilized for dust loadout exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).

- (10) One (1) shelled corn receiving, identified as Shelled Corn Receiving approved for construction in 2013 and has a capacity of 5,000 bushels per hour (280,000 pounds) exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).

(d) Conditioning

- (1) One (1) Tower Reclaim conveyor grain handling system with a capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34R (House Dust System).
- (2) Two (2) cleaners, identified as Cleaner Line 1 and Cleaner Line 2, constructed in 2007, exhausting to two (2) baghouses for particulate control, identified as White Dust Collector 1 and White Dust Collector 2, capacity: 500 bushels (28,000 pounds) of shelled corn per hour, each.
- (3) Two (2) sorters, identified as Sorter Line 1 and Sorter Line 2, constructed in 2007, exhausting to two (2) baghouses for particulate control, identified as White Dust Collector 1 and White Dust Collector 2, capacity: 500 bushels (28,000 pounds) of shelled corn per hour, each.
- (4) Two (2) sizers, identified as Sizer Line 1 and Sizer Line 2, constructed in 2007, exhausting to two (2) baghouses for particulate control, identified as White Dust Collector 1 and White Dust Collector 2, capacity: 500 bushels (28,000 pounds) of shelled corn per hour, each.
- (5) Sixteen (16) gravity tables, identified as Gravity Tables Line 1 and Gravity Tables Line 2, constructed in 2007, equipped with sixteen (16) dust collectors for particulate control, identified as Gravity Table Dust Collectors 1 through 16, capacity: 1,000 bushels (56,000 pounds) of shelled corn per hour, total.
- (6) Twenty-four (24) storage bins, identified as Storage Bins Lines 1 and Storage Bins Line 2, constructed in 2007, throughput capacity: 1,000 bushels (56,000 pounds) of shelled corn per hour, total.

(e) Treating/Packaging

- (1) Three (3) aspirators, identified as Aspirator 1 through 3, constructed in 2007, exhausting to a baghouse, identified as Red Dust Collector, capacity: 1,500 bushels (84,000 pounds) of shelled corn per hour, total.
- (2) One (1) treater, identified as Treater 3, constructed in 1994, modified in 2005, equipped with a baghouse for particulate control, identified as Red Dust Collector, capacity: 500 bushels (28,000 pounds) of shelled corn per hour.
- (3) Two (2) treaters, identified as Treater 1 and 2, constructed in 2007, exhausting to a baghouse, identified as Red Dust Collector, capacity: 1,000 bushels (56,000 pounds) of shelled corn per hour, total.
- (4) Twelve (12) storage bins, identified as Treating and Packing Storage Bins 1 through 12, constructed in 2007, each exhausting to a baghouse, identified as Red Dust Collector, capacity: 1,000 bushels (56,000 pounds) of shelled corn per hour, total.
- (5) One (1) bagging machine, identified as EU12, constructed in 1994, modified in 2005, equipped with a baghouse for particulate control, identified as Red Dust

Collector, capacity: 2,400 bushels per hour (134,400 pounds per hour) of seed corn per hour.

- (6) One (1) seed pak filler, identified as Seed Pak Filler, approved for construction in 2010, with a maximum capacity of 1,500 bushels per hour (84,000 pounds per hour), with particulate emissions vented to baghouse CE14.
- (7) One (1) refuge scale, identified as Refuge Scale 1, constructed in 2010, with a maximum capacity of 270 bushels per hour (15,120 pounds per hour), with particulate emissions vented to Red Dust Collector.
- (8) One (1) refuge scale, identified as Refuge Scale 2, constructed in 2010, with a maximum capacity of 270 bushels per hour (15,120 pounds per hour), with particulate emissions vented to baghouse CE14.
- (9) One (1) seed corn debagger, identified as EU34, constructed in 2002, exhausting to a baghouse, identified as Red Dust Collector, maximum throughput: 1,000 bushels (56,000 pounds) of seed corn per hour.
- (10) One (1) small lot bagging operation, constructed in 2005, approved for modification in 2013 consisting of a debagger identified as small lot debagger EU106, the CBT-100 treater, identified as EU102, an aspirator, identified as EU103, and bagging unit 2, identified as EU104, exhausting to a baghouse, identified as CE14, capacity: 1,000 ~~3,550~~ bushels (56,000~~198,800~~ pounds) per hour, total.

Calculations indicate that the baghouses, identified as the Red Dust Collector, CE14, CE34, CE35, White Dust Collectors 1&2 and Gravity Table Dust Collectors 1-16 do not have to be operated in order for the associated emission units to comply with 326 IAC 6-3-2.

#### 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) Btu per hour, with no boilers.
- (b) The following VOC and HAP storage containers:
  - (1) Storage tanks with capacity less than or equal to one thousand (1,000) and annual throughputs less than twelve thousand (12,000) gallons.
  - (2) Vessels storage the following: hydraulic oils, lubricating oils, machining oils, and machining fluids.
- (c) Paved and unpaved roads and parking lots with public access.
- (d) One Central Vacuum system identified as Sheller Central Vac for general clean up.

#### 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]

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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)]

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- (a) This permit, F073-30542-00035, 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]

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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]

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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)]

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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)]

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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)]

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- (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)]

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- (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, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

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

The notice fulfills the requirement of 326 IAC 2-8-4(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]**

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- (a) All terms and conditions of permits established prior to F073-30542-00035 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)]**

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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]

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- (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)]

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require 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]**

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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]**

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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<sub>2</sub> equivalent emissions (CO<sub>2</sub>e) 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 two hundred fifty (250) 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]

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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]

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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]

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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]

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- (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]**

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- (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]**

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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)]**

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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 or of initial start-up, whichever is later, 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 or the date of initial startup, whichever is later, 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).

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

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

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- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

### **C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

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

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

C.13 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.14 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.15 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.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

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

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

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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) Husking Receiving

- (1) Two (2) receiving lines, identified as Corn Receiving 1 and Corn Receiving 2, consisting of two (2) huskers, identified as Husker 1 and Husker 2, which each consist of seven (7) husking beds, constructed in 1976, modified in 1995, 2007, 2008, and 2013 exhausting to general ventilation, capacity: 2,000 bushels (112,000 pounds) of ear corn per hour for each line and each husker.
- (2) Two (2) corn receiving lines identified as Corn Receiving 3 and Corn Receiving 4, consisting of two (2) huskers, identified as Husker 3 and Husker 4, which each consist of seven (7) husking beds, constructed in 2007 and modified in 2008, exhausting to general ventilation, capacity: 2,000 bushels (112,000 pounds) of ear corn per hour for each line and each husker.

#### (b) Drying

- (1) Two (2) natural gas-fired bin dryers, identified as Dry 1 and Dry 2, exhausting to Stacks Dry 1 and Dry 2, constructed in 1976, with heat input capacities of sixty (60) million British thermal units per hour, each, and a dry rate of 20,238 bushels per batch (500 bushels (28,000 pounds) per hour, each).
- (2) Two (2) gas-fired bin dryers, identified as Dry 3 and Dry 4, approved for construction in 2007 and 2008, exhausting to Stack Dry 3 and Stack Dry 4, with a drying rate of 500 bushels (28,000 pounds) per hour and a heat input capacity of 160 million British thermal units per hour, equipped with eighteen (18) storage bins each, identified as Dry 3 Bins and Dry 4 Bins, used for drying with a capacity of 2,000 bushels (112,000 pounds), each.
- (3) Two (2) gas-fired bin dryers, identified as Dry 5 and Dry 6, approved for construction in 2008, 2009 and approved for modification in 2013, exhausting to Stack Dry 5 and Stack Dry 6, with a drying rate of 778 bushels (43,568 pounds) per hour and a heat input capacity of 252 million British thermal units per hour (28 burners x 9 MMBtu/burner), equipped with eighteen (28) storage bins each, identified as Dry 5 Bins and Dry 6 Bins, used for drying with a capacity of 2,000 bushels (112,000 pounds), each.

#### (c) Shelling/Bulk Storage

- (1) One (1) corn sheller, identified as Sheller 1, constructed in 2007, exhausting to a baghouse for particulate control, identified as CE15a, capacity: 2,500 bushels (140,000 pounds) of corn per hour.
- (2) One (1) corn sheller, identified as Sheller 2, constructed in 2007, exhausting to a baghouse for particulate control, identified as CE15b, capacity: 2,500 bushels (140,000 pounds) of corn per hour.
- (3) One (1) corn sheller, identified as Sheller 3, approved for construction in 2013, exhausting to a baghouse for particulate control, identified as CE15c, capacity: 2,500 bushels (140,000 pounds) of corn per hour.
- (4) Four (4) aspirators, identified as Sheller Aspirator 1 and Sheller Aspirator 2, constructed in 2009, Sheller Aspirator 3, and Sheller Aspirator 4, approved for construction 2013 exhausting to baghouse CE16 for particulate control, with a capacity of 2,500 bushels (140,000 pounds) of corn per hour, each.

- (5) Two hundred and forty eight (248) bulk storage bins, identified as 451.01-451.31, 452.01-452.31, 453.01-453.31, 454.01-454.31, 455.01-455.31, 456.01-456.31, 457.01-457.31 and 458.01-458.31 constructed in 1999, 2007, 2008, 2009, and 2013 exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).
    - (a) Storage bins 451.01-451.31, 454.01-454.31, 455.01-455.31 and 458.01- 458.31 have a capacity of 7,500 bushels (420,000 pounds) each.
    - (b) Storage bins 452.01-452.31, 453.01-453.31, 456.01-456.31 and 457.01- 457.31 have a capacity of 5,000 bushels (280,000 pounds) each.
  - (6) One (1) shelled corn loadout operation, identified as Shelled Corn Loadout, approved for construction in 2013, with a maximum capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34r (House Dust System).
  - (7) Four (4) shelled corn loadout bins, identified as 31.830, 31.840, 31.850 and 31.860 approved for construction in 2013 with a capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34R (House Dust System). Each bin has a capacity of 2,580 bushels (144,480 Lbs).
  - (8) Four (4) cob bins, identified as 31.810, 31.820, 31.870 and 31.880 approved for construction in 2013. Each has a capacity of 2,832 cubic feet (48,144 pounds) and are utilized for cob loadout exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).
  - (9) One (1) dust bin, identified as 31.900 approved for construction in 2013 and has a capacity of 3,000 cubic feet (60,000 pounds) and utilized for dust loadout exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).
  - (10) One (1) shelled corn receiving, identified as Shelled Corn Receiving approved for construction in 2013 and has a capacity of 5,000 bushels per hour (280,000 pounds) exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).
- (d) Conditioning
- (1) One (1) Tower Reclaim conveyor grain handling system with a capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34R (House Dust System).
  - (2) Two (2) cleaners, identified as Cleaner Line 1 and Cleaner Line 2, constructed in 2007, exhausting to two (2) baghouses for particulate control, identified as White Dust Collector 1 and White Dust Collector 2, capacity: 500 bushels (28,000 pounds) of shelled corn per hour, each.
  - (3) Two (2) sorters, identified as Sorter Line 1 and Sorter Line 2, constructed in 2007, exhausting to two (2) baghouses for particulate control, identified as White Dust Collector 1 and White Dust Collector 2, capacity: 500 bushels (28,000 pounds) of shelled corn per hour, each.
  - (4) Two (2) sizers, identified as Sizer Line 1 and Sizer Line 2, constructed in 2007, exhausting to two (2) baghouses for particulate control, identified as White Dust Collector 1 and White Dust Collector 2, capacity: 500 bushels (28,000 pounds) of shelled corn per hour, each.

- (5) Sixteen (16) gravity tables, identified as Gravity Tables Line 1 and Gravity Tables Line 2, constructed in 2007, equipped with sixteen (16) dust collectors for particulate control, identified as Gravity Table Dust Collectors 1 through 16, capacity: 1,000 bushels (56,000 pounds) of shelled corn per hour, total.
- (6) Twenty-four (24) storage bins, identified as Storage Bins Lines 1 and Storage Bins Line 2, constructed in 2007, throughput capacity: 1,000 bushels (56,000 pounds) of shelled corn per hour, total.

(e) Treating/Packaging

- (1) Three (3) aspirators, identified as Aspirator 1 through 3, constructed in 2007, exhausting to a baghouse, identified as Red Dust Collector, capacity: 1,500 bushels (84,000 pounds) of shelled corn per hour, total.
- (2) One (1) treater, identified as Treater 3, constructed in 1994, modified in 2005, equipped with a baghouse for particulate control, identified as Red Dust Collector, capacity: 500 bushels (28,000 pounds) of shelled corn per hour.
- (3) Two (2) treaters, identified as Treater 1 and 2, constructed in 2007, exhausting to a baghouse, identified as Red Dust Collector, capacity: 1,000 bushels (56,000 pounds) of shelled corn per hour, total.
- (4) Twelve (12) storage bins, identified as Treating and Packing Storage Bins 1 through 12, constructed in 2007, each exhausting to a baghouse, identified as Red Dust Collector, capacity: 1,000 bushels (56,000 pounds) of shelled corn per hour, total.
- (5) One (1) bagging machine, identified as EU12, constructed in 1994, modified in 2005, equipped with a baghouse for particulate control, identified as Red Dust Collector, capacity: 2,400 bushels (134,400 pounds) of seed corn per hour.
- (6) One (1) seed pak filler, identified as Seed Pak Filler, approved for construction in 2010, with a maximum capacity of 1,500 bushels per hour (84,000 pounds per hour), with particulate emissions vented to baghouse CE14.
- (7) One (1) refuge scale, identified as Refuge Scale 1, constructed in 2010, with a maximum capacity of 270 bushels per hour (15,120 pounds per hour), with particulate emissions vented to Red Dust Collector.
- (8) One (1) refuge scale, identified as Refuge Scale 2, constructed in 2010, with a maximum capacity of 270 bushels per hour (15,120 pounds per hour), with particulate emissions vented to baghouse CE14.
- (9) One (1) seed corn debagger, identified as EU34, constructed in 2002, exhausting to a baghouse, identified as Red Dust Collector, maximum throughput: 1,000 bushels (56,000 pounds) of seed corn per hour.
- (10) One (1) small lot bagging operation, constructed in 2005, approved for modification in 2013 consisting of a debagger identified as small lot debagger EU106, the CBT-100 treater, identified as EU102, an aspirator, identified as EU103, and bagging unit 2, identified as EU104, exhausting to a baghouse, identified as CE14, capacity: 1,000 bushels (56,000 pounds) per hour, total.

Calculations indicate that the baghouses, identified as the Red Dust Collector, CE14, CE34, CE35, White Dust Collectors 1&2 and Gravity Table Dust Collectors 1-16 do not have to be operated in order for the associated emission units to comply with 326 IAC 6-3-2.

(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 Matter (PM) [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following emission units and control devices shall not exceed the pounds per hour limitation when operating at the stated process weight rates calculated using the following equations:

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:

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

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:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Emission Unit	Control Device	Process Weight Rate (tons per hour)	326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour)
Corn Receiving 1, 2, 3, and 4	none	56.0, each	45.64, each
Huskers 1, 2, 3, and 4, part of Corn Receiving 1, 2, 3, and 4	none	56.0, each	45.64, each
Dryers Dry 1, 2, 3, and 4	none	14.0, each	24.03, each
Dryers Dry 5 and 6	none	22.0, each	32.31
Sheller 1	Baghouse CE15a	70.0	47.77
Sheller 2	Baghouse CE15b	70.0	47.77
Sheller 3	Baghouse CE15c	70.0	47.77
Sheller Aspirators 1 and 2	Baghouse CE16	140, total	54.72, total
Sheller Aspirators 3 and 4	Baghouse CE16	140, total	54.72, total
248 Bulk Storage Bins	Baghouse CE35 (Harvest Dust System)	28.0, each	38.23, each
Shelled Corn Loadout	Baghouse CE34r (House Dust System)	70.0	47.77
Loadout Bins 1 through 6	Baghouse CE34r (House Dust system)	70.0	47.77
4 Cob Loadout Bins (31.810, 31.820, 31.870, 31.880)	Baghouse CE35 (Harvest Dust System)	24.0	34.55
Dust Bin (31.9100)	Baghouse CE35 (Harvest Dust System)	30.0	40.04
Shelled Corn Receiving	Baghouse CE35 (Harvest Dust System)	140.0	54.72
Cleaners, Sorters, Sizers Line 1	White Dust Collector 1	28.0, each	38.23, each
Cleaners, Sorters, Sizers Line 2	White Dust Collector 2	28.0, each	38.23, each
Eight (8) Gravity Tables, Line 1	Gravity Table Dust Collectors 1 through 8	1.75, each	5.97, each
Eight (8) Gravity Tables, Line 2	Gravity Table Dust Collectors 9 through 16	1.75, each	5.97, each
Storage Bins, Lines 1 and 2	none	28.0	38.23
Aspirators 1 through 3	Red Dust Collector	28.0	38.23

Emission Unit	Control Device	Process Weight Rate (tons per hour)	326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour)
Treaters 1 through 3	Red Dust Collector	42.0	42.97
Treating and Packing Storage Bins 1 through 12	Red Dust Collector	28.0, total	38.23, total
Bagging Machine EU12	Red Dust Collector	67.2	47.37
Seed Pak Filler	Baghouse CE14	42.0	42.97
Refuge Scale 1	Red Dust Collector	7.56	15.90
Refuge Scale 2	Baghouse CE14	7.56	15.90
Debagger EU34	Red Dust Collector	28.0	38.23
Small Lot Bagging EU102 through EU104	Baghouse CE14	99.4	51.22
Debagger EU106	Baghouse CE14	28.0	38.23
Internal Handling	None	28.0	39.35

In addition, several of the emission units exhaust through the same baghouse or stack. The allowable particulate pursuant to 326 IAC 6-3-2 has been tabulated by stack/exhaust and baghouse as follows:

Stack # or Exhaust	Emission Unit	Process Weight Rate (tons per hour)	PM Emission Rate (pounds per hour)
Red Dust Collector	Aspirators 1 - 3	Subtotal of 28.00	38.23
	Treaters 1- 3	Subtotal of 42.0	42.97
	Treating and Packing Storage Bins 1 through 12	Subtotal of 28.0	38.23
	Bagging Machine EU12	Subtotal of 67.2	47.37
	Refuge Scale 1	Subtotal of 7.56	15.90
	Debagger EU 34	Subtotal of 28.0	38.23
Baghouse CE14	Refuge Scale 2	7.56	15.90
	Small Lot Bagging EU102 through EU104	99.4	51.22
	Seed Pak Filler	42.0	42.97
	Debagger EU106	28.0	38.23
Baghouse CE16	Sheller Aspirator 1 and Sheller Aspirator 2	140	54.72
	Sheller Aspirator 3 and Sheller Aspirator 4	140	54.72
Baghouse CE34r (House Dust System)	Shelled Corn Loadout Operation	70.0	70.63
	Loadout Bins 1 through 4	70.0	70.63
	Internal Handling	28.0	38.23

Baghouse CE35 (Harvest Dust System)	4 Cob Loadout Bins (31.810, 31.820, 31.870, 31.880)	24.00	34.55
	Dust Bin (31.9100)	30.0	40.04
	Shelled Corn Receiving	140.0	54.72
	248 Bulk Storage Bins	2.80	38.23
White Dust Collector 1	Cleaner, Line 1	14.0	24.03
	Sorter, Line 1	14.0	24.03
	Sizer, Line 1	14.0	24.03
White Dust Collector 2	Cleaner, Line 2	14.0	24.03
	Sorter, Line 2	14.0	24.03
	Sizer, Line 2	14.0	24.03

**D.1.2 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) The PM emissions from the four (4) corn receiving lines, identified as Corn Receiving 1, 2, 3, and 4, four (4) huskers, identified as Husker 1, 2, 3, and 4, six (6) natural gas-fired bin dryers, identified as Dry 1, 2, 3, 4, 5, and 6 (grain drying), two (2) cleaners, identified as Cleaners Lines 1 and 2, the two (2) sorters, identified as Sorters Lines 1 and 2, the two (2) sizers, identified as Sizers Lines 1 and 2, and the sixteen (16) gravity tables, identified as Gravity Tables Lines 1 and 2, which are all part of the two (2) corn handling lines, identified as Lines 1 and 2, the one (1) bagging machine, identified as EU12, the one (1) small lot bagging operation, consisting of EU102 through EU104 and the one (1) Seed Pak Filler, shall be limited to less than the throughput and emission limits specified in the following table:

<b>Emission Units (Control Device)</b>	<b>Limited Corn Throughput (tons/yr*)</b>	<b>PM Emission Limit (lbs PM/ton corn)</b>
Corn Receiving 1, 2, 3, and 4	Facility throughput 200,000 (wet ear)	0.035
Huskers 1, 2, 3, and 4	Facility throughput 200,000 (wet ear)	0.061
Dryers 1, 2, 3, 4, 5, and 6	Facility throughput 200,000 (wet ear)	0.47
Sheller Aspirators 1, 2, 3, and 4 (Baghouse CE16)	Facility throughput 150,000 (dry shelled corn)	0.061
Bulk Storage Bins, 4 Cob Loadout Bins, Dust Bin 31.900	Facility	0.025

Emission Units (Control Device)	Limited Corn Throughput (tons/yr*)	PM Emission Limit (lbs PM/ton corn)
(Baghouse CE35) 4 Shelled Corn Loadout Bins (Baghouse CE34r) Storage Bins Lines 1 & 2 Treating and Packaging Storage Bins (Red Dust Collector)	throughput 150,000 (dry shelled corn)	
Shelled Corn Loadout Operation (Baghouse CE34r)	Facility throughput 150,000 (dry shelled corn)	0.086
Shelled Corn Receiving (Baghouse CE35)	Facility throughput 150,000 (dry shelled corn)	0.035
Bagging Machine EU12, Small Lot Bagging (EU-102-104), and Internal Handling	Facility throughput 150,000 (dry shelled corn)	0.061

\*Note that "yr" represents twelve (12) consecutive month period, with compliance determined at the end of each month.

