



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: May 24, 2005
RE: Monsanto Global Seed Company / 159-21175-00010
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from 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-AM.dot 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

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May 24, 2005

Mr. Craig Weitbrecht
Monsanto Global Seed Company
908 North Independence Street
Windfall, IN 46076

Re: 159-21175-00010
Notice-only change to
MSOP 159-15902-00010

Dear Mr. Weitbrecht:

Monsanto Global Seed Company was issued Minor Source Operating Permit (MSOP) on February 28, 2003, for a stationary soybean seed processing plant, located at 908 North Independence Street, Windfall, IN 46076. A letter was received on April 27, 2005 notifying the Office of Air Quality of the following notice-