- (b) Shellers 1,2 and 3 shall be limited to 2,500 hours per year each and PM limit of 0.768 lb/hr.

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per 12 consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

**D.1.3 PM10 and PM2.5 Emission Limitations [326 IAC 2-8-4] [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) The PM<sub>10</sub> and PM<sub>2.5</sub> emissions from the four (4) corn receiving lines, identified as corn receiving 1, 2, 3, and 4, four (4) huskers, identified as Husker 1, 2, 3, and 4, six (6) natural gas-fired bin dryers, identified as Dry 1, 2, 3, 4, 5, and 6 (grain drying), two (2) cleaners, identified as Cleaners Lines 1 and 2, the two (2) sorters, identified as Sorters Lines 1 and 2, the two (2) sizers, identified as Sizers Lines 1 and 2, and the sixteen (16) gravity tables, identified as Gravity Tables Lines 1 and 2, which are all part of the two (2) corn handling lines, identified as Lines 1 and 2, the one (1) bagging machine, identified as EU12, the one (1) small lot bagging operation, consisting of EU102 through EU104, and the one (1) Seed Pak Filler, shall be limited to less than the throughput and emission limits specified in the following table:

Emission Units (Control Device)	Limited Corn Throughput (tons/yr*)	PM <sub>10</sub> Emission Limit (lbs PM <sub>10</sub> /ton corn)	PM <sub>2.5</sub> Emission Limit (lbs PM <sub>2.5</sub> /ton corn)
Corn Receiving 1, 2, 3, and 4	Facility throughput 200,000 (wet ear)	0.0078	0.0013
Huskers 1, 2, 3, and 4	Facility throughput 200,000 (wet ear)	0.034	0.0058
Dryers 1, 2, 3, 4, 5, and 6	Facility throughput 200,000 (wet ear)	0.12	0.020
Sheller Aspirators 1, 2, 3, and 4 (Baghouse CE16)	Facility throughput 150,000 (dry shelled corn)	0.034	0.0058
Bulk Storage Bins, 4 Cob Loadout Bins, Dust Bin 31.900 (Baghouse CE35)	Facility throughput 150,000 (dry shelled corn)	0.063	

<b>Emission Units (Control Device)</b>	<b>Limited Corn Throughput (tons/yr*)</b>	<b>PM<sub>10</sub> Emission Limit (lbs PM<sub>10</sub>/ton corn)</b>	<b>PM<sub>2.5</sub> Emission Limit (lbs PM<sub>2.5</sub>/ton corn)</b>
4 Shelled Corn Loadout Bins (Baghouse CE34r) Storage Bins Lines 1 & 2 Treating and Packaging Storage Bins (Red Dust Collector)			0.0011
Shelled Corn Loadout Operation (Baghouse CE34r)	Facility throughput 150,000 (dry shelled corn)	0.029	0.0049
Shelled Corn Receiving (Baghouse CE35)	Facility throughput 150,000 (dry shelled corn)	0.0078	0.0013
Bagging Machine EU12, Small Lot Bagging (EU-102-104), and Internal Handling	Facility throughput 150,000 (dry shelled corn)	0.034	0.0058

\*Note that "yr" represents twelve (12) consecutive month period, with compliance determined at the end of each month.

- (b) Shellers 1,2 and 3 shall be limited to 2,500 hours per year each and PM limit of 0.0.768 lb/hr.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 each to less than 100 tons per 12 consecutive month period, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) not applicable, and rendered the requirements of 326 IAC 2-2 (PSD) not applicable for PM10.

**D.1.4 Fuel Combustion Limitations [326 IAC 2-8-4] [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70 Permits) not applicable, the Permittee shall comply with the following:

- (a) The total amount of natural gas burned in dryers Dry 1, Dry 2, Dry 3, Dry 4, Dry 5, and Dry 6 shall not exceed 1,126.9 million cubic feet (MMCF) per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (b) NO<sub>x</sub> emissions from dryers Dry 1, Dry 2, Dry 3, Dry 4, Dry 5, and Dry 6 shall not exceed 100 pounds per million cubic foot (lb/MMCF);
- (c) CO emissions from dryers Dry 1, Dry 2, Dry 3, Dry 4, Dry 5, and Dry 6 shall not exceed 84 pounds per million cubic foot (lb/MMCF);
- (d) carbon dioxide (CO<sub>2</sub>) emissions from natural gas combustion shall not exceed 120,000 pounds per million cubic foot (lb/MMCF);
- (e) methane (CH<sub>4</sub>) emissions from natural gas combustion shall not exceed 2.3 pounds per million cubic foot (lb/MMCF);
- (f) nitrous oxide (N<sub>2</sub>O) emissions from natural gas combustion shall not exceed 2.2 pounds per million cubic foot (lb/MMCF);
- (g) the Global Warming Potential (GWP) for carbon dioxide (CO<sub>2</sub>) shall not exceed 1.0;
- (h) the Global Warming Potential (GWP) for methane (CH<sub>4</sub>) shall not exceed 21; and
- (i) the Global Warming Potential (GWP) for nitrous oxide (N<sub>2</sub>O) shall not exceed 310.

Compliance with these limits, combined with the NO<sub>x</sub>, CO, and carbon dioxide equivalent emissions (CO<sub>2</sub>e) from all other emission units at the source, shall limit the source-wide total NO<sub>x</sub> and CO emissions to less than 100 tons per twelve (12) consecutive month period, each, the source-wide total greenhouse gas (GHG) emissions to less than 100,000 tons of carbon dioxide equivalent emissions (CO<sub>2</sub>e) 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.

D.1.5 Volatile Organic Compounds (VOCs) Limitations [326 IAC 8-1-6] [326 IAC 2-2] [326 IAC 2-8-4]

In order to render the requirements of 326 IAC 8-1-6 (New facilities; general reduction requirements), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-7 (Part 70 Permits) not applicable, the Permittee shall comply with the following:

- (a) VOC input to each of the three (3) seed treaters, identified as Treaters 1 through 3, shall be less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) VOC input to the one (1) seed treater, identified as CBT-100, shall be less than fifteen (15.0) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits shall render the requirements of 326 IAC 8-1-6 (New facilities; general reduction requirements) not applicable.

Compliance with these limits, combined with the potential to emit VOC from all other emission units at the source, shall limit the source-wide total VOC emissions to less than 100 tons 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.

D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

**Compliance Determination Requirements**

D.1.7 Testing Requirements [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

Not later than five (5) years from the most recent compliant stack test, in order to demonstrate compliance with Conditions D.1.1, D.1.2, and D.1.3, the Permittee shall perform PM, PM<sub>10</sub>, and PM<sub>2.5</sub> testing for the three (3) Shellers, identified as Sheller 1 exhausting to Baghouse CE15a, Sheller 2 exhausting to Baghouse CE15b, and Sheller 3 exhausting to Baghouse CE15c, and the 4 Sheller Aspirators, identified as Sheller Aspirators 1, Sheller Aspirator 2, Sheller Aspirator 3, and Sheller Aspirator 4 all exhausting to baghouse CE16, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>.

D.1.8 Particulate Control

- (a) In order to comply with Conditions D.1.2 and D.1.3, the baghouses, identified as CE15a, CE15b, CE15c, and CE16, for particulate control shall be in operation and control emissions from the three (3) Shellers, identified as Sheller 1, Sheller 2, Sheller 3, and the 4 Sheller Aspirators, identified as Sheller Aspirators 1, Sheller Aspirator 2, Sheller Aspirator 3, and Sheller Aspirator 4, and at all times that the emission units 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.

## Compliance Monitoring Requirements

### D.1.9 Visible Emissions Notations

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- (a) Visible emission notations of the baghouses, identified as CE15a, CE15b, CE15c, and CE16 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take a reasonable response steps. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

### D.1.10 Baghouse Parametric Monitoring

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- (a) The Permittee shall record the pressure drop across the baghouses, identified as CE15a, CE15b, CE15c, and CE16, used in conjunction with the three (3) Shellers, identified as Sheller 1, Sheller 2, Sheller 3, and the 4 Sheller Aspirators, identified as Sheller Aspirators 1, Sheller Aspirator 2, Sheller Aspirator 3, and Sheller Aspirator 4. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for these units is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

### D.1.11 Broken or Failed Bag Detection

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- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

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

#### **D.1.12 Record Keeping Requirements**

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- (a) To document the compliance status with Conditions D.1.2 and D.1.3, the Permittee shall maintain records of the facility's throughput of wet ear and dry shelled corn and the number of operating hours of Sheller 1, Sheller 2, and Sheller 3 each compliance period.
- (b) To document the compliance status with Condition D.1.4(a), the Permittee shall maintain records of the amount of natural gas used in dryers Dry 1, Dry 2, Dry 3, Dry 4, Dry 5, and Dry 6 each month and each compliance period.
- (c) To document the compliance status with Condition D.1.5, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC input limitations established in Condition D.1.5. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
- (1) The VOC content of each coating material and solvent used for each treater.
- (2) The amount of coating material and solvent less water used on a monthly basis.
- (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
- (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
- (3) The cleanup solvent usage for each treater each month;
- (4) The total VOC input to each treater each month and each compliance period.
- (d) To document the compliance status with Condition D.1.9, the Permittee shall maintain daily records of visible emission notations of each of the three (3) Shellers, identified as Sheller 1, Sheller 2, Sheller 3, and the 4 Sheller Aspirators, identified as Sheller Aspirators 1, Sheller Aspirator 2, Sheller Aspirator 3, and Sheller Aspirator 4, exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).
- (e) To document the compliance status with Condition D.1.10, the Permittee shall maintain daily records of the pressure drop across the baghouses identified as baghouses, identified as CE15a, CE15b, CE15c, and CE16. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).

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

#### D.1.13 Reporting Requirements

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Quarterly summaries of the information to document the compliance status with Conditions D.1.2, D.1.3, D.1.4(a) and D.1.5 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee 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).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**COMPLIANCE AND ENFORCEMENT BRANCH**  
**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)**  
**CERTIFICATION**

Source Name: Monsanto Company  
Source Address: 15849 S US Hwy 231, Remington, Indiana 47977  
FESOP Permit No.: F073-30542-00035

**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: Monsanto Company  
Source Address: 15849 S US Hwy 231, Remington, Indiana 47977  
FESOP Permit No.: F073-30542-00035

**This form consists of 2 pages**

**Page 1 of 2**

- |  |
|--|
| <p><input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none"><li>• 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</li><li>• 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</li></ul> |
|--|

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 <sub>2</sub> , VOC, NO <sub>x</sub> , 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: Monsanto Company  
Source Address: 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: F073-30542-00035  
Facilities: Facility wide  
Parameter: Wet Ear Throughput  
Limit: 200,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Wet Ear Throughput (tons)	Wet Ear Throughput (tons)	Wet Ear Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: Monsanto Company  
Source Address: 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: F073-30542-00035  
Facilities: Facility wide  
Parameter: Dry Shelled Corn Throughput  
Limit: 150,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Dry shelled Corn Throughput (tons)	Dry Shelled Corn Throughput (tons)	Dry shelled Corn Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: Monsanto Company  
Source Address: 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: F073-30542-00035  
Facilities: Sheller 1  
Parameter: Operating hours  
Limit: 2,500 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Number of Operating Hours	Number of Operating Hours	Number of Operating Hours
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: Monsanto Company  
Source Address: 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: F073-30542-00035  
Facilities: Sheller 2  
Parameter: Operating hours  
Limit: 2,500 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Number of Operating Hours	Number of Operating Hours	Number of Operating Hours
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: Monsanto Company  
Source Address: 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: F073-30542-00035  
Facilities: Sheller 3  
Parameter: Operating hours  
Limit: 2,500 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Number of Operating Hours	Number of Operating Hours	Number of Operating Hours
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: Monsanto Company  
Source Address: 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: F073-30542-00035  
Facility: Dryers Dry 1, Dry 2, Dry 3, Dry 4, Dry 5, and Dry 6  
Parameter: Natural Gas Usage  
Limit: The total amount of natural gas burned in dryers Dry 1, Dry 2, Dry 3, Dry 4, Dry 5, and Dry 6 shall not exceed 1,126.9 million cubic feet (MMCF) per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Natural Gas Usage (MMCF)	Natural Gas Usage (MMCF)	Natural Gas Usage (MMCF)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: Monsanto Company  
Source Address: 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: F073-30542-00035  
Facility: Treater 1  
Parameter: VOC Input  
Limit: Less than twenty-five (25.0) tons per twelve consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	VOC Input (tons)	VOC Input (tons)	VOC Input (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: Monsanto Company  
Source Address: 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: F073-30542-00035  
Facility: Treater 2  
Parameter: VOC Input  
Limit: Less than twenty-five (25.0) tons per twelve consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	VOC Input (tons)	VOC Input (tons)	VOC Input (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: Monsanto Company  
Source Address: 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: F073-30542-00035  
Facility: Treater 3  
Parameter: VOC Input  
Limit: Less than twenty-five (25.0) tons per twelve consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	VOC Input (tons)	VOC Input (tons)	VOC Input (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: Monsanto Company  
Source Address: 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: F073-30542-00035  
Facility: Treater CBT-100  
Parameter: VOC Input  
Limit: Less than fifteen (15.0) tons per twelve consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	VOC Input (tons)	VOC Input (tons)	VOC Input (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**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: Monsanto Company  
Source Address: 15849 S US Hwy 231, Remington, Indiana 47977  
FESOP Permit No.: F073-30542-00035

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

Page 1 of 2

<p>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".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

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

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

Technical Support Document (TSD) for a Significant Permit Revision to a  
Federally Enforceable State Operating Permit (FESOP)

**Source Description and Location**

Source Name:	Monsanto Company
Source Location:	15849 S US Hwy 231, Remington, IN 47977
County:	Jasper
SIC Code:	0723 (Crop Preparation Services for Market, Except Cotton Ginning)
Operation Permit No.:	F 073-30542-00035
Operation Permit Issuance Date:	November 20, 2012
Significant Permit Revision No.:	073-32601-00035
Permit Reviewer:	Ghassan Shalabi

On December 07, 2012, the Office of Air Quality (OAQ) received an application from Monsanto Company related to a modification to an existing source.

**Existing Approvals**

The source was issued FESOP Renewal No. F073-30542-00035 on November 20, 2012. The source has not received any other approvals since then.

**County Attainment Status**

The source is located in Jasper County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> 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 <sub>2.5</sub> .	

- (a) **Ozone Standards**  
Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) 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<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Jasper County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM<sub>2.5</sub>**  
Jasper County has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub>.

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<sub>2.5</sub> significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (c) **Other Criteria Pollutants**  
 Jasper 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 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.

**Note:** Although the New Source Performance Standard (NSPS) for Grain Elevators (40 CFR 60, Subpart DD) was promulgated on or before August 7, 1980, this facility does not fall within the “listed source category” for Subpart DD, since this source is not considered a grain terminal elevator or a grain storage elevator as defined by 40 CFR 60.301.

**Status of the Existing Source**

The table below summarizes the potential to emit of the entire source, prior to the proposed revision, after consideration of all enforceable limits established in the effective permits:

This PTE table is from the TSD or Appendix A of F073-30542-00035, issued on November 20, 2012

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)									
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub> **	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs as CO <sub>2</sub> e	Total HAPs	Worst Single HAP
Corn Receiving 1, 2, 3, & 4	4.29	0.96	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Husking 1, 2, 3 & 4	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dryers 1, 2, 3, 4, 5 & 6 (Grain Drying)	57.64	14.72	2.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dryers 1, 2, 3, 4, 5, and 6 (combustion)	1.07	4.28	4.28	0.34	56.35	3.10	47.33	68,025	1.06	1.01 (Hexane)
Sheller 1 & Sheller 2	2.49	2.49	2.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sheller Aspirators 1 & 2	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180 Bulk Storage Bins	3.07	0.77	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shelled Corn Loadout	10.55	3.56	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loadout Bins 1 through 6	3.07	0.77	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleaners, Sorters, Sizers, Line 1	1.90	1.90	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleaners, Sorters, Sizers, Line 2	1.90	1.90	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gravity Tables, Lines 1 & 2	16.50	16.50	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Storage Bins, Lines 1 & 2	3.07	0.77	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aspirators 1-3	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Treaters 1-3 & CBT100 Treater	11.22	6.25	1.07	0.00	0.00	< 90.00	0.00	0.00	0.26	0.21 (Glycol Ethers)

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)									
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub> **	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs as CO <sub>2</sub> e	Total HAPs	Worst Single HAP
Treating and Packing Storage Bins	3.07	0.77	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bagging Machine (EU12)	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seed Pak Filler	11.22	6.25	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refuge Scales 1 & 2	4.04	2.25	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Debagger EU34	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Lot Bagging (EU102 through 104)	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dust Collector Loadouts	0.75	0.25	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tanks	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00
Bulk Seed Receiving	10.73	2.39	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Heaters	0.01	0.06	0.06	0.00	0.79	0.04	0.66	952	0.01	0.01 (Hexane)
<b>Total PTE of Entire Source (Non-Fugitive)</b>	<b>191.47</b>	<b>91.87</b>	<b>38.11</b>	<b>0.34</b>	<b>57.13</b>	<b>&lt; 93.22</b>	<b>47.99</b>	<b>68,977</b>	<b>1.34</b>	<b>1.03 Hexane</b>
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO <sub>2</sub> e	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO <sub>2</sub> e	NA	NA
negl. = negligible *Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". **PM <sub>2.5</sub> listed is direct PM <sub>2.5</sub> .										

This existing stationary source is not major for PSD because the emissions of each regulated pollutant, excluding GHGs, are less than or limited to less than two hundred fifty (<250) tons per year, emissions of GHGs are limited to less than one hundred thousand (<100,000) tons of CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e) per year, and it is not in one of the twenty-eight (28) listed source categories.

**Description of Proposed Revision**

The Office of Air Quality (OAQ) has reviewed an application, submitted by Monsanto Company on December 07, 2012, relating to the following modifications and construction:

1. Huskers 1 and 2 will be modified to have one additional husking bed each.
2. Dry 5 and dry 6 will be modified to each have a drying rate of 778 bushels (43,568 pounds) per hour and heat input capacity of 252 MMBtu/hr (28 burners x 9 MMBtu/hr), equipped with twenty eight (28) storage bins, identified as Dry 5 and Dry 6 Bins, used for drying with capacity of 2,000 bushels (112,000 pounds) each.
3. One (1) corn sheller, identified as Sheller #3, exhausting to a baghouse for particulate control, identified as CE15c, with a capacity of 2,500 bushels (140,000 pounds) of corn per hour.
4. Two new sheller aspirators, identified as Sheller Aspirator 3 and Sheller Aspirator 4, exhausting to a new baghouse for particulate control, identified as CE16, with a capacity of 2,500 bushels (140,000 pounds) of corn per hour, each.
5. The removal of 12 bulk storage bins and the addition of 80 new ones. The bulk storage bins will be renumbered.

6. The shelled corn loadout constructed in 1976 will be demolished and a new shelled corn loadout operation will be added. The new shelled corn loadout operation will have a maximum capacity of 2,500 bushels per hour (140,000 pounds) and exhausting to a baghouse for particulate control, identified as CE-34r (House Dust System).
7. The 6 loadout bins will be replaced with 4 shelled corn loadout bins. Four (4) shelled corn loadout bins identified as 31.830, 31.840, 31.850, 31.860 with a capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34R (House Dust system). Each bin has a capacity of 2,580 bushels (144,480 lbs).
8. Four (4) cob bins identified as 31.810, 31.820, 31.870, and 31.880. Each has a capacity of 2,832 cubic feet (48,144 pounds) and is utilized for cob loadout exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust system).
9. One (1) dust bin identified as 31.900 with a capacity of 3,000 cubic feet (60,000 pounds) and utilized for dust loadout exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).
10. One shelled corn receiving operation identified as Shelled Corn Receiving with a capacity of 5,000 bushels per hour (280,000 pounds) exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust system).
11. One debagger, identified as small lot debagger EU106.
12. The addition of the following insignificant activities:
  - (a) One Central Vacuum system identified as Tower Central Vac for general clean up.
  - (b) One Central Vacuum system identified as Sheller Central Vac for general clean up.
  - (c) One husk chopper identified as Husk Chopper, with a capacity of 500 bushels per hour (28,000 pounds per hour); and
  - (d) Internal Handling operations

<b>Enforcement Issues</b>
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There are no pending enforcement actions related to this revision.

<b>Emission Calculations</b>
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See Appendix A of this TSD for detailed emission calculations.

**Permit Level Determination – FESOP Revision**

The following table is used to determine the appropriate permit level under 326 IAC 2-8.11.1. This table reflects the PTE before controls of the proposed revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	PTE of Proposed Revision (tons/year)									
	PM	PM10	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs as CO <sub>2</sub> e	Total HAPs	Worst Single HAP
Dryers 5 & 6 (Grain Drying)	32.05	8.18	1.36	-	-	-	-	-	-	-
Dryers 5 & 6 (NG Combustion)	1.5	6.00	6.00	0.47	79.01	4.35	66.37	95,391	1.491	1.423 (Hexane)
Sheller 3	28.13	17.16	17.16	-	-	-	-	-	-	-
Sheller Aspirators 3 &4	4.58	2.55	0.44	-	-	-	-	-	-	-
80 New Bulk Storage Bins	1.88	0.47	0.08	-	-	-	-	-	-	-
4 Shelled Corn Loadout Bins	1.88	0.47	0.08	-	-	-	-	-	-	-
4 Cob Loadout Bins (31.810, 31.820, 31.870, 31.880)	1.88	0.47	0.08	-	-	-	-	-	-	-
Dust Bin (31.9100)	1.88	0.47	0.08	-	-	-	-	-	-	-
Shelled Corn Loadout Operation (Replaced)	26.37	8.89	1.50	-	-	-	-	-	-	-
Shelled Corn Receiving	2.63	0.59	0.10	-	-	-	-	-	-	-
Debagger EU106	4.58	2.55	0.44	-	-	-	-	-	-	-
Internal Handling	4.58	2.55	0.44	-	-	-	-	-	-	-
Husk Chopper (existing)	1.53	0.85	0.15	-	-	-	-	-	-	-
Sheller Central Vacuum System	0.45	0.45	0.45	-	-	-	-	-	-	-
Tower Central Vacuum System	0.50	0.50	0.50	-	-	-	-	-	-	-
<b>Total PTE of Proposed Revision</b>	<b>114.36</b>	<b>52.16</b>	<b>28.85</b>	<b>0.47</b>	<b>79.01</b>	<b>4.35</b>	<b>66.37</b>	<b>95.391</b>	<b>1.491</b>	<b>1.423</b>
negl. = negligible										

Pursuant to 326 IAC 2-8-11.1(f)(1)(E), this FESOP is being revised through a FESOP Significant Permit Revision because the proposed revision is not an Administrative Amendment or Minor Permit revision and the proposed revision involves the construction of new emission units and a change in operation - with potential to emit greater than or equal to twenty-five (25) tons per year of the following pollutants:





Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)									
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub> **	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs as CO <sub>2</sub> e	Total HAPs	Worst Single HAP
4 shelled corn loadout bins	1.88	0.47	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 Cob Loadout Bins	1.88	0.47	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dust Bin	1.88	0.47	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shelled Corn Receiving	2.63	0.59	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleaners, Sorters, Sizers, Line 1	1.90	1.90	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleaners, Sorters, Sizers, Line 2	1.90	1.90	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gravity Tables, Lines 1 & 2	23.00	14.03	14.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Storage Bins, Lines 1 & 2	1.88	0.47	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aspirators 1-3	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Treaters 1-3 & CBT100 Treater	11.22	6.25	1.07	0.00	0.00	< 90.00	0.00	0.00	0.26	0.21 (Glycol Ethers)
Treating and Packing Storage Bins	1.88	0.47	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bagging Machine (EU12)	4.58	2.55	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seed Pak Filler	11.22	6.25	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refuge Scales 1 & 2	4.04	2.25	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Debagger EU34	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Lot Bagging (EU102 through 104)	4.58	2.55	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Debagger EU106 (Small Lot Debagger)	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Internal Handling	4.58	2.55	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dust Collector Loadouts	0.75	0.25	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Insignificant Emissions										
Husk Chopper	1.53	0.85	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sheller Central Vacuum System	0.45	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tower Central Vacuum System	0.50	0.50	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tanks	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00
Heaters	0.01	0.06	0.06	0.00	0.79	0.04	0.66	952	0.01	0.01 (Hexane)
<b>Total PTE of Entire Source (Non-Fugitive)</b>	<b>172.56</b>	<b>79.49</b>	<b>31.47</b>	<b>0.34</b>	<b>57.18</b>	<b>93.22</b>	<b>48.03</b>	<b>69,030</b>	<b>1.34</b>	<b>1.03 Hexane</b>
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO <sub>2</sub> e	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO <sub>2</sub> e	NA	NA
negl. = negligible *Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". **PM <sub>2.5</sub> listed is direct PM <sub>2.5</sub> .										

- (a) **FESOP Status**  
This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less

than the Title V major source threshold levels. Therefore, the source will still be 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) Corn Receiving #1, #2, #3, #4 shall be limited to facility throughput limit of 200,000 tons per year (wet ear), PM10 and PM2.5 limits of 0.0078 lbs/ton and 0.0013 lbs/ton respectively.
- (2) Husking #1, #2, #3, #4 shall be limited to facility throughput limit of 200,000 tons per year (wet ear), PM10 and PM2.5 limits of 0.034 lbs/ton and 0.0058 lb/ton respectively.
- (3) Dry #1, #2, #3, #4, #5, and #6 (grain) shall be limited to facility throughput limit of 200,000 tons per year (wet ear), PM10 and PM2.5 limits of 0.12 lb/ton and 0.020 lb/ton respectively.
- (4) Sheller Aspirators #1, #2, #3, and #4 shall be limited to facility throughput limit of 150,000 tons per year (dry shelled corn), PM10 and PM2.5 limits of 0.034 lbs/ton and 0.0058 lbs/ton respectively and controlled by baghouse CE16.
- (5) Bulk Storage Bins, 4 Cob Loadout Bins and Dust Bin 31.900 (controlled by Baghouse CE35), 4 Shelled Corn Loadout Bins (controlled by Baghouse CE34r), Storage Bins Lines 1 & 2, Treating and Packaging Storage Bins (controlled by Red dust Collector) shall be limited to facility throughput limit of 150,000 tons per year (dry shelled corn), PM10 and PM2.5 limits of 0.0063 lbs/ton and 0.0011 lbs/ton respectively.
- (6) Shelled Corn Loadout Operation shall be limited to facility throughput limit of 150,000 tons per year (dry shelled corn), PM10 and PM2.5 limits of 0.029 lbs/ton and 0.0049 lbs/ton respectively and controlled by baghouse CE34r.
- (7) Shelled Corn Receiving shall be limited to facility throughput limit of 150,000 tons per year (dry shelled corn), PM10 and PM2.5 limits of 0.0078 lbs/ton and 0.0013 lbs/ton respectively and controlled by baghouse CE35.
- (8) Bagging Machine EU12, Small Lot Bagging (EU-102-104), Internal Handling shall be limited to facility throughput limit of 150,000 tons per year (dry shelled corn), PM10 and PM2.5 limits of 0.034 lbs/ton and 0.0058 lb/tons respectively.
- (9) Shellers 1, 2, and 3 shall be limited to 2,500 hours per year each and PM10/PM2.5 limit of 0.006 gr/dscf.
- (10) The total amount of natural gas burned in dryers Dry 1, Dry 2, Dry 3, Dry 4, Dry 5, and Dry 6 shall not exceed 1,126.9 million cubic feet (MMCF) per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (11) NO<sub>x</sub> emissions from dryers Dry 1, Dry 2, Dry 3, Dry 4, Dry 5, and Dry 6 shall not exceed 100 pounds per million cubic foot (lb/MMCF);
- (12) CO emissions from dryers Dry 1, Dry 2, Dry 3, Dry 4, Dry 5, and Dry 6 shall not exceed 84 pounds per million cubic foot (lb/MMCF);
- (13) carbon dioxide (CO<sub>2</sub>) emissions from natural gas combustion shall not exceed 120,000 pounds per million cubic foot (lb/MMCF);
- (14) methane (CH<sub>4</sub>) emissions from natural gas combustion shall not exceed 2.3 pounds per

million cubic foot (lb/MMCF);

- (15) nitrous oxide (N<sub>2</sub>O) emissions from natural gas combustion shall not exceed 2.2 pounds per million cubic foot (lb/MMCF);
- (16) the Global Warming Potential (GWP) for carbon dioxide (CO<sub>2</sub>) shall not exceed 1.0;
- (17) the Global Warming Potential (GWP) for methane (CH<sub>4</sub>) shall not exceed 21; and
- (18) the Global Warming Potential (GWP) for nitrous oxide (N<sub>2</sub>O) shall not exceed 310.

Compliance with these limits, combined with the potential to emit PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO, and carbon dioxide equivalent emissions (CO<sub>2</sub>e) from all other emission units at this source, shall limit the source-wide total potential to emit of PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO, and carbon dioxide equivalent emissions (CO<sub>2</sub>e) and shall render 326 IAC 2-7 (Part 70 Permits) not applicable.

(b) PSD Minor Source

This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the source shall comply with the following:

- (1) Corn Receiving #1, #2, #3, #4 shall be limited to facility throughput limit of 200,000 tons per year (wet ear), PM limit of 0.035 lbs/ton.
- (2) Husking #1, #2, #3, #4 shall be limited to facility throughput limit of 200,000 tons per year (wet ear), and PM limit of 0.061 lbs/ton.
- (3) Dry #1, #2, #3, #4, #5, and #6 (grain) shall be limited to facility throughput limit of 200,000 tons per year (wet ear), and PM limit of 0.47 lb/ton.
- (4) Sheller Aspirators #1, #2, #3, and #4 shall be limited to facility throughput limit of 150,000 tons per year (dry shelled corn), and PM limit of 0.061 lbs/ton and controlled by baghouse CE16.
- (5) Bulk Storage Bins, 4 Cob Loadout Bins and Dust Bin 31.900 (controlled by Baghouse CE35), 4 Shelled Corn Loadout Bins (controlled by Baghouse CE34r), Storage Bins Lines 1 & 2, Treating and Packaging Storage Bins (controlled by Red dust Collector) shall be limited to facility throughput limit of 150,000 tons per year (dry shelled corn) and PM limit of 0.025 lbs/ton.
- (6) Shelled Corn Loadout Operation shall be limited to facility throughput limit of 150,000 tons per year (dry shelled corn), and PM limit of 0.086 lbs/ton and controlled by baghouse CE34r.
- (7) Shelled Corn Receiving shall be limited to facility throughput limit of 150,000 tons per year (dry shelled corn), and PM limit of 0.035 lbs/ton and controlled by baghouse CE35.
- (8) Bagging Machine EU12, Small Lot Bagging (EU-102-104), and Internal Handling shall be limited to facility throughput limit of 150,000 tons per year (dry shelled corn), and PM limit of 0.061.

- (9) Shellers 1, 2, and 3 shall be limited to 2,500 hours per year each and PM limit of 0.768 lb/hr.

Compliance with these PM limits and the PM<sub>10</sub>, NO<sub>x</sub>, CO, and the carbon dioxide equivalent emissions (CO<sub>2</sub>e) that render the requirements Part 70 326 IAC 2-7 not applicable, when combined with the potential to emit PM, PM<sub>10</sub>, NO<sub>x</sub>, CO, and carbon dioxide equivalent emissions (CO<sub>2</sub>e) from all other emission units at this source, shall limit the source-wide total potential to emit of PM, PM<sub>10</sub>, NO<sub>x</sub>, CO, and carbon dioxide equivalent emissions (CO<sub>2</sub>e) and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

#### **Federal Rule Applicability Determination**

##### **(NSPS)**

- (a) The requirements of the New Source Performance Standard for Grain Elevators, 40 CFR 60, Subpart DD (60.300 through 60.304) (326 IAC 12), are not included in the permit, since this source is not considered a grain terminal elevator or a grain storage elevator as defined by 40 CFR 60.301. This source is not considered a grain terminal elevator, because it has a permanent storage capacity of less than 2,500,000 bushels and is not a animal food manufacturer, pet food manufacturer, cereal manufacturer, brewery, or a livestock feedlot. In addition, this source is not considered a grain storage elevator, because it is not a wheat flour mill, a wet corn mill, a dry corn mill, nor a soybean oil extraction plant, and has a storage capacity that is less than one million (1,000,000) bushels.
- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

##### **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 the permit, 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 hybrid corn seed processing plant (corn receiving, drying, shelling/bulk storage, conditioning, treating/packaging), where the processed seed is primarily sold to farmers to be used as agricultural seed for growing corn and not as animal feed.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

##### **CAM (Compliance Assurance Monitoring) [40 CFR 64]**

- (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 Determination**

The following state rules are applicable to the proposed revision:

- (a) 326 IAC 2-8-4 (FESOP)  
This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the

provisions of 326 IAC 2-8 (FESOP). See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))  
 This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.
- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
 The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the new and the modified units 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.

<b>Compliance Determination, Monitoring and Testing Requirements</b>
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- (a) The compliance determination and monitoring requirements applicable to this proposed revision are as follows:

Emission Unit/Control	Operating Parameters	Frequency	Range	Excursions and Exceedances
Sheller 1 (Baghouse CE15a)	Pressure Drop	Once per day	1.0 to 6.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
Sheller 2 (Baghouse CE15b)	Pressure Drop	Once per day	1.0 to 6.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
Sheller 3 (Baghouse CE15c)	Pressure Drop	Once per day	1.0 to 6.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
(4) Sheller Aspirators (Baghouse CE16)	Pressure Drop	Once Per day	1.0 to 6.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	

- (b) The testing requirements applicable to this proposed revision are as follows:

Testing Requirements					
Emission Unit	Control Device	Pollutant	Timeframe for Testing	Frequency of Testing	Limit or Requirement
Sheller 1	(Baghouse CE15a)	PM PM10 PM2.5	180 days	5 yrs	0.768 lb/hr 0.768 lb/hr 0.768 lb/hr
Sheller 2	(Baghouse CE15b)	PM PM10 PM2.5	180 days	5 yrs	0.768 lb/hr 0.768 lb/hr 0.768 lb/hr
Sheller 3	(Baghouse CE15c)	PM PM10 PM2.5	180 days	5yrs	0.768 lb/hr 0.768 lb/hr 0.768 lb/hr

Testing Requirements					
Emission Unit	Control Device	Pollutant	Timeframe for Testing	Frequency of Testing	Limit or Requirement
(4) Sheller Aspirators	(Baghouse CE16)	PM PM10 PM2.5	180 days	5yrs	0.061lbs/ton 0.034 lbs/ton 0.0058 lbs/ton

The existing compliance requirements will not change as a result of this revision. The source shall continue to comply with the applicable requirements and permit conditions as contained in FESOP No: F073-30542-00035, issued on November 20, 2012.

**Proposed Changes**

(a) The following changes listed below are due to the proposed revision. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

**Change 1:** To incorporate the addition of the new units and the modifications to the existing units, Condition A.2 and Condition D.1.1 are changed as follows:

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) Husking Receiving

- (1) Two (2) receiving lines, identified as Corn Receiving 1 and Corn Receiving 2, consisting of two (2) huskers, identified as Husker 1 and Husker 2, which each consist of ~~six~~ **seven (6-7)** husking beds, constructed in 1976, modified in 1995, 2007, ~~and 2008,~~ **and 2013** exhausting to general ventilation, capacity: 2,000 bushels (112,000 pounds) of ear corn per hour for each line and each husker.

...

(b) Drying

...

- ~~(2) One (1) natural gas-fired bin dryer, identified as Dry 3, constructed in 2007, exhausting to Stack Dry 3, with a drying rate of 500 bushels (28,000 pounds) per hour and a heat input capacity of 160 million British thermal units per hour, equipped with eighteen (18) storage bins, identified as Dry 3 Bins, used for drying with a capacity of 2,000 bushels (152,000 pounds), each.~~

- ~~(3) Two (2) natural gas-fired bin dryers identified as Dry 4 and Dry 5, constructed in 2007, exhausting to Stack Dry 4 and Stack Dry 5, with a drying rate of 500 bushels (28,000 pounds) per hour and a heat input capacity of 160 million British thermal units per hour, each equipped with eighteen (18) storage bins, identified as Dry 4 and Dry 5 Bins, used for drying with a capacity of 2,000 bushels (112,000 pounds), each.~~

- ~~(4) One (1) natural gas-fired grain dryer, identified as Dry 6, constructed in 2008, exhausting to Stack Dry 6, with a drying rate of 500 bushels (28,000) per hour and a heat input capacity of 160 million British thermal units per hour, equipped with eighteen (18) storage bins, identified as Dry 6 Bins, used for drying with a capacity of 2,000 bushels (112,000 pounds), each.~~

- (2) Two (2) gas-fired bin dryers, identified as Dry 3 and Dry 4, approved for**

construction in 2007 and 2008, exhausting to Stack Dry 3 and Stack Dry 4, with a drying rate of 500 bushels (28,000 pounds) per hour and a heat input capacity of 160 million British thermal units per hour, equipped with eighteen (18) storage bins each, identified as Dry 3 Bins and Dry 4 Bins, used for drying with a capacity of 2,000 bushels (112,000 pounds), each.

- (3) Two (2) gas-fired bin dryers, identified as Dry 5 and Dry 6, approved for construction in 2008, 2009 and approved for modification in 2013, exhausting to Stack Dry 5 and Stack Dry 6, with a drying rate of 778 bushels (43,568 pounds) per hour and a heat input capacity of 252 million British thermal units per hour (28 burners x 9 MMBtu/burner), equipped with eighteen (28) storage bins each, identified as Dry 5 Bins and Dry 6 Bins, used for drying with a capacity of 2,000 bushels (112,000 pounds), each.

(c) Shelling/Bulk Storage

...

- (3) One (1) corn sheller, identified as Sheller 3, approved for construction in 2013, exhausting to a baghouse for particulate control, identified as CE15c, capacity: 2,500 bushels (140,000 pounds) of corn per hour.

- (34) ~~Two (2)~~ Four (4) aspirators, identified as Sheller Aspirator 1 and Sheller Aspirator 2, constructed in 2009, **Sheller Aspirator 3, and Sheller Aspirator 4, approved for construction in 2013**, exhausting to baghouse ~~CE35 (Harvest Dust System)~~ **CE16** for particulate control, with a capacity of 2,500 bushels (140,000 pounds) of corn per hour, each.

- (45) Two hundred and forty eight (248) bulk storage bins, identified as 451.01-451.31, 452.01-452.31, 453.01-453.31, 454.01-454.31, 455.01-455.31, 456.01-456.31, 457.01-457.31 and 458.01-458.31 constructed in 1999, 2007, 2008, 2009, and 2013 exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).

(a) Storage bins 451.01-451.31, 454.01-454.31, 455.01-455.31 and 458.01-458.31 have a capacity of 7,500 bushels (420,000 pounds) each.

(b) Storage bins 452.01-452.31, 453.01-453.31, 456.01-456.31 and 457.01-457.31 have a capacity of 5,000 bushels (280,000 pounds) each.

One hundred eighty (180) bulk storage bins, constructed in 1999, 2007, and 2009, with a total capacity of 1,198,000 bushels (67,088,000 lbs) and a total throughput of 1000 bushels (56,000 lbs) per hour:

(A) ~~Eight (8) bulk storage bins identified as 9.01-9.04 and 9.09-9.12 with a capacity of 11,000 bushels (616,000 lbs) each.~~

(B) ~~Four (4) bulk storage bins identified as 9.05-9.08 with a capacity of 15,000 bushels (840,000 lbs) each.~~

(C) ~~Eighty four (84) bulk storage bins identified as 1.01-1.31, 4.01-4.31, 5.01-5.11 and 8.01-8.11 with a capacity of 7500 bushels (420,000 lbs) each.~~

~~(D) Eighty four (84) bulk storage bins identified as 2.01-2.31, 3.01-3.31, 6.01-6.11 and 7.01-7.11 with a capacity of 5000 bushels (280,000 lbs) each.~~

- (56) One (1) shelled corn loadout operation, identified as Shelled Corn Loadout, approved for construction in 2013, with a maximum capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34r (House Dust System).**

~~One (1) shelled corn loadout operation, identified as Shelled Corn Loadout, constructed in 1976, with a maximum capacity of 56,000 pounds per hour of shelled corn loaded to trucks, utilizing no control devices.~~

- (67) Four (4) shelled corn loadout bins, identified as 31.830, 31.840, 31.850 and 31.860 approved for construction in 2013 with a capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34R (House Dust System). Each bin has a capacity of 2,580 bushels (144,480 Lbs).**

~~Six (6) loadout bins, identified as Loadout Bins 1 through 4, and Loadout Bins 5 and 6, constructed in 2009, throughput: 1,000 bushels per hour. Loadout Bins 1 through 4 have a capacity of 1,000 bushels (56,000 pounds) each, and Loadout Bins 5 and 6 have a capacity of 1,000 bushels (56,000 pounds) each.~~

- (8) Four (4) cob bins, identified as 31.810, 31.820, 31.870 and 31.880 approved for construction in 2013. Each has a capacity of 2,832 cubic feet (48,144 pounds) and are utilized for cob loadout exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).**

- (9) One (1) dust bin, identified as 31.900 approved for construction in 2013 and has a capacity of 3,000 cubic feet (60,000 pounds) and utilized for dust loadout exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).**

- (10) One (1) shelled corn receiving, identified as Shelled Corn Receiving approved for construction in 2013 and has a capacity of 5,000 bushels per hour (280,000 pounds) exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).**

(d) Conditioning

- (1) One (1) Tower Reclaim conveyor grain handling system with a capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34R (House Dust System).**

- (42) Two (2) cleaners, identified as Cleaner Line 1 and Cleaner Line 2, constructed in 2007, exhausting to two (2) baghouses for particulate control, identified as White Dust Collector 1 and White Dust Collector 2, capacity: 500 bushels (28,000 pounds) of shelled corn per hour, each.**

- (23) Two (2) sorters, identified as Sorter Line 1 and Sorter Line 2, constructed in 2007, exhausting to two (2) baghouses for particulate control, identified as White Dust Collector 1 and White Dust Collector 2, capacity: 500 bushels (28,000 pounds) of shelled corn per hour, each.**

- (34) Two (2) sizers, identified as Sizer Line 1 and Sizer Line 2, constructed in 2007, exhausting to two (2) baghouses for particulate control, identified as White Dust Collector 1 and White Dust Collector 2, capacity: 500 bushels (28,000 pounds) of shelled corn per hour, each.
  - (45) Sixteen (16) gravity tables, identified as Gravity Tables Line 1 and Gravity Tables Line 2, constructed in 2007, equipped with sixteen (16) dust collectors for particulate control, identified as Gravity Table Dust Collectors 1 through 16, capacity: 1,000 bushels (56,000 pounds) of shelled corn per hour, total.
  - (56) Twenty-four (24) storage bins, identified as Storage Bins Lines 1 and Storage Bins Line 2, constructed in 2007, throughput capacity: 1,000 bushels (56,000 pounds) of shelled corn per hour, total.
- (e) Treating/Packaging
- ...
- (5) One (1) bagging machine, identified as EU12, constructed in 1994, modified in 2005, equipped with a baghouse for particulate control, identified as Red Dust Collector, capacity: **2,400 bushels** (134,400 pounds) of seed corn per hour.
  - (6) One (1) seed pak filler, identified as Seed Pak Filler, approved for construction in 2010, with a maximum capacity of **1,500 bushels per hour** (84,000 pounds per hour), with particulate emissions vented to baghouse CE14.
  - (7) One (1) refuge scale, identified as Refuge Scale 1, constructed in 2010, with a maximum capacity of **270 bushels per hour** (15,120 pounds per hour), with particulate emissions vented to Red Dust Collector.
  - (8) One (1) refuge scale, identified as Refuge Scale 2, constructed in 2010, with a maximum capacity of **270 bushels per hour** (15,120 pounds per hour), with particulate emissions vented to baghouse CE14.
- ...
- (10) One (1) small lot bagging operation, constructed in 2005, **approved for modification in 2013** consisting of a **debagger identified as small lot debagger EU106**, the CBT-100 treater, identified as EU102, an aspirator, identified as EU103, and bagging unit 2, identified as EU104, exhausting to a baghouse, identified as CE14, capacity: **1,000 3,550 bushels (56,000 98,800 pounds)** per hour, total.

~~Baghouse CE34 is utilized to control house dust and a loadout point, this baghouse operates at the facility for industrial hygiene purposes.~~

~~Calculations indicate that the six (6) baghouses, identified as the Red Dust Collector, CE14, CE15a, CE15b, CE34, and CE35, do not have to be operated in order for the associated emission units to comply with 326 IAC 6-3-2.~~

**Calculations indicate that the baghouses, identified as the Red Dust Collector, CE14, CE34, CE35, White Dust Collectors 1&2 and Gravity Table Dust Collectors 1-16 do not have to be operated in order for the associated emission units to comply with 326 IAC 6-3-2.**

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) Btu per hour, with no boilers.
- (b) The following VOC and HAP storage containers:
  - (1) Storage tanks with capacity less than or equal to one thousand (1,000) and annual throughputs less than twelve thousand (12,000) gallons.
  - (2) Vessels storage the following: hydraulic oils, lubricating oils, machining oils, and machining fluids.
- (c) Paved and unpaved roads and parking lots with public access.
- ~~(d) Bulk Seed Receiving facility.~~
- (d) One Central Vacuum system identified as Sheller Central Vac for general clean up.**

**SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:**

(a) Husking Receiving

- (1) Two (2) receiving lines, identified as Corn Receiving 1 and Corn Receiving 2, consisting of two (2) huskers, identified as Husker 1 and Husker 2, which each consist of ~~six (6)~~ **seven (7)** husking beds, constructed in 1976, modified in 1995, 2007, ~~and 2008, and~~ **2013** exhausting to general ventilation, capacity: 2,000 bushels (112,000 pounds) of ear corn per hour for each line and each husker.
- (2) Two (2) receiving lines, identified as Corn Receiving 1 and Corn Receiving 2, consisting of two (2) huskers, identified as Husker 1 and Husker 2, which each consist of six (6) husking beds, constructed in 1976, modified in 1995, 2007, and 2008, exhausting to general ventilation, capacity: 2,000 bushels (112,000 pounds) of ear corn per hour for each line and each husker.

(b) Drying

...

- ~~(2) One (1) natural gas-fired bin dryer, identified as Dry 3, constructed in 2007, exhausting to Stack Dry 3, with a drying rate of 500 bushels (28,000 pounds) per hour and a heat input capacity of 160 million British thermal units per hour, equipped with eighteen (18) storage bins, identified as Dry 3 Bins, used for drying with a capacity of 2,000 bushels (152,000 pounds), each.~~
- ~~(3) Two (2) natural gas-fired bin dryers identified as Dry 4 and Dry 5, constructed in 2007, exhausting to Stack Dry 4 and Stack Dry 5, with a drying rate of 500 bushels (28,000 pounds) per hour and a heat input capacity of 160 million British thermal units per hour, each equipped with eighteen (18) storage bins, identified as Dry 4 and Dry 5 Bins, used for drying with a capacity of 2,000 bushels (112,000 pounds), each.~~
- ~~(4) One (1) natural gas-fired grain dryer, identified as Dry 6, constructed in 2008, exhausting to Stack Dry 6, with a drying rate of 500 bushels (28,000) per hour~~

and a heat input capacity of 160 million British thermal units per hour, equipped with eighteen (18) storage bins, identified as Dry 6 Bins, used for drying with a capacity of 2,000 bushels (112,000 pounds), each.

- (2) **Two (2) gas-fired bin dryers, identified as Dry 3 and Dry 4, approved for construction in 2007 and 2008, exhausting to Stack Dry 3 and Stack Dry 4, with a drying rate of 500 bushels (28,000 pounds) per hour and a heat input capacity of 160 million British thermal units per hour, equipped with eighteen (18) storage bins each, identified as Dry 3 Bins and Dry 4 Bins, used for drying with a capacity of 2,000 bushels (112,000 pounds), each.**
- (3) **Two (2) gas-fired bin dryers, identified as Dry 5 and Dry 6, approved for construction in 2008, 2009 and approved for modification in 2013, exhausting to Stack Dry 5 and Stack Dry 6, with a drying rate of 778 bushels (43,568 pounds) per hour and a heat input capacity of 252 million British thermal units per hour (28 burners x 9 MMBtu/burner), equipped with eighteen (28) storage bins each, identified as Dry 5 Bins and Dry 6 Bins, used for drying with a capacity of 2,000 bushels (112,000 pounds), each.**

(c) Shelling/Bulk Storage

...

- (3) **One (1) corn sheller, identified as Sheller 3, approved for construction in 2013, exhausting to a baghouse for particulate control, identified as CE15c, capacity: 2,500 bushels (140,000 pounds) of corn per hour.**
- (34) ~~Two (2)~~ **Four (4) aspirators, identified as Sheller Aspirator 1 and Sheller Aspirator 2, constructed in 2009, Sheller Aspirator 3, and Sheller Aspirator 4, approved for construction in 2013, exhausting to baghouse CE35 (Harvest Dust System) CE16 for particulate control, with a capacity of 2,500 bushels (140,000 pounds) of corn per hour, each.**
- (45) **Two hundred and forty eight (248) bulk storage bins, identified as 451.01-451.31, 452.01-452.31, 453.01-453.31, 454.01-454.31, 455.01-455.31, 456.01-456.31, 457.01-457.31 and 458.01-458.31 constructed in 1999, 2007, 2008, 2009, and 2013 exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).**
  - (a) **Storage bins 451.01-451.31, 454.01-454.31, 455.01-455.31 and 458.01-458.31 have a capacity of 7,500 bushels (420,000 pounds) each.**
  - (b) **Storage bins 452.01-452.31, 453.01-453.31, 456.01-456.31 and 457.01-457.31 have a capacity of 5,000 bushels (280,000 pounds) each.**

One hundred eighty (180) bulk storage bins, constructed in 1999, 2007, and 2009, with a total capacity of 1,198,000 bushels (67,088,000 lbs) and a total throughput of 1000 bushels (56,000 lbs) per hour:

- (A) ~~Eight (8) bulk storage bins identified as 9.01-9.04 and 9.09-9.12 with a capacity of 11,000 bushels (616,000 lbs) each.~~
- (B) ~~Four (4) bulk storage bins identified as 9.05-9.08 with a capacity of 15,000 bushels (840,000 lbs) each.~~

~~(C) Eighty four (84) bulk storage bins identified as 1.01-1.31, 4.01-4.31, 5.01-5.11 and 8.01-8.11 with a capacity of 7500 bushels (420,000 lbs) each.~~

~~(D) Eighty four (84) bulk storage bins identified as 2.01-2.31, 3.01-3.31, 6.01-6.11 and 7.01-7.11 with a capacity of 5000 bushels (280,000 lbs) each.~~

- (56) **One (1) shelled corn loadout operation, identified as Shelled Corn Loadout, approved for construction in 2013, with a maximum capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34r (House Dust System).**

~~One (1) shelled corn loadout operation, identified as Shelled Corn Loadout, constructed in 1976, with a maximum capacity of 56,000 pounds per hour of shelled corn loaded to trucks, utilizing no control devices.~~

- (67) **Four (4) shelled corn loadout bins, identified as 31.830, 31.840, 31.850 and 31.860 approved for construction in 2013 with a capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34R (House Dust System). Each bin has a capacity of 2,580 bushels (144,480 Lbs).**

~~Six (6) loadout bins, identified as Loadout Bins 1 through 4, and Loadout Bins 5 and 6, constructed in 2009, throughput: 1,000 bushels per hour. Loadout Bins 1 through 4 have a capacity of 1,000 bushels (56,000 pounds) each, and Loadout Bins 5 and 6 have a capacity of 1,000 bushels (56,000 pounds) each.~~

- (8) **Four (4) cob bins, identified as 31.810, 31.820, 31.870 and 31.880 approved for construction in 2013. Each has a capacity of 2,832 cubic feet (48,144 pounds) and are utilized for cob loadout exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).**

- (9) **One (1) dust bin, identified as 31.900 approved for construction in 2013 and has a capacity of 3,000 cubic feet (60,000 pounds) and utilized for dust loadout exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).**

- (10) **One (1) shelled corn receiving, identified as Shelled Corn Receiving approved for construction in 2013 and has a capacity of 5,000 bushels per hour (280,000 pounds) exhausting to a baghouse for particulate control, identified as CE-35 (Harvest Dust System).**

- (11) **One Central Vacuum system identified as Sheller Central Vac for general clean up.**

(d) Conditioning

- (1) **One (1) Tower Reclaim conveyor grain handling system with a capacity of 2,500 bushels per hour (140,000 pounds) exhausting to a baghouse for particulate control, identified as CE-34R (House Dust System).**

- ~~(2) Two (2) cleaners, identified as Cleaner Line 1 and Cleaner Line 2, constructed in 2007, exhausting to two (2) baghouses for particulate control, identified as White Dust Collector 1 and White Dust Collector 2, capacity: 500 bushels (28,000 pounds) of shelled corn per hour, each.~~

- (23) Two (2) sorters, identified as Sorter Line 1 and Sorter Line 2, constructed in 2007, exhausting to two (2) baghouses for particulate control, identified as White Dust Collector 1 and White Dust Collector 2, capacity: 500 bushels (28,000 pounds) of shelled corn per hour, each.
- (34) Two (2) sizers, identified as Sizer Line 1 and Sizer Line 2, constructed in 2007, exhausting to two (2) baghouses for particulate control, identified as White Dust Collector 1 and White Dust Collector 2, capacity: 500 bushels (28,000 pounds) of shelled corn per hour, each.
- (45) Sixteen (16) gravity tables, identified as Gravity Tables Line 1 and Gravity Tables Line 2, constructed in 2007, equipped with sixteen (16) dust collectors for particulate control, identified as Gravity Table Dust Collectors 1 through 16, capacity: 1,000 bushels (56,000 pounds) of shelled corn per hour, total.
- (56) Twenty-four (24) storage bins, identified as Storage Bins Lines 1 and Storage Bins Line 2, constructed in 2007, throughput capacity: 1,000 bushels (56,000 pounds) of shelled corn per hour, total.

(e) Treating/Packaging

...

- (5) One (1) bagging machine, identified as EU12, constructed in 1994, modified in 2005, equipped with a baghouse for particulate control, identified as Red Dust Collector, capacity: **2,400 bushels** (134,400 pounds) of seed corn per hour.
- (6) One (1) seed pak filler, identified as Seed Pak Filler, approved for construction in 2010, with a maximum capacity of **1,500 bushels per hour** (84,000 pounds per hour), with particulate emissions vented to baghouse CE14.
- (7) One (1) refuge scale, identified as Refuge Scale 1, constructed in 2010, with a maximum capacity of **270 bushels per hour** (15,120 pounds per hour), with particulate emissions vented to Red Dust Collector.
- (8) One (1) refuge scale, identified as Refuge Scale 2, constructed in 2010, with a maximum capacity of **270 bushels per hour** (15,120 pounds per hour), with particulate emissions vented to baghouse CE14.

...

- (10) One (1) small lot bagging operation, constructed in 2005, **approved for modification in 2013** consisting of **a debagger identified as small lot debagger EU106**, the CBT-100 treater, identified as EU102, an aspirator, identified as EU103, and bagging unit 2, identified as EU104, exhausting to a baghouse, identified as CE14, capacity: **1,000 3,550 bushels (56,000 198,800 pounds)** per hour, total.

~~Baghouse CE34 is utilized to control house dust and a loadout point, this baghouse operates at the facility for industrial hygiene purposes.~~

~~Calculations indicate that the six (6) baghouses, identified as the Red Dust Collector, CE14, CE15a, CE15b, CE34, and CE35, do not have to be operated in order for the associated emission units to comply with 326 IAC 6-3-2.~~

**Calculations indicate that the baghouses, identified as the Red Dust Collector,**

**CE14, CE34, CE35, White Dust Collectors 1&2 and Gravity Table Dust Collectors 1-16 do not have to be operated in order for the associated emission units to comply with 326 IAC 6-3-2.**

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

**Change 2:** The Emission Limitations and Standards are changed as follows:

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

**D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following emission units and control devices shall not exceed the pounds per hour limitation when operating at the stated process weight rates calculated using the following equations:

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:

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

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:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and } P = \text{process weight rate in tons per hour}$$

Emission Unit	Control Device	Process Weight Rate (tons per hour)	326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour)
Corn Receiving 1, 2, 3, and 4	none	56.0, each	45.64, each
Huskers 1, 2, 3, and 4, part of Corn Receiving 1, 2, 3, and 4	none	56.0, each	45.64, each
Dryers Dry 1, 2, 3, and 4, 5, and 6	none	14.0, each	24.03, each
<b>Dryers Dry 5 and 6</b>	<b>none</b>	<b>22.0, each</b>	<b>32.31</b>
Sheller 1	Baghouse CE15a	70.0	47.77
Sheller 2	Baghouse CE15b	70.0	47.77
<b>Sheller 3</b>	<b>Baghouse CE15c</b>	<b>70.0</b>	<b>47.77</b>
Sheller Aspirators 1 and 2	<del>Baghouse CE35</del> Baghouse CE16	140, total	54.72, total
<b>Sheller Aspirators 3 and 4</b>	<b>Baghouse CE16</b>	<b>140, total</b>	<b>54.72, total</b>
<del>188</del> <b>248</b> Bulk Storage Bins	<del>none</del> Baghouse CE35 (Harvest Dust System)	28.0, each	38.23, each
Shelled Corn Loadout	<del>none</del> Baghouse CE34r (House Dust System)	<del>28.0</del> <b>70.0</b>	<del>38.23</del> <b>47.77</b>
Loadout Bins 1 though <del>6</del> <b>4</b>	<del>none</del> Baghouse CE34r (House Dust system)	<del>28.0</del> <b>70.0</b>	<del>38.23</del> <b>47.77</b>
<b>4 Cob Loadout Bins (31.810, 31.820, 31.870, 31.880)</b>	<b>Baghouse CE35 (Harvest Dust System)</b>	<b>24.0</b>	<b>34.55</b>
<b>Dust Bin (31.9100)</b>	<b>Baghouse CE35 (Harvest Dust System)</b>	<b>30.0</b>	<b>40.04</b>

Emission Unit	Control Device	Process Weight Rate (tons per hour)	326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour)
<b>Shelled Corn Receiving</b>	<b>Baghouse CE35 (Harvest Dust System)</b>	<b>140.0</b>	<b>54.72</b>
Cleaners, Sorters, Sizers Line 1	White Dust Collector 1	<del>44.0</del> <b>28.0</b> , each	<del>24.03</del> <b>38.23</b> , each
Cleaners, Sorters, Sizers Line 2	White Dust Collector 2	<del>44.0</del> <b>28.0</b> , each	<del>24.03</del> <b>38.23</b> , each
Eight (8) Gravity Tables, Line 1	Gravity Table Dust Collectors 1 through 8	1.75, each	5.97, each
Eight (8) Gravity Tables, Line 2	Gravity Table Dust Collectors 9 through 16	1.75, each	5.97, each
Storage Bins, Lines 1 and 2	none	28.0	38.23
Aspirators 1 through 3	Red Dust Collector	<del>42.0</del> <b>28.0</b>	<del>42.97</del> <b>38.23</b>
Treaters 1 through 3	Red Dust Collector	42.0	42.97
Treating and Packing Storage Bins 1 through 12	Red Dust Collector	28.0, total	38.23, total
Bagging Machine EU12	Red Dust Collector	67.2	47.37
Seed Pak Filler	Baghouse CE14	42.0	42.97
Refuge Scale 1	Red Dust Collector	7.56	15.90
Refuge Scale 2	Baghouse CE14	7.56	15.90
Debagger EU34	Red Dust Collector	28.0	38.23
Small Lot Bagging EU102 through EU104	Baghouse CE14	99.4	51.22
<b>Debagger EU106</b>	<b>Baghouse CE14</b>	<b>28.0</b>	<b>38.23</b>
<b>Internal Handling</b>	<b>None</b>	<b>28.0</b>	<b>39.35</b>

In addition, several of the emission units exhaust through the same baghouse or stack. The allowable particulate pursuant to 326 IAC 6-3-2 has been tabulated by stack/exhaust and baghouse as follows:

Stack # or Exhaust	Emission Unit	Process Weight Rate (tons per hour)	PM Emission Rate (pounds per hour)
Red Dust Collector	Aspirators 1 - 3	Subtotal of <del>42.0</del> <b>28.00</b>	<del>42.97</del> <b>38.23</b>
	Treaters 1- 3	Subtotal of 42.0	42.97
	Treating and Packing Storage Bins 1 through 12	Subtotal of 28.0	38.23
	Bagging Machine EU12	Subtotal of 67.2	47.37
	Refuge Scale 1	Subtotal of 7.56	15.90
	Debagger EU 34	Subtotal of 28.0	38.23
			<del>Total: 225.67</del>
Baghouse CE14	Refuge Scale 2	7.56	15.90
	Small Lot Bagging EU102 through EU104	99.4	51.22
	Seed Pak Filler	42.0	42.97
	<b>Debagger EU106</b>	<b>28.0</b>	<b>38.23</b>
			<del>Total: 140.09</del>

Baghouse 35 CE16	Sheller Aspirator 1 and Sheller Aspirator 2	140	54.72
	Sheller Aspirator 3 and Sheller Aspirator 4	140	54.72
Baghouse CE34r (House Dust System)	Shelled Corn Loadout Operation	70.0	70.63
	Loadout Bins 1 through 4	70.0	70.63
	Internal Handling	28.0	38.23
Baghouse CE35 (Harvest Dust System)	4 Cob Loadout Bins (31.810, 31.820, 31.870, 31.880)	24.00	34.55
	Dust Bin (31.9100)	30.0	40.04
	Shelled Corn Receiving	140.0	54.72
	248 Bulk Storage Bins	28.0	38.23
White Dust Collector 1	Cleaner, Line 1	14.0	24.03
	Sorter, Line 1	14.0	24.03
	Sizer, Line 1	14.0	24.03
			Total: 72.09
White Dust Collector 2	Cleaner, Line 2	14.0	24.03
	Sorter, Line 2	14.0	24.03
	Sizer, Line 2	14.0	24.03
			Total: 72.09

**D.1.2 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) The PM emissions from the four (4) corn receiving lines, identified as Corn Receiving 1, 2, 3, and 4, four (4) huskers, identified as Husker 1, 2, 3, and 4, six (6) natural gas-fired bin dryers, identified as Dry 1, 2, 3, 4, 5, and 6 (grain drying), two (2) cleaners, identified as Cleaners Lines 1 and 2, the two (2) sorters, identified as Sorters Lines 1 and 2, the two (2) sizers, identified as Sizers Lines 1 and 2, and the sixteen (16) gravity tables, identified as Gravity Tables Lines 1 and 2, which are all part of the two (2) corn handling lines, identified as Lines 1 and 2, the one (1) bagging machine, identified as EU12, the one (1) small lot bagging operation, consisting of EU102 through EU104 and the one (1) Seed Pak Filler, shall be limited to less than the throughput and emission limits specified in the following table:

Emission Units (Control Device)	Limited Corn Throughput (tons/yr*)	PM Emission Limit (lbs PM/ton corn)
Corn Receiving 1, 2, 3, and 4	245,280, total Facility throughput	0.035

Emission Units (Control Device)	Limited Corn Throughput (tons/yr*)	PM Emission Limit (lbs PM/ton corn)
	200,000 (wet ear)	
Huskers 1, 2, 3, and 4	245,280, total Facility throughput 200,000 (wet ear)	0.061
Dryers 1, 2, 3, 4, 5, and 6	245,280, total Facility throughput 200,000 (wet ear)	0.47
Sheller Aspirators 1, and 2 (Baghouse CE35), 3, and 4 (Baghouse CE16)	245,280, total Facility throughput 150,000 (dry shelled corn)	0.061
Line 1: Cleaner, Sorter, Sizer (White Dust Collector 1) <b>Bulk Storage Bins, 4 Cob Loadout Bins, Dust Bin 31.900 (Baghouse CE35)</b> <b>4 Shelled Corn Loadout Bins (Baghouse CE34r)</b> <b>Storage Bins Lines 1 &amp; 2</b> <b>Treating and Packaging Storage Bins (Red Dust Collector)</b>	61,320, total Facility throughput 150,000 (dry shelled corn)	0.062 <b>0.025</b>
Line 2: Cleaner, Sorter, and Sizer (White Dust Collector 2) <b>Shelled Corn Loadout Operation (Baghouse CE34r)</b>	61,320, total Facility throughput 150,000 (dry shelled corn)	0.062 <b>0.086</b>
Line 1: Eight (8) Gravity Tables (Gravity Table Dust Collectors 1 through 8) <b>Shelled Corn Receiving (Baghouse CE35)</b>	61,320, total Facility throughput 150,000 (dry shelled corn)	0.269 <b>0.035</b>
Line 2: Eight (8) Gravity Tables (Gravity Table Dust Collectors 9 through 16) <b>Bagging Machine EU12, Small Lot Bagging (EU-102-104), and Internal Handling</b>	61,320, total Facility throughput 150,000 (dry shelled corn)	0.269 <b>0.061</b>
Bagging Machine EU12 (Red Dust Collector)	245,280	0.064
Small Lot Bagging EU102 through EU104 and Seed Pak Filler (Baghouse CE14)	245,280, total	0.064

\*Note that "yr" represents twelve (12) consecutive month period, with compliance determined at the end of each month.

- (b) Shellers 1,2 and 3 shall be limited to 2,500 hours per year each and PM limit of 0.768 lb/hr.**

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per 12 consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

**D.1.3 PM10 Emission Limitations [326 IAC 2-8-4] [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and **326 IAC 2-2 (Prevention of Significant Deterioration (PSD))** not applicable, the Permittee shall comply with

the following:

- (a) The PM<sub>10</sub> and PM<sub>2.5</sub> emissions from the four (4) corn receiving lines, identified as corn receiving 1, 2, 3, and 4, four (4) huskers, identified as Husker 1, 2, 3, and 4, six (6) natural gas-fired bin dryers, identified as Dry 1, 2, 3, 4, 5, and 6 (grain drying), two (2) cleaners, identified as Cleaners Lines 1 and 2, the two (2) sorters, identified as Sorters Lines 1 and 2, the two (2) sizers, identified as Sizers Lines 1 and 2, and the sixteen (16) gravity tables, identified as Gravity Tables Lines 1 and 2, which are all part of the two (2) corn handling lines, identified as Lines 1 and 2, the one (1) bagging machine, identified as EU12, the one (1) small lot bagging operation, consisting of EU102 through EU104, and the one (1) Seed Pak Filler, shall be limited to less than the throughput and emission limits specified in the following table:

<b>Emission Units (Control Device)</b>	<b>Limited Corn Throughput (tons/yr*)</b>	<b>PM<sub>10</sub> Emission Limit (lbs PM<sub>10</sub>/ton corn)</b>	<b>PM<sub>2.5</sub> Emission Limit (lbs PM<sub>2.5</sub>/ton corn)</b>
Corn Receiving 1, 2, 3, and 4	245,280, total <b>Facility throughput 200,000 (wet ear)</b>	0.0078	<b>0.0013</b>
Huskers 1, 2, 3, and 4	245,280, total <b>Facility throughput 200,000 (wet ear)</b>	0.034	<b>0.0058</b>
Dryers 1, 2, 3, 4, 5, and 6	245,280, total <b>Facility throughput 200,000 (wet ear)</b>	0.12	<b>0.020</b>
Sheller Aspirators 1, and 2 (Baghouse CE35), 3, and 4 (Baghouse CE16)	245,280, total <b>Facility throughput 150,000 (dry shelled corn)</b>	0.034	<b>0.0058</b>
Line 1: Cleaner, Sorter, Sizer (White Dust Collector 1) <b>Bulk Storage Bins, 4 Cob Loadout Bins, Dust Bin 31.900 (Baghouse CE35) 4 Shelled Corn Loadout Bins (Baghouse CE34r) Storage Bins Lines 1 &amp; 2 Treating and Packaging Storage Bins (Red Dust Collector)</b>	61,320, total <b>Facility throughput 150,000 (dry shelled corn)</b>	0.0623	<b>0.0011</b>
Line 2: Cleaner, Sorter, and Sizer (White Dust Collector 2) <b>Shelled Corn Loadout Operation (Baghouse CE34r)</b>	61,320, total <b>Facility throughput 150,000 (dry shelled corn)</b>	0.062 <b>0.029</b>	<b>0.0049</b>
Line 1: Eight (8) Gravity Tables (Gravity Table Dust Collectors 1 through 8) <b>Shelled Corn Receiving (Baghouse CE35)</b>	61,320, total <b>Facility throughput 150,000 (dry shelled corn)</b>	0.269 <b>0.0078</b>	<b>0.0013</b>
Line 2: Eight (8) Gravity Tables (Gravity Table Dust Collectors 9 through 16) <b>Bagging Machine EU12, Small Lot Bagging (EU-102-104), and Internal Handling</b>	61,320, total <b>Facility throughput 150,000 (dry shelled corn)</b>	0.269 <b>0.034</b>	<b>0.0058</b>
Bagging Machine EU12 (Red Dust Collector)	245,280	0.034	
Small Lot Bagging EU102 through EU104 and Seed Pak Filler (Baghouse CE14)	245,280, total	0.034	

\*Note that "yr" represents twelve (12) consecutive month period, with compliance determined at the end of each month.

- (b) Shellers 1,2 and 3 shall be limited to 2,500 hours per year each and PM limit of 0.006 gr/dscf.**

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per 12 consecutive month period, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) not applicable, and rendered the requirements of 326 IAC 2-2 (PSD) not applicable for PM10.

**Change 3:** The Compliance Determination Requirements are changed as follows:

### Compliance Determination Requirements

#### D.1.7 Testing Requirements [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

~~Not later than five (5) years from the most recent compliant stack test, in order to demonstrate compliance with Conditions D.1.1, D.1.2, and D.1.3, the Permittee shall perform PM and PM10 testing for the two (2) cleaners, identified as Cleaners Lines 1 and 2, the two (2) sorters, identified as Sorters Lines 1 and 2, and the two (2) sizers, identified as Sizars Lines 1 and 2, all exhausting to two (2) baghouses, identified as White Dust Collector 1 and 2; and four (4) of the sixteen (16) gravity tables, identified as Gravity Tables Lines 1 and 2, exhausting to sixteen (16) baghouses, identified as Gravity Table Dust Collectors 1-8 and Gravity Table Dust Collectors 9-16, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 includes filterable and condensable PM10.~~

**Not later than five (5) years from the most recent compliant stack test, in order to demonstrate compliance with Conditions D.1.1, D.1.2, and D.1.3, the Permittee shall perform PM, PM10, and PM2.5 testing for the three (3) Shellers, identified as Sheller 1 exhausting to Baghouse CE15a, Sheller 2 exhausting to Baghouse CE15b, and Sheller 3 exhausting to Baghouse CE15c, and the 4 Sheller Aspirators, identified as Sheller Aspirators 1, Sheller Aspirator 2, Sheller Aspirator 3, and Sheller Aspirator 4 all exhausting to baghouse CE16, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5 include filterable and condensable PM10 and PM2.5.**

#### D.1.8 Particulate Control

- ~~(a) In order to comply with Conditions D.1.2 and D.1.3, the baghouses, identified as White Dust Collectors 1 and 2, Gravity Table Dust Collectors 1 through 16, for particulate control shall be in operation and control emissions from the two (2) cleaners, identified as Cleaners Lines 1 and 2, the two (2) sorters, identified as Sorters Lines 1 and 2, and the two (2) sizers, identified as Sizars Lines 1 and 2, the sixteen (16) gravity tables, identified as Gravity Tables Lines 1 and 2, and at all times that the emission units are in operation.~~
- In order to comply with Conditions D.1.2 and D.1.3, the baghouses, identified as CE15a, CE15b, CE15c, and CE16, for particulate control shall be in operation and control emissions from the three (3) Shellers, identified as Sheller 1, Sheller 2, Sheller 3, and the 4 Sheller Aspirators, identified as Sheller Aspirators 1, Sheller Aspirator 2, Sheller Aspirator 3, and Sheller Aspirator 4, and at all times that the emission units are in operation.**

...

**Change 4:** The Compliance Monitoring Requirements are changed as follows:

### Compliance Monitoring Requirements

#### D.1.9 Visible Emissions Notations

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- (a) ~~Visible emission notations of the White Dust Collector 1 and 2 and Gravity Table Dust Collectors 1 through 16 exhausts~~ **baghouses, identified as CE15a, CE15b, CE15c, and CE16** shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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#### D.1.10 Baghouse Parametric Monitoring

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- (a) ~~The Permittee shall record the pressure drop across the baghouses, identified as White Dust Collectors 1 and 2 and Gravity Table Dust Collectors 1 through 16, used in conjunction with the two (2) cleaners, identified as Cleaners Lines 1 and 2, the two (2) sorters, identified as Sorters Lines 1 and 2, the two (2) sizers, identified as Sizers Lines 1 and 2, and the sixteen (16) gravity tables, identified as Gravity Tables Lines 1 and 2, all part of the two (2) Corn Handling Lines, identified as Lines 1 and 2, at least once per day when either of the two (2) corn handling lines is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response. The normal range for these units is a pressure drop between 1.0 and 6.0 inches of water unless a different upper bound or lower bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.~~  
**The Permittee shall record the pressure drop across the baghouses, identified as CE15a, CE15b, CE15c, and CE16, used in conjunction with the three (3) Shellers, identified as Sheller 1, Sheller 2, Sheller 3, and the 4 Sheller Aspirators, identified as Sheller Aspirators 1, Sheller Aspirator 2, Sheller Aspirator 3, and Sheller Aspirator 4 at least once per day when either of the two (2) corn handling lines is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for these units is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.**
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

**Change 4:** The Record Keeping Requirements and the reporting forms are changed as follows:

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

#### D.1.12 Record Keeping Requirements

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- (a) ~~To document the compliance status with Conditions D.1.2 and D.1.3, the Permittee shall maintain records corn throughput at the four (4) corn receiving lines, identified as Corn~~

Receiving 1, 2, 3, and 4, four (4) huskers, identified as Husker 1, 2, 3, and 4, six (6) natural gas-fired bin dryers, identified as Dry 1, 2, 3, 4, 5, and 6 (grain drying), two (2) cleaners, identified as Cleaners Lines 1 and 2, the two (2) sorters, identified as Sorters Lines 1 and 2, the two (2) sizers, identified as Sizers Lines 1 and 2, and the sixteen (16) gravity tables, identified as Gravity Tables Lines 1 and 2, all part of the two (2) Corn Handling Lines, identified as Lines 1 and 2, the one (1) bagging machine, identified as EU12, and the one (1) small lot bagging operation, consisting of EU102 through EU104 each month and each compliance period.

**To document the compliance status with Conditions D.1.2 and D.1.3, the Permittee shall maintain records of the facility's throughput of wet ear and dry shelled corn and the number of operating hours of Sheller 1, Sheller 2, and Sheller 3 each compliance period.**

...

- (d) To document the compliance status with Condition D.1.9, the Permittee shall maintain daily records of visible emission notations of each of the two (2) cleaners, identified as Cleaners Lines 1 and 2, the two (2) sorters, identified as Sorters Lines 1 and 2, and the two (2) sizers, identified as Sizers Lines 1 and 2, and the sixteen (16) gravity tables, identified as Gravity Tables Lines 1 and 2 **three (3) Shellers, identified as Sheller 1, Sheller 2, Sheller 3, and the 4 Sheller Aspirators, identified as Sheller Aspirators 1, Sheller Aspirator 2, Sheller Aspirator 3, and Sheller Aspirator 4,** exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).
- (e) To document the compliance status with Condition D.1.10, the Permittee shall maintain daily records of the pressure drop across the baghouses identified as ~~White Dust Collectors 1 and 2 and Gravity Table Dust Collectors 1 through 16~~ **baghouses, identified as CE15a, CE15b, CE15c, and CE16.** The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).
- (f) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

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

**FESOP Quarterly Report**

Source Name: \_\_\_\_\_ Monsanto Company  
Source Address: \_\_\_\_\_ 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: \_\_\_\_\_ F073-30542-00035  
Facilities: \_\_\_\_\_ Four (4) Receiving Lines, identified as Corn Receiving 1, Corn Receiving 2, \_\_\_\_\_ Corn Receiving 3, and Corn Receiving 4  
Parameter: \_\_\_\_\_ Corn Throughput  
Limit: \_\_\_\_\_ Less than 245,280 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Corn Throughput (tons)	Corn Throughput (tons)	Corn Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: \_\_\_\_\_ Monsanto Company  
Source Address: \_\_\_\_\_ 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: \_\_\_\_\_ F073-30542-00035  
Facilities: \_\_\_\_\_ Four (4) Huskers, identified as Husker 1, Husker 2, Husker 3, and Husker 4  
Parameter: \_\_\_\_\_ Corn Throughput  
Limit: \_\_\_\_\_ Less than 245,280 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Corn Throughput (tons)	Corn Throughput (tons)	Corn Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

\_\_\_\_\_ No deviation occurred in this quarter.  
 \_\_\_\_\_ Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: Monsanto Company  
Source Address: 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: F073-30542-00035  
Facilities: Six (6) natural gas-fired bin dryers, identified as Dry 1, Dry 2, Dry 3, Dry 4, Dry 5, and Dry 6  
Parameter: Corn Throughput  
Limit: Less than 245,280 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Corn Throughput (tons)	Corn Throughput (tons)	Corn Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

No deviation occurred in this quarter.  
 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: \_\_\_\_\_ Monsanto Company  
Source Address: \_\_\_\_\_ 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: \_\_\_\_\_ F073-30542-00035  
Facilities: \_\_\_\_\_ Sheller Aspirators 1 and 2  
Parameter: \_\_\_\_\_ Corn Throughput  
Limit: \_\_\_\_\_ Less than 245,280 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Corn Throughput (tons)	Corn Throughput (tons)	Corn Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

No deviation occurred in this quarter.  
 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: \_\_\_\_\_ Monsanto Company  
Source Address: \_\_\_\_\_ 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: \_\_\_\_\_ F073-30542-00035  
Facilities: \_\_\_\_\_ Cleaners, Sorters, Sizers, Line 1  
Parameter: \_\_\_\_\_ Corn Throughput  
Limit: \_\_\_\_\_ Less than 61,320 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Corn Throughput (tons)	Corn Throughput (tons)	Corn Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

No deviation occurred in this quarter.  
 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: \_\_\_\_\_ Monsanto Company  
Source Address: \_\_\_\_\_ 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: \_\_\_\_\_ F073-30542-00035  
Facilities: \_\_\_\_\_ Cleaners, Sorters, Sizers, Line 2  
Parameter: \_\_\_\_\_ Corn Throughput  
Limit: \_\_\_\_\_ Less than 61,320 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Corn Throughput (tons)	Corn Throughput (tons)	Corn Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

No deviation occurred in this quarter.  
 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: \_\_\_\_\_ Monsanto Company  
Source Address: \_\_\_\_\_ 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: \_\_\_\_\_ F073-30542-00035  
Facilities: \_\_\_\_\_ Gravity Tables, Line 1  
Parameter: \_\_\_\_\_ Corn Throughput  
Limit: \_\_\_\_\_ Less than 61,320 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Corn Throughput (tons)	Corn Throughput (tons)	Corn Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

No deviation occurred in this quarter.  
 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: \_\_\_\_\_ Monsanto Company  
Source Address: \_\_\_\_\_ 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: \_\_\_\_\_ F073-30542-00035  
Facilities: \_\_\_\_\_ Gravity Tables, Line 2  
Parameter: \_\_\_\_\_ Corn Throughput  
Limit: \_\_\_\_\_ Less than 61,320 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Corn Throughput (tons)	Corn Throughput (tons)	Corn Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

\_\_\_\_\_ No deviation occurred in this quarter.  
 \_\_\_\_\_ Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: \_\_\_\_\_ Monsanto Company  
Source Address: \_\_\_\_\_ 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: \_\_\_\_\_ F073-30542-00035  
Facilities: \_\_\_\_\_ Bagging Machine EU12  
Parameter: \_\_\_\_\_ Corn Throughput  
Limit: \_\_\_\_\_ Less than 294,336 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Corn Throughput (tons)	Corn Throughput (tons)	Corn Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

\_\_\_\_\_ No deviation occurred in this quarter.  
 \_\_\_\_\_ Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

Source Name: \_\_\_\_\_ Monsanto Company  
Source Address: \_\_\_\_\_ 15489 S US Hwy 231, Remington, Indiana 47977  
FESOP No.: \_\_\_\_\_ F073-30542-00035  
Facilities: \_\_\_\_\_ Small Lot Bagging Operation (EU102 through EU104).  
Parameter: \_\_\_\_\_ Corn Throughput  
Limit: \_\_\_\_\_ Less than 744,600 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Corn Throughput (tons)	Corn Throughput (tons)	Corn Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

No deviation occurred in this quarter.  
 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**FESOP Quarterly Report**

**Source Name:** Monsanto Company  
**Source Address:** 15489 S US Hwy 231, Remington, Indiana 47977  
**FESOP No.:** F073-30542-00035  
**Facilities:** Facility wide  
**Parameter:** Wet Ear Throughput  
**Limit:** 200,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

**QUARTER:** \_\_\_\_\_ **YEAR:** \_\_\_\_\_

Month	Wet Ear Throughput (tons)	Wet Ear Throughput (tons)	Wet Ear Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

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

**Submitted by:** \_\_\_\_\_

**Title / Position:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

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

**FESOP Quarterly Report**

**Source Name:** Monsanto Company  
**Source Address:** 15489 S US Hwy 231, Remington, Indiana 47977  
**FESOP No.:** F073-30542-00035  
**Facilities:** Facility wide  
**Parameter:** Dry Shelled Corn Throughput  
**Limit:** 150,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

**QUARTER:** \_\_\_\_\_ **YEAR:** \_\_\_\_\_

Month	Dry shelled Corn Throughput (tons)	Dry Shelled Corn Throughput (tons)	Dry shelled Corn Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

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

**Submitted by:** \_\_\_\_\_

**Title / Position:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

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

**FESOP Quarterly Report**

**Source Name:** Monsanto Company  
**Source Address:** 15489 S US Hwy 231, Remington, Indiana 47977  
**FESOP No.:** F073-30542-00035  
**Facilities:** Sheller 1  
**Parameter:** Operating hours  
**Limit:** 2,500 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

**QUARTER:** \_\_\_\_\_ **YEAR:** \_\_\_\_\_

Month	Number of Operating Hours	Number of Operating Hours	Number of Operating Hours
	This Month	Previous 11 Months	12 Month Total

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

**Submitted by:** \_\_\_\_\_

**Title / Position:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

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

**FESOP Quarterly Report**

**Source Name:** Monsanto Company  
**Source Address:** 15489 S US Hwy 231, Remington, Indiana 47977  
**FESOP No.:** F073-30542-00035  
**Facilities:** Sheller 2  
**Parameter:** Operating hours  
**Limit:** 2,500 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

**QUARTER:** \_\_\_\_\_ **YEAR:** \_\_\_\_\_

Month	Number of Operating Hours	Number of Operating Hours	Number of Operating Hours
	This Month	Previous 11 Months	12 Month Total

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

**Submitted by:** \_\_\_\_\_

**Title / Position:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

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

**FESOP Quarterly Report**

**Source Name:** Monsanto Company  
**Source Address:** 15489 S US Hwy 231, Remington, Indiana 47977  
**FESOP No.:** F073-30542-00035  
**Facilities:** Sheller 3  
**Parameter:** Operating hours  
**Limit:** 2,500 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

**QUARTER:** \_\_\_\_\_ **YEAR:** \_\_\_\_\_

Month	Number of Operating Hours	Number of Operating Hours	Number of Operating Hours
	This Month	Previous 11 Months	12 Month Total

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

**Submitted by:** \_\_\_\_\_

**Title / Position:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**Conclusion and Recommendation**

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on December 07, 2012.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Permit Revision No. 073-32601-00035. The staff recommends to the Commissioner that this FESOP Significant Permit Revision be approved.

<b>IDEM Contact</b>
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- (a) Questions regarding this proposed permit can be directed to Ghassan Shalabi 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 317-234-5378 or toll free at 1-800-451-6027 extension 4-5378.
- (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.in.gov/idem](http://www.in.gov/idem)

**Appendix A: Emissions Calculations**  
**Processing - Unlimited Potential to Emit of New Equipment and Modified**

**Company Name:** Monsanto Company  
**Source Address:** 15849 S US Hwy 231, Remington, IN 47977  
**Permit Number:** F073-32601-00035  
**Reviewer:** Ghassan Shalabi

Facility Throughput (Wet Ear Corn) = 200,000 tons/year\*  
 Facility Throughput Limit (dry shelled corn) = 150,000 tons/year\*

**Unlimited Potential to Emit**

Emission Unit	Unlimited Capacity (lbs/hr)	Unlimited Capacity (tons/hr)	Unlimited Capacity (tons/year)	Pollutant	Emission Factor	Units	Source of EF (date published)	PM (TPY)	PM-10 (TPY)	PM-2.5 (TPY)	SOx (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)
Dryers 5&6 (Grain Drying) Before Modification	28,000	14	245,280	PM	0.47	lbs/ton	AP-42 Table 9.9.1-1 (3/03)	57.64	14.72	2.45				
Rack Dryer - Self Cleaning Screens	lbs/hr	tons/hr	tons/hr	PM10	0.12	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
SCC 3-02-005-27	each	each	Total	PM2.5	0.020	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
Dryers 5&6 (Natural Gas) Before Modification	160	0.157	2,748	PM	1.9	lb/mmcf	AP 42, Tables 1.4-2	2.61	10.44	10.44	0.82	137.41	7.56	115.43
Rack Dryer - Self Cleaning Screens	mmBtu/hr	mmcf/hr	mmcf/year	PM10	7.6	lb/mmcf	AP 42, Tables 1.4-2							
SCC 3-02-005-27	Each	each	Total	PM2.5	7.6	lb/mmcf	AP 42, Tables 1.4-2							
				SOx	0.6	lb/mmcf	AP 42, Tables 1.4-2							
				NOx	100	lb/mmcf	AP 42, Tables 1.4-1							
				VOC	5.5	lb/mmcf	AP 42, Tables 1.4-2							
				CO	84	lb/mmcf	AP 42, Tables 1.4-1							
Dryers 5&6 (Grain Drying) After Modification	43,568	22	381,656	PM	0.47	lbs/ton	AP-42 Table 9.9.1-1 (3/03)	89.69	22.90	3.82				
Rack Dryer - Self Cleaning Screens	lbs/hr	tons/hr	tons/hr	PM10	0.12	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
SCC 3-02-005-27	each	each	Total	PM2.5	0.020	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
Dryers 5&6 (Natural Gas) After Modification	252	0.247	4,328	PM	1.9	lb/mmcf	AP 42, Tables 1.4-2	4.11	16.45	16.45	1.30	216.42	11.90	181.80
Rack Dryer - Self Cleaning Screens	mmBtu/hr	mmcf/hr	mmcf/year	PM10	7.6	lb/mmcf	AP 42, Tables 1.4-2							
SCC 3-02-005-27	Each	each	Total	PM2.5	7.6	lb/mmcf	AP 42, Tables 1.4-2							
				SOx	0.6	lb/mmcf	AP 42, Tables 1.4-2							
				NOx	100	lb/mmcf	AP 42, Tables 1.4-1							
				VOC	5.5	lb/mmcf	AP 42, Tables 1.4-2							
				CO	84	lb/mmcf	AP 42, Tables 1.4-1							
Increase in Potential Emissions for Dryer 5 & 6 grain drying								32.05	8.18	1.36				
Increase in Potential Emissions for Dryer 5 & 6 natural gas								1.50	6.00	6.00	0.47	79.01	4.35	66.37
No Change in the maximum uncontrolled Potential Emissions for Sheller 1 (change in air flowrate)														
No Change in the maximum uncontrolled Potential Emissions for Sheller 2 (change in air flow rate)														
Sheller 3	140,000	70	150,000	PM	0.375	lbs/ton	Engineering Estimate	28.13	17.16	17.16				
Baghouse CE15c Flow Rate (cfm)	lbs/hr	tons/hr	tons/yr	PM10	0.22875	lbs/ton	Engineering Estimate							
14,880			Limit*	PM2.5	0.22875	lbs/ton	Engineering Estimate							
Sheller Aspirators 3 & 4 (1,226,400 tons/year)	280,000	140	150,000	PM	0.061	lbs/ton	AP-42 Table 9.9.1-1 (3/03)	4.58	2.55	0.44				
	lbs/hr	tons/hr	tons/yr	PM10	0.034	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
	total	total	Limit*	PM2.5	0.0058	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
80 New Bulk Storage Bins	56,000	28	150,000	PM <sup>1</sup>	0.025	lbs/ton	AP-42 Table 9.9.1-1 (3/03)	1.88	0.47	0.08				
SCC 3-02-005-40	lbs/hr	tons/hr	tons/yr	PM10	0.0063	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
	each	each	Limit*	PM2.5	0.0011	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
4 Shelled Corn Loadout Bins	140,000	70	150,000	PM <sup>1</sup>	0.025	lbs/ton	AP-42 Table 9.9.1-1 (3/03)	1.88	0.47	0.08				
2,580 bushels capacity each	lbs/hr	tons/hr	tons/yr	PM10	0.0063	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
SCC 3-02-005-40			Limit*	PM2.5	0.0011	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
4 Cob Loadout Bins (31,810, 31,820, 31,870, 31,880)	48,144	24	150,000	PM <sup>1</sup>	0.025	lbs/ton	AP-42 Table 9.9.1-1 (3/03)	1.88	0.47	0.08				
	lbs/hr	tons/hr	tons/yr	PM10	0.0063	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
SCC 3-02-005-40	each	each	Limit*	PM2.5	0.0011	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
Dust Bin (31,9100)	60,000	30	150,000	PM <sup>1</sup>	0.025	lbs/ton	AP-42 Table 9.9.1-1 (3/03)	1.88	0.47	0.08				
	lbs/hr	tons/hr	tons/yr	PM10	0.0063	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
			Limit*	PM2.5	0.0011	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
Shelled Corn Loadout (Replaced)	140,000	70	613,200	PM	0.086	lbs/ton	AP-42 Table 9.9.1-1 (3/03)	26.37	8.89	1.50				
	lbs/hr	tons/hr	tons/yr	PM10	0.029	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
	total	total		PM2.5	0.0049	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							

Emission Unit	Unlimited Capacity (lbs/hr)	Unlimited Capacity (tons/hr)	Unlimited Capacity (tons/year)	Pollutant	Emission Factor	Units	Source of EF (date published)	PM (TPY)	PM-10 (TPY)	PM-2.5 (TPY)	SOx (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)
Shelled Corn Receiving SCC 3-02-005-52	280,000 lbs/hr	140 tons/hr	150,000 tons/yr Limit*	PM <sup>2</sup>	0.035	lbs/ton	AP-42 Table 9.9.1-1 (3/03)	2.63	0.59	0.10				
				PM10	0.0078	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
				PM2.5	0.0013	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
Debagger EU106	56,000 lbs/hr	28 tons/hr	150,000 tons/yr Limit*	PM	0.061	lbs/ton	AP-42 Table 9.9.1-1 (3/03)	4.58	2.55	0.44				
				PM10	0.034	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
				PM2.5	0.0058	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
Internal Handling	34,247 lb/hr	17.1 tons/hr	150,000 tons/yr Limit*	PM	0.061	lbs/ton	AP-42 Table 9.9.1-1 (3/03)	4.58	2.55	0.44				
				PM10	0.034	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
				PM2.5	0.0058	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
Husk Chopper (existing) Only 25% of grain received goes through the chopper	28,000 lbs/hr	14 tons/hr	50,000 tons/yr	PM	0.061	lbs/ton	AP-42 Table 9.9.1-1 (3/03)	1.53	0.85	0.15				
				PM10	0.034	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
				PM2.5	0.0058	lbs/ton	AP-42 Table 9.9.1-1 (3/03)							
Sheller Central Vacuum System 10" Hg	400 scfm			PM	0.03	gr/dscf	Engineering Estimate	0.45	0.45	0.45				
				PM10	0.03	gr/dscf	Engineering Estimate							
				PM2.5	0.03	gr/dscf	Engineering Estimate							
Tower Central Vacuum System 11" Hg	440 scfm			PM	0.03	gr/dscf	Engineering Estimate	0.50	0.50	0.50				
				PM10	0.03	gr/dscf	Engineering Estimate							
				PM2.5	0.03	gr/dscf	Engineering Estimate							
<b>Total Emissions</b>								<b>114.36</b>	<b>52.16</b>	<b>28.85</b>	<b>0.47</b>	<b>79.01</b>	<b>4.35</b>	<b>66.37</b>

**Notes**

\*Facility throughput limit

1. Assumes all bins are controlled by a bin vent.
2. Assumes grain receiving is done by hopper truck.

**Appendix A: Emissions Calculations  
Summary - Unlimited**

**Company Name: Monsanto Company  
Source Address: 15849 S US Hwy 231, Remington, IN 47977  
Permit Number: F073-32601-00035  
Reviewer: Ghassan Shalabi**

**Unlimited/Uncontrolled Potential to Emit (tons/year)**

Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs as CO2e	Total HAPs	Single HAP	
<b>Non-Fugitive Emissions</b>											
Corn Receiving 1, 2, 3, & 4	4.29	0.96	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Husking 1, 2, 3 & 4	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Dryers 1, 2, 3, 4, 5 & 6 (Grain Drying)	57.64	14.72	2.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Dryers 1, 2, 3, 4, 5, and 6 (combustion)</b>	<b>7.86</b>	<b>31.42</b>	<b>31.42</b>	<b>2.48</b>	<b>413.47</b>	<b>22.74</b>	<b>347.32</b>	<b>499,186</b>	<b>7.80</b>	<b>7.44</b>	Hexane
Sheller 1	45.99	28.05	28.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Sheller 2</b>	<b>45.99</b>	<b>28.05</b>	<b>28.05</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Sheller 3</b>	<b>45.99</b>	<b>28.05</b>	<b>28.05</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Sheller Aspirators 1 & 2	37.41	20.85	3.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Sheller Aspirators 3 &amp; 4</b>	<b>37.41</b>	<b>20.85</b>	<b>3.56</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>248 Bulk Storage Bins</b>	<b>3.07</b>	<b>0.77</b>	<b>0.13</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Shelled Corn Loadout (Replaced)	26.37	8.89	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>4 Shelled Corn Loadout Bins</b>	<b>3.07</b>	<b>0.77</b>	<b>0.13</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>4 Cob Loadout Bins</b>	<b>3.07</b>	<b>0.77</b>	<b>0.13</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Dust Bin</b>	<b>3.07</b>	<b>0.77</b>	<b>0.13</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Shelled Corn Receiving</b>	<b>4.29</b>	<b>0.96</b>	<b>0.16</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Cleaners, Sorters, Sizers, Line 1	7.60	7.60	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Cleaners, Sorters, Sizers, Line 2	7.60	7.60	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Gravity Tables, Lines 1 & 2	45.99	28.05	28.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Storage Bins, Lines 1 & 2	3.07	0.77	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Aspirators 1-3	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Treaters 1-3 & CBT100 Treater	11.22	6.25	1.07	0.00	0.00	387.23	0.00	0	0.16	0.13	Glycol Ethers
Treating and Packing Storage Bins	3.07	0.77	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Bagging Machine (EU12)	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Seed Pak Filler	11.22	6.25	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Refuge Scales 1 & 2	4.04	2.25	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Debagger EU34	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Small Lot Bagging (EU102 through 104)	7.48	4.17	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Debagger EU106 (Small Lot Debagger)</b>	<b>7.48</b>	<b>4.17</b>	<b>0.71</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Internal Handling</b>	<b>7.48</b>	<b>4.17</b>	<b>0.71</b>	0.00	0.00	0.00	0.00	0	0.00	0.00	-
Dust Collector Loadouts	0.75	0.25	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Insignificant Emissions</b>											
<b>Husk Chopper</b>	<b>1.87</b>	<b>1.04</b>	<b>0.18</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Sheller Central Vacuum System</b>	<b>0.45</b>	<b>0.45</b>	<b>0.45</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Tower Central Vacuum System</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Tanks	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0	0.00	0.00	-
<b>Heaters</b>	<b>0.02</b>	<b>0.06</b>	<b>0.06</b>	<b>0.00</b>	<b>0.83</b>	<b>0.05</b>	<b>0.70</b>	<b>1,005</b>	<b>0.02</b>	<b>0.01</b>	Hexane
<b>Totals (Non-Fugitive)</b>	<b>475.26</b>	<b>276.96</b>	<b>179.77</b>	<b>2.49</b>	<b>414.30</b>	<b>410.10</b>	<b>348.02</b>	<b>500,191</b>	<b>7.98</b>	<b>7.46</b>	<b>Hexane</b>
<b>Fugitive Emissions</b>											
Paved Roads	2.29	0.46	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Unpaved Roads	18.46	4.70	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Totals (Fugitive)</b>	<b>20.74</b>	<b>5.16</b>	<b>0.58</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>-</b>
<b>Totals Before the Modification (non-fugitive)</b>	267.55	152.53	84.93	2.00	333.67	651.63	280.28	402838.86	6.56	6.01	Hexane
<b>Emission Increase from Modification (non-fugitive)</b>	<b>207.71</b>	<b>124.42</b>	<b>94.84</b>	<b>0.48</b>	<b>80.64</b>	<b>-241.53</b>	<b>67.73</b>	<b>97,351.84</b>	<b>1.42</b>	<b>1.45</b>	
<b>Significant Permit Revision Thresholds</b>	25	10	25	25	25	25	100			10	





Company Name: Monsanto Company  
Source Address: 15849 S US Hwy 231, Remington, IN 47977  
Permit Number: F073-32601-00035  
Reviewer: Ghassan Shalabi

Conditioning Tower Annual Bottleneck = 245,280 tons/year\*

Unlimited Potential to Emit

Emission Unit	Unlimited Capacity (lbs/hr)	Unlimited Capacity (tons/hr)	Unlimited Capacity (tons/year)	Pollutant	Emission Factor	Units	Source of EF (date published)	PM (TPY)	PM-10 (TPY)	PM-2.5 (TPY)	326 IAC 6-3-2 Allowable PM Emission Rate (lbs/hr)
Corn Receiving 1, 2, 3, & 4 SCC 3-02-005-52	112,000 lbs/hr each	56 tons/hr each	245,280 tons/yr Bottleneck*	PM <sup>1</sup> PM10 PM2.5	0.035 0.0078 0.0013	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	4.29	0.96	0.16	each
Husking 1, 2, 3 & 4 SCC 3-02-005-30	112,000 lbs/hr each	56 tons/hr each	245,280 tons/yr Bottleneck*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	7.48	4.17	0.71	45.64 each
Dryers 1,2,3 & 4(Grain Drying) Rack Dryer - Self Cleaning Screens SCC 3-02-005-27	28,000 lbs/hr each	14 tons/hr each	245,280 tons/yr Bottleneck*	PM PM10 PM2.5	0.47 0.12 0.020	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	57.64	14.72	2.45	24.03 each
Dryers 5 & 6 (Grain Drying) Rack Dryer - Self Cleaning Screens SCC 3-02-005-27	43,568 lbs/hr each	22 tons/hr each	for Dryers 1, 2, 3, 4, 5, & 6								32.31 each
Sheller 1 Baghouse CE15a Flow Rate (cfm) 14,880	140,000 lbs/hr	70 tons/hr	245,280 tons/yr Bottleneck*	PM PM10 PM2.5	0.375 0.22875 0.22875	lbs/ton lbs/ton lbs/ton	Engineering Estimate Engineering Estimate Engineering Estimate	45.99	28.05	28.05	47.77
Sheller 2 Baghouse CE15b Flow Rate (cfm) 14,880	140,000 lbs/hr	70 tons/hr	245,280 tons/yr Bottleneck*	PM PM10 PM2.5	0.375 0.22875 0.22875	lbs/ton lbs/ton lbs/ton	Engineering Estimate Engineering Estimate Engineering Estimate	45.99	28.05	28.05	47.77
Sheller 3 Baghouse CE15c Flow Rate (cfm) 14,880	140,000 lbs/hr	70 tons/hr	245,280 tons/yr Bottleneck*	PM PM10 PM2.5	0.375 0.22875 0.22875	lbs/ton lbs/ton lbs/ton	Engineering Estimate Engineering Estimate Engineering Estimate	45.99	28.05	28.05	47.77
Sheller Aspirators 1 & 2 (1,226,400 tons/year)	280,000 lbs/hr total	140 tons/hr total	1,226,400 tons/yr total	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	37.41	20.85	3.56	54.72
Sheller Aspirators 3 & 4 (1,226,400 tons/year)	280,000 lbs/hr total	140 tons/hr total	1,226,400 tons/yr total	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	37.41	20.85	3.56	54.72
248 Bulk Storage Bins SCC 3-02-005-40	56,000 lbs/hr each	28 tons/hr each	245,280 tons/yr Bottleneck*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	3.07	0.77	0.13	38.23 each
Shelled Corn Loadout (Replaced)	140,000 lbs/hr total	70 tons/hr total	613,200 tons/yr	PM <sup>5</sup> PM10 PM2.5	0.086 0.029 0.0049	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	26.37	8.89	1.50	47.77
4 Shelled Corn Loadout Bins 2,580 bushels capacity each SCC 3-02-005-40	140,000 lbs/hr	70 tons/hr	245,280 tons/yr Bottleneck*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	3.07	0.77	0.13	47.77
4 Cob Loadout Bins (31,810, 31,820, 31,870, 31,880) SCC 3-02-005-40	48,144 lbs/hr each	24 tons/hr each	245,280 tons/yr Bottleneck*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	3.07	0.77	0.13	34.55
Dust Bin (31,9100)	60,000 lbs/hr	30 tons/hr	245,280 tons/yr Bottleneck*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	3.07	0.77	0.13	40.04
Shelled Corn Receiving SCC 3-02-005-52	280,000 lbs/hr	140 tons/hr	245,280 tons/yr Bottleneck*	PM <sup>1</sup> PM10 PM2.5	0.035 0.0078 0.0013	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	4.29	0.96	0.16	54.72
Cleaners, Sorters, Sizers, Line 1 SCC 3-02-005-37	56,000 lbs/hr total	28 tons/hr total	245,280 tons/yr	PM <sup>2</sup> PM10 PM2.5	0.062 0.062 0.062	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	7.60	7.60	7.60	38.23
Cleaners, Sorters, Sizers, Line 2 SCC 3-02-005-37	56,000 lbs/hr total	28 tons/hr total	245,280 tons/yr	PM <sup>2</sup> PM10 PM2.5	0.062 0.062 0.062	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	7.60	7.60	7.60	38.23
Gravity Tables, Lines 1 & 2 SCC 3-02-005-37 (16 gravity tables)	3,500 lbs/hr each	1.75 tons/hr each	245,280 tons/yr	PM <sup>4</sup> PM10 <sup>4</sup> PM2.5 <sup>4</sup>	0.375 0.22875 0.22875	lbs/ton lbs/ton lbs/ton	Engineering Estimate Engineering Estimate Engineering Estimate	45.99	28.05	28.05	5.97
Storage Bins, Lines 1 & 2 SCC 3-02-005-40	56,000 lbs/hr total	28 tons/hr total	245,280 tons/yr Bottleneck*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	3.07	0.77	0.13	38.23
Aspirators 1-3	56,000 lbs/hr total	28 tons/hr total	245,280 tons/yr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	7.48	4.17	0.71	38.23
Treaters 1-3	84,000 lbs/hr total	42 tons/hr total	367,920 tons/yr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	11.22	6.25	1.07	42.97
Treating and Packing Storage Bins SCC 3-02-005-40	56,000 lbs/hr total	28 tons/hr total	245,280 tons/yr	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	3.07	0.77	0.13	38.23
Bagging Machine (EU12)	134,400 lbs/hr	67.2 tons/hr	245,280 tons/yr Bottleneck*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	7.48	4.17	0.71	47.37
Seed Pak Filler	84,000 lbs/hr	42.0 tons/hr	367,920 tons/yr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	11.22	6.25	1.07	42.97
Refuge Scales 1 & 2	15,120 lbs/hr each	7.56 tons/hr each	132,451 tons/yr total	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	4.04	2.25	0.38	15.90
Debagger EU34	56,000 lbs/hr	28 tons/hr	245,280 tons/yr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	7.48	4.17	0.71	38.23
Small Lot Bagging (EU102-104)	198,800 lbs/hr total	99.4 tons/hr total	245,280 tons/yr Bottleneck*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	7.48	4.17	0.71	51.22
Debagger EU106	56,000 lbs/hr	28 tons/hr	245,280 tons/yr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	7.48	4.17	0.71	38.23
Internal Handling	56,000 lb/hr	28.0 tons/hr total	245,280 tons/yr Bottleneck*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	7.48	4.17	0.71	38.23
Dust Collector Loadouts			17,520 tons/yr	PM PM10 PM2.5	0.086 0.029 0.0049	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	0.75	0.25	0.04	NA
Husk Chopper (existing) Only 25% of grain received goes through the chopper	28,000 lbs/hr	14 tons/hr	61,320 tons/yr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	1.87	1.04	0.18	
Sheller Central Vacuum System 10" Hg	400 scfm			PM PM10 PM2.5	0.03 0.03 0.03	gr/dscf gr/dscf gr/dscf	Engineering Estimate Engineering Estimate Engineering Estimate	0.45	0.45	0.45	
Tower Central Vacuum System 11" Hg	440 scfm			PM PM10 PM2.5	0.03 0.03 0.03	gr/dscf gr/dscf gr/dscf	Engineering Estimate Engineering Estimate Engineering Estimate	0.50	0.50	0.50	
<b>Total Emissions</b>								<b>467.39</b>	<b>245.47</b>	<b>148.28</b>	

Notes:

\*The maximum bottleneck throughput is based on the capacity of the conditioning tower (56,000 lbs/hour \* ton/2000 lbs = 28 tons/hour)

- Assumes grain receiving is done by hopper truck.
- Emission factors for the Cleaners, Sorters, and Gravity Tables is listed in AP-42 with a cyclone for controls; therefore an 80% capture rate was assumed to back out an uncontrolled emission factor.
- Assumes all bins are controlled by a bin vent.
- Gravity Tables uncontrolled emissions factors from FESOP No. 073-23632-00035 (as provided by the applicant). This emission factor is also used for the Shellers.

**Appendix A: Emissions Calculations  
Processing - Limited**

**Company Name: Monsanto Company  
Source Address: 15849 S US Hwy 231, Remington, IN 47977  
Permit Number: F073-32601-00035  
Reviewer: Ghassan Shalabi**

Facility Throughput (Wet Ear Corn) = 200,000 tons/year\*  
Facility Throughput Limit (dry shelled corn) = 150,000 tons/year\*

**Limited Potential to Emit**

Emission Unit	Limited Capacity	Pollutant	Emission Factor	Units	Source of EF (date published)	PM (TPY)	PM-10 (TPY)	PM2.5 (TPY)
Corn Receiving 1, 2, 3, & 4 SCC 3-02-005-52	200,000 tons/yr total*	PM <sup>1</sup> PM10 PM2.5	0.035 0.0078 0.0013	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	3.50	0.78	0.13
Husking 1, 2, 3 & 4 SCC 3-02-005-30	200,000 tons/yr total*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	6.10	3.40	0.58
Dryers 1, 2, 3, 4, 5 & 6 (Grain Drying) Rack Dryer - Self Cleaning Screens SCC 3-02-005-27	200,000 tons/yr total*	PM PM10 PM2.5	0.47 0.12 0.020	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	47.00	12.00	2.00
Sheller 1 Baghouse CE15a Flow Rate (cfm) 14,880	150,000 ton/yr total	PM <sup>1</sup> PM10 <sup>4</sup> PM2.5 <sup>4</sup>	0.375 0.22875 0.22875	lbs/ton lbs/ton lbs/ton	Engineering Estimate Engineering Estimate Engineering Estimate	28.13	17.16	17.16
Sheller 2 Baghouse CE15b Flow Rate (cfm) 14,880	150,000 ton/yr total	PM <sup>1</sup> PM10 <sup>4</sup> PM2.5 <sup>4</sup>	0.375 0.22875 0.22875	lbs/ton lbs/ton lbs/ton	Engineering Estimate Engineering Estimate Engineering Estimate	28.13	17.16	17.16
Sheller 3 Baghouse CE15c Flow Rate (cfm) 14,880	150,000 ton/yr total	PM <sup>1</sup> PM10 <sup>4</sup> PM2.5 <sup>4</sup>	0.375 0.22875 0.22875	lbs/ton lbs/ton lbs/ton	Engineering Estimate Engineering Estimate Engineering Estimate	28.13	17.16	17.16
Sheller Aspirators 1 & 2 (28 tons/hour total)	150,000 (ton/yr) total*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	4.58	2.55	0.44
Sheller Aspirators 3 & 4 (28 tons/hour total)	150,000 (ton/yr) total*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	4.58	2.55	0.44
248 Bulk Storage Bins SCC 3-02-005-40	150,000 (ton/yr) total*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	1.88	0.47	0.08
Shelled Corn Loadout (Replaced)	150,000 tons/yr	PM PM10 PM2.5	0.086 0.029 0.0049	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	6.45	2.18	0.37
4 Shelled Corn Loadout Bins 2,580 bushels capacity each SCC 3-02-005-40	150,000 (ton/yr) total*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	1.88	0.47	0.08
4 Cob Loadout Bins (31,810, 31,820, 31,870, 31,880) SCC 3-02-005-40	150,000 (ton/yr) total*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	1.88	0.47	0.08
Dust Bin (31,9100)	150,000 tons/yr Limit*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	1.88	0.47	0.08
Shelled Corn Receiving SCC 3-02-005-52	150,000 tons/yr Limit*	PM <sup>1</sup> PM10 PM2.5	0.035 0.0078 0.0013	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	2.63	0.59	0.10
Cleaners, Sorters, Sizers, Line 1 SCC 3-02-005-37 61,320 tons/year throughput limit for Line 1	61,320 tons/yr	PM <sup>2</sup> PM10 PM2.5	0.062 0.062 0.062	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	1.90	1.90	1.90
Cleaners, Sorters, Sizers, Line 2 SCC 3-02-005-37 61,320 tons/year throughput limit for Line 2	61,320 tons/yr	PM <sup>2</sup> PM10 PM2.5	0.062 0.062 0.062	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	1.90	1.90	1.90
Gravity Tables, Lines 1 & 2 SCC 3-02-005-37 61,320 tons/year each line	122,640 tons/yr	PM PM10 PM2.5	0.375 0.22875 0.22875	lbs/ton lbs/ton lbs/ton	Engineering Estimate Engineering Estimate Engineering Estimate	23.00	14.03	14.03
Storage Bins, Lines 1 & 2 SCC 3-02-005-40	150,000 (ton/yr) total*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	1.88	0.47	0.08
Aspirators 1-3	56,000 lb/hr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	7.48	4.17	0.71
Treaters 1-3	84,000 lb/hr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	11.22	6.25	1.07
Treating and Packing Storage Bins SCC 3-02-005-40	150,000 (ton/yr) total*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	1.88	0.47	0.08
Bagging Machine (EU12)	150,000 tons/yr Limit*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	4.58	2.55	0.44
Seed Pak Filler	84,000 lb/hr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	11.22	6.25	1.07
Refuge Scales 1 & 2	132,451 tons/yr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	4.04	2.25	0.38
Debagger EU34	56,000 lb/hr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	7.48	4.17	0.71
Small Lot Bagging (EU102-104)	150,000 tons/yr Limit*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	4.58	2.55	0.44
Debagger EU106	56,000 lb/hr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	7.48	4.17	0.71
Internal Handling	150,000 tons/yr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	4.58	2.55	0.44
Dust Collector Loadouts	17,520 tons/yr	PM PM10 PM2.5	0.086 0.029 0.0049	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	0.75	0.25	0.04
Husk Chopper (existing) Only 25% of grain received goes through the chopper	50,000 lbs/hr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	1.53	0.85	0.15
Sheller Central Vacuum System 10" Hg	400 scfm	PM PM10 PM2.5	0.03 0.03 0.03	gr/dscf gr/dscf gr/dscf	Engineering Estimate Engineering Estimate Engineering Estimate	0.45	0.45	0.45
Tower Central Vacuum System 11" Hg	440 scfm	PM PM10 PM2.5	0.03 0.03 0.03	gr/dscf gr/dscf gr/dscf	Engineering Estimate Engineering Estimate Engineering Estimate	0.50	0.50	0.50
<b>Total Emissions</b>						<b>263.12</b>	<b>133.14</b>	<b>80.93</b>

**Notes:**

- \*The maximum bottleneck throughput is based on the capacity of the conditioning tower (56,000 lbs/hour \* ton/2000 lbs = 28 tons/hour)
- 1. Assumes grain receiving is done by hopper truck.
- 2. Emission factors for the Cleaners, Sorters, and Gravity Tables is listed in AP-42 with a cyclone for controls; therefore an 80% capture rate was assumed to back out an uncontrolled emission factor.
- 3. Assumes all bins are controlled by a bin vent.
- 4. Gravity Tables uncontrolled emissions factors from FESOP No. 073-23632-00035 (as provided by the applicant). This emission factor is also used for the Shellers.

**Appendix A: Emissions Calculations**  
**Processing - Limited/Controlled**

**Company Name:** Monsanto Company  
**Source Address:** 15849 S US Hwy 231, Remington, IN 47977  
**Permit Number:** F073-32601-00035  
**Reviewer:** Ghassan Shalabi

Facility Throughput (Wet Ear Corn) = 200,000 tons/year\*      3,809,524 bushels (wet ear corn)  
Facility Throughput Limit (dry shelled corn) = 150,000 tons/year\*      5,357,143 bushels (dry shelled corn)

**Limited/Controlled Potential to Emit**

Emission Unit	Limited Capacity	Pollutant	Emission Factor or Limit	Units	Source of EF (date published)	Control Device	Control Eff.	PM (TPY)	PM-10 (TPY)	PM2.5 (TPY)
Corn Receiving 1, 2, 3, & 4 SCC 3-02-005-52	200,000 tons/yr total*	PM <sup>1</sup> PM10 PM2.5	0.035 0.0078 0.0013	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	none	0.00% 0.00% 0.00%	3.50	0.78	0.13
Husking 1, 2, 3 & 4 SCC 3-02-005-30	200,000 tons/yr total*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	none	0.00% 0.00% 0.00%	6.10	3.40	0.58
Dryers 1, 2, 3, 4, 5 & 6 (Grain Drying) Rack Dryer - Self Cleaning Screens SCC 3-02-005-27	200,000 tons/yr total*	PM PM10 PM2.5	0.47 0.12 0.020	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	none	0.00% 0.00% 0.00%	47.00	12.00	2.00
Sheller 1 Baghouse CE15a Flow Rate (cfm) 14,880	140,000 lbs/hr 2,500 hrs limit**	PM PM10 PM2.5	0.006 0.006 0.006	gr/dscf gr/dscf gr/dscf	Engineering Estimate Engineering Estimate Engineering Estimate	Baghouse CE15a (Sheller 1)	N/A N/A N/A	0.96	0.96	0.96
Sheller 2 Baghouse CE15b Flow Rate (cfm) 14,880	140,000 lbs/hr 2,500 hrs limit**	PM PM10 PM2.5	0.006 0.006 0.006	gr/dscf gr/dscf gr/dscf	Engineering Estimate Engineering Estimate Engineering Estimate	Baghouse CE15b (Sheller 2) Regulated Dust Collector	N/A N/A N/A	0.96	0.96	0.96
Sheller 3 Baghouse CE15c Flow Rate (cfm) 14,880	140,000 lbs/hr 2,500 hrs limit**	PM PM10 PM2.5	0.006 0.006 0.006	gr/dscf gr/dscf gr/dscf	Engineering Estimate Engineering Estimate Engineering Estimate	Baghouse CE15c (Sheller 3) Regulated Dust Collector	N/A N/A N/A	0.96	0.96	0.96
Sheller Aspirators 1 & 2 (28 tons/hour total)	150,000 (ton/yr) total*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	Baghouse CE16 Regulated Dust Collector	99.00% 99.00% 99.00%	0.05	0.03	0.00
Sheller Aspirators 3 & 4 (28 tons/hour total)	150,000 (ton/yr) total*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	Baghouse CE16 Regulated Dust Collector	99.00% 99.00% 99.00%	0.05	0.03	0.00
248 Bulk Storage Bins SCC 3-02-005-40	150,000 (ton/yr) total*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	CE-35 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	1.88	0.47	0.08
Shelled Corn Loadout (Replaced)	150,000 (ton/yr) Limit*	PM <sup>3</sup> PM10 PM2.5	0.086 0.029 0.0049	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	CE-34 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	6.45	2.18	0.37
4 Shelled Corn Loadout Bins 2,580 bushels capacity each SCC 3-02-005-40	150,000 (ton/yr) total*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	CE-35 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	1.88	0.47	0.08
4 Cob Loadout Bins (31,810, 31,820, 31,870, 31,880) SCC 3-02-005-40	150,000 (ton/yr) total*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	CE-35 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	1.88	0.47	0.08
Dust Bin (31,9100)	150,000 (ton/yr) Limit*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	CE-34 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	1.88	0.47	0.08
Shelled Corn Receiving SCC 3-02-005-52	150,000 (ton/yr) Limit*	PM <sup>1</sup> PM10 PM2.5	0.035 0.0078 0.0013	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	CE-35 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	2.63	0.59	0.10
Cleaners, Sorters, Sizers, Line 1 SCC 3-02-005-37 61,320 tons/year throughput limit for Line 1	61,320 tons/yr	PM PM10 PM2.5	0.062 0.062 0.062	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	White Dust Collector 1 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	1.90	1.90	1.90
Cleaners, Sorters, Sizers, Line 2 SCC 3-02-005-37 61,320 tons/year throughput limit for Line 2	61,320 tons/yr	PM PM10 PM2.5	0.062 0.062 0.062	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	White Dust Collector 2 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	1.90	1.90	1.90
Gravity Tables, Lines 1 & 2 SCC 3-02-005-37 61,320 tons/year each line	122,640 tons/yr	PM PM10 PM2.5	0.375 0.22875 0.22875	lbs/ton lbs/ton lbs/ton	Engineering Estimate Engineering Estimate Engineering Estimate	Dust Collectors 1 through 8 (Line 1) Dust Collectors 9 through 16 (Line 2)	0.00% 0.00% 0.00%	23.00	14.03	14.03
Storage Bins, Lines 1 & 2 SCC 3-02-005-40	150,000 (ton/yr) total*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	White Dust Collectors 1 & 2 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	1.88	0.47	0.08
Aspirators 1-3	56,000 lb/hr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	Red Dust Collector Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	7.48	4.17	0.71
Treaters 1-3	84,000 lb/hr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	Red Dust Collector Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	11.22	6.25	1.07
Treating and Packing Storage Bins SCC 3-02-005-40	150,000 (ton/yr) total*	PM <sup>3</sup> PM10 PM2.5	0.025 0.0063 0.0011	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	Red Dust Collector Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	1.88	0.47	0.083
Bagging Machine (EU12)	150,000 tons/yr limit*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	Red Dust Collector Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	4.58	2.55	0.435
Seed Pak Filler	84,000 lb/hr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	Baghouse CE34 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	11.22	6.25	1.07
Refuge Scales 1 & 2	132,451 tons/yr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	Red Dust Collector (Refuse Scale 1) Baghouse CE14 (Refuse Scale 2)	0.00% 0.00% 0.00%	4.04	2.25	0.384
Debagger EU34	56,000 lb/hr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	Red Dust Collector Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	7.48	4.17	0.71
Small Lot Bagging (EU102-104)	150,000 tons/yr limit*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	Baghouse CE14 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	4.58	2.55	0.435
Debagger EU106	56,000 lb/hr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	Baghouse CE14 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	7.48	4.17	0.71
Internal Handling	150,000 tons/yr limit*	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	CE-34 Unregulated Dust Collector Assume 0% Control Efficiency	0.00% 0.00% 0.00%	4.58	2.55	0.435
Dust Collector Loadouts	17,520 tons/yr	PM PM10 PM2.5	0.086 0.029 0.0049	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	none		0.75	0.25	0.043
Husk Chopper (existing) Only 25% of grain received goes through the chopper	50,000 lbs/hr	PM PM10 PM2.5	0.061 0.034 0.0058	lbs/ton lbs/ton lbs/ton	AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03) AP-42 Table 9.9.1-1 (3/03)	none	0.00% 0.00% 0.00%	1.53	0.85	0.15
Sheller Central Vacuum System 10" Hg	400 scfm	PM PM10 PM2.5	0.03 0.03 0.03	gr/dscf gr/dscf gr/dscf	Engineering Estimate Engineering Estimate Engineering Estimate	none	0.00% 0.00% 0.00%	0.45	0.45	0.45
Tower Central Vacuum System 11" Hg	440 scfm	PM PM10 PM2.5	0.03 0.03 0.03	gr/dscf gr/dscf gr/dscf	Engineering Estimate Engineering Estimate Engineering Estimate	none	0.00% 0.00% 0.00%	0.50	0.50	0.50
<b>Total Emissions</b>								<b>172.56</b>	<b>79.49</b>	<b>31.47</b>

**Notes:**

- \*Facility throughput limit
- \*\* Shellers 1, 2 & 3 have an hourly limit of 2,500 hours per year each
- 1. Assumes grain receiving is done by hopper truck.
- 2. Emission factors for the Cleaners, Sorters, and Gravity Tables is listed in AP-42 with a cyclone for controls; therefore an 80% capture rate was assumed to back out an uncontrolled emission factor.
- 3. Assumes all bins are controlled by a bin vent.

**Appendix A: Emissions Calculations  
Emissions From Seed Coating Operations  
Treater 1, 2, 3 and CBT 100**

**Company Name:** Monsanto Company  
**Source Address:** 15849 S US Hwy 231, Remington, IN 47977  
**Permit Number:** F073-32601-00035  
**Reviewer:** Ghassan Shalabi

Conditioning Tower Limit =  tons/year\*

**Unlimited**

Material	Density (lb/gal)	VOC Content (lb VOC /gallon of coating)	Gallons of Mat. (gal/ton of seed)	Maximum (tons seed/yr)	Potential VOC (tpy)	Glycol Ether Content (%)	HAP Emissions (tpy)
Apron XL LS	9.3	6.32	0.00656	150,000	3.109	1.00%	0.03
Poncho Medium**	10.6	1.80	0.35313	0	0.000	0%	0.0
Poncho High	10.6	1.80	1.96870	150,000	265.775	0%	0.0
Precise Medium**	10.5	2.94	0.31250	0	0.000	0%	0.0
Precise High	10.5	2.94	0.46870	150,000	103.348	0%	0.0
MaximXL	9.2	0.55	0.02625	150,000	1.083	12.00%	0.13
Red Colorant**	9.9	0.18	0.03906	0	0.000	0%	0.0
Green Colorant**	11	0.20	0.04688	0	0.000	0%	0.0
Blue Colorant	9.9	0.18	0.07813	150,000	1.055	0%	0.0
Seed Gloss	10.1	0.00	0.00000	150,000	0.000	0%	0.0
Dynasty	8.673	0.52	0.02206	150,000	0.861	0%	0.0
Trilex	9.1	1.82	0.08791	150,000	12.000	0%	0.0
<b>Total</b>					<b>387.23</b>		<b>0.16</b>

\*The maximum bottleneck throughput is based on the capacity of the conditioning tower (56,000 lbs/hour \* ton/2000 lbs = 28 tons/hour)

\*\*Throughputs for certain materials set at 0 since these would not represent the maximum potential emissions for these chemicals

**Limited**

Unit ID	VOC Limit (tons/year)
Treater 1	25.0
Treater 2	25.0
Treater 3	25.0
CBT 100	15.0
<b>Totals</b>	<b>90.0</b>

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**Unlimited Potential to Emit**  
**Dryers 1, 2, 3, 4, 5, 6**

**Company Name: Monsanto Company**  
**Source Address: 15849 S US Hwy 231, Remington, IN 47977**  
**Permit Number: F073-32601-00035**  
**Reviewer: Ghassan Shalabi**

Unit ID	Unlimited Heat Input Capacity MMBtu/hr		HHV mmBtu	Unlimited Throughput MMCF/yr
Dryer 1	60	(4 burners @ 15 MMBtu/hr each)		
Dryer 2	60	(4 burners @ 15 MMBtu/hr each)		
Dryer 3	160	(18 burners @ 8.89 MMBtu/hr each)		
Dryer 4	160	(18 burners @ 8.89 MMBtu/hr each)		
Dryer 5	252	(28 burners @ 8.89 MMBtu/hr each)		
Dryer 6	252	(28 burners @ 8.89 MMBtu/hr each)	1000	8269.4
<b>Total</b>	<b>944.0</b>			

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	7.86	31.42	31.42	2.48	413.47	22.74	347.32

\*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/1,000 MMBtu  
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	8.683E-03	4.962E-03	3.101E-01	7.442	1.406E-02

Emission Factor in lb/MMcf	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.067E-03	4.548E-03	5.789E-03	1.571E-03	8.683E-03

Total HAP's = 7.80

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

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emission in tons/yr	496,166	9.5	9.1
Summed Potential Emissions in tons/yr	496,185		
CO2e Total in tons/yr	499,186		

**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) = 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  
MM BTU/HR <100  
Limited Potential to Emit  
Dryers 1, 2, 3, 4, 5, 6**

**Company Name:** Monsanto Company  
**Source Address:** 15849 S US Hwy 231, Remington, IN 47977  
**Permit Number:** F073-32601-00035  
**Reviewer:** Ghassan Shalabi

<b>Limited Throughput MMCF/yr</b>  <b>1,126.90</b>
--

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx 100 **see below	VOC	CO
Limited Emission in tons/yr	1.07	4.28	4.28	0.34	56.35	3.10	47.33

\*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/1,000 MMBtu  
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Potential Emission in tons/yr	1.183E-03	6.761E-04	4.226E-02	1.014	1.916E-03

Emission Factor in lb/MMcf	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Potential Emission in tons/yr	2.817E-04	6.198E-04	7.888E-04	2.141E-04	1.183E-03

Total HAP's = 1.06

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

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
Potential Emission in tons/yr	67,614	1.3	1.2
Summed Potential Emissions in tons/yr	67,617		
CO2e Total in tons/yr	68,025		

**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) = 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**  
**Storage Tanks Emissions**

**Company Name: Monsanto Company**  
**Source Address: 15849 S US Hwy 231, Remington, IN 47977**  
**Permit Number: F073-32601-00035**  
**Reviewer: Ghassan Shalabi**

	VOC (lb/yr)	VOC (tpy)
Gasoline 250 gallon storage tank	157.2	0.0786
Diesel 250 gallon storage tank	0.14	0.00007
	<b>Total</b>	<b>0.079</b>

**Notes:**

1. The gasoline and diesel storage tanks were run using the US EPA Tanks 4.0.9d software.
2. All other storage tanks for the facility are in storage totes with no VOC losses.

**Appendix A: Emissions Calculations  
Natural Gas Combustion  
Heater Data**

**Company Name: Monsanto Company  
Source Address: 15849 S US Hwy 231, Remington, IN 47977  
Permit Number: F073-32601-00035  
Reviewer: Ghassan Shalabi**

	Maximum Heat Input Capacity (Btu/hr)	Maximum Heat Output Capacity (Btu/hr)
Shop 1-Forced Air	225,000	182,300
Shop 2-Forced Air	125,000	100,000
Shop 3-Forced Air	125,000	100,000
Battery Area-Radiant	125,000	N/A
Small Lot Line 1-Radiant	125,000	N/A
Small Lot Line 2-Radiant	125,000	N/A
Palletizer 1-Radiant	300,000	N/A
Palletizer 2-Radiant	250,000	N/A
Bagger 1-Radiant	40,000	N/A
Bagger 2-Radiant	60,000	N/A
Bagger 3-Radiant	80,000	N/A
Seed Pak Filler 1-Radiant	40,000	N/A
Seed Pak Filler 2-Radiant	60,000	N/A
Seed Pak Filler 3-Radiant	60,000	N/A
Seed Pak Filler 4-Radiant	60,000	N/A
New Office HVAC 1	50,000	N/A
New Office HVAC 2	50,000	N/A
	1,900,000	Btu/hr
	<b>1.90</b>	<b>MMBtu/hr</b>

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
HEATERS**

**Company Name:** Monsanto Company  
**Source Address:** 15849 S US Hwy 231, Remington, IN 47977  
**Permit Number:** F073-32601-00035  
**Reviewer:** Ghassan Shalabi

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
1.9	1000	16.6

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.02	0.06	0.06	0.00	0.83	0.05	0.70

\*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/1,000 MMBtu  
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.748E-05	9.986E-06	6.242E-04	0.015	2.829E-05

Emission Factor in lb/MMcf	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	4.161E-06	9.154E-06	1.165E-05	3.162E-06	1.748E-05

Total HAP's 0.016

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

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emission in tons/yr	999	0.0	0.0
Summed Potential Emissions in tons/yr	999		
CO2e Total in tons/yr	1,005		

**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) = 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 - Paved Roads**

**Company Name: Monsanto Company**  
**Source Address: 15849 S US Hwy 231, Remington, IN 47977**  
**Permit Number: F073-32601-00035**  
**Reviewer: Ghassan Shalabi**

**Paved Roads at Industrial Site**

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

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	16.8	1.0	16.8	40.0	672.0	771	0.146	2.5	895.4
Vehicle (leaving plant) (one-way trip)	16.8	1.0	16.8	40.0	672.0	771	0.146	2.5	895.4
<b>Totals</b>			<b>33.6</b>		<b>1344.0</b>			<b>4.9</b>	<b>1790.8</b>

Average Vehicle Weight Per Trip = 

30.0
------

 tons/trip  
Average Miles Per Trip = 

0.15
------

 miles/trip

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

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	30.0	30.0	30.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m <sup>2</sup> = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext =  $E * [1 - (p/4N)]$  (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, Eext =  $Ef * [1 - (p/4N)]$   
where p = 

125
-----

 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)  
N = 

365
-----

 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	2.793	0.559	0.1371	lb/mile
Mitigated Emission Factor, Eext =	2.554	0.511	0.1254	lb/mile
Dust Control Efficiency =	0%	0%	0%	

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	1.25	0.25	0.06	1.14	0.23	0.06	1.14	0.23	0.06
Vehicle (leaving plant) (one-way trip)	1.25	0.25	0.06	1.14	0.23	0.06	1.14	0.23	0.06
<b>Totals</b>	<b>2.50</b>	<b>0.50</b>	<b>0.12</b>	<b>2.29</b>	<b>0.46</b>	<b>0.11</b>	<b>2.29</b>	<b>0.46</b>	<b>0.11</b>

**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 day (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 day (trip/day)]  
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] \* [Unmitigated Emission Factor (lb/mile)] \* (ton/2000 lbs)  
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] \* [Mitigated Emission Factor (lb/mile)] \* (ton/2000 lbs)  
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] \* [1 - Dust Control Efficiency]

**Abbreviations**

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

**Appendix A: Emissions Calculations**  
**Fugitive Dust Emissions - Unpaved Roads**

**Company Name: Monsanto Company**  
**Source Address: 15849 S US Hwy 231, Remington, IN 47977**  
**Company Name: Monsanto Company**  
**Source Address: 15849 S US Hwy 231, Remington, IN 47977**  
**Permit Number: F073-32601-00035**  
**Reviewer: Ghassan Shalabi**

**Unpaved Roads at Industrial Site**

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip) REC	25.2	1.0	25.2	40.0	1008.0	1590	0.301	7.6	2769.9
Vehicle (leaving plant) (one-way trip) REC	25.2	1.0	25.2	20.0	504.0	995	0.188	4.7	1733.3
Vehicle (entering plant) (one-way trip) Loadout	18.0	1.0	18.0	20.0	360.0	1590	0.301	5.4	1978.5
Vehicle (leaving plant) (one-way trip) Loadout	18.0	1.0	18.0	40.0	720.0	995	0.188	3.4	1238.1
<b>Totals</b>			<b>86.4</b>		<b>2592.0</b>			<b>21.2</b>	<b>7719.8</b>

Average Vehicle Weight Per Trip =  $\frac{30.0}{0.24}$  tons/trip  
Average Miles Per Trip =  $\frac{30.0}{0.24}$  miles/trip

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

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Sand/Gravel Processing Plant)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
W =	30.0	30.0	30.0	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext =  $E \cdot [(365 - P)/365]$  (Equation 2 from AP-42 13.2.2)

Mitigated Emission Factor, Eext =  $E \cdot [(365 - P)/365]$   
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	7.27	1.85	0.19	lb/mile
Mitigated Emission Factor, Eext =	4.78	1.22	0.12	lb/mile
Dust Control Efficiency =	0%	0%	0%	

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip) REC	10.07	2.57	0.26	6.62	1.69	0.17	6.62	1.69	0.17
Vehicle (leaving plant) (one-way trip) REC	6.30	1.61	0.16	4.14	1.06	0.11	4.14	1.06	0.11
Vehicle (entering plant) (one-way trip) Loadout	7.19	1.83	0.18	4.73	1.21	0.12	4.73	1.21	0.12
Vehicle (leaving plant) (one-way trip) Loadout	4.50	1.15	0.11	2.96	0.75	0.08	2.96	0.75	0.08
<b>Totals</b>	<b>28.07</b>	<b>7.15</b>	<b>0.72</b>	<b>18.46</b>	<b>4.70</b>	<b>0.47</b>	<b>18.46</b>	<b>4.70</b>	<b>0.47</b>

**Methodology**

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

**Abbreviations**

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

245,280 tpy	Bulk Corn Rec	Rec	Trips	25.2
122640 tpy	Bulk seed Rec.	367,920 tpy		
17520 tpy	D/C Loadout	Loadout		
245280 tpy	Shelled Corn Loadout	262,800 tpy	18.0	
<b>630,720 tpy</b>	<b>Total</b>			



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Michael R. Pence*  
**Governor**

*Thomas W. Easterly*  
**Commissioner**

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

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

**TO:** John Sturges  
Monsanto Company  
PO Box 35  
15849 South US Highway 231  
Remington, IN 47977

**DATE:** April 9, 2013

**FROM:** Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

**SUBJECT:** Final Decision  
Significant Permit Revision  
073-32601-00035

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
David Jordan – Environmental Resources Management (ERM)  
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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[www.idem.IN.gov](http://www.idem.IN.gov)

April 9, 2013

TO: Remington Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

**Applicant Name: Monsanto Company**  
**Permit Number: 073-32601-00035**

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or 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.

Enclosures  
Final Library.dot 11/30/07

# Mail Code 61-53

IDEM Staff	GHOTOPP 4/9/2013 Monsanto Company 073-32601-00035 Final		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		John Sturges Monsanto Company PO Box 35, 15849 S US Hwy 231 Remington IN 47977 (Source CAATS) via confirmed delivery										
2		Remington Public Library 105 North Ohio Street Remington IN 47977 (Library)										
3		Jasper County Commissioners 115 W. Washington Street Rensselaer IN 47978 (Local Official)										
4		Jasper County Health Department 105 W. Kellner St Rensselaer IN 47978-2623 (Health Department)										
5		Mr. Kenny Haun P.O. Box 280 Rensselaer IN 47978 (Affected Party)										
6		David Jordan Environmental Resources Management (ERM) 11350 North Meridian, Suite 320 Carmel IN 46032 (Consultant)										
7		Remington Town Coucil P.O. Box 70 Remington IN 47977 (Local Official)										
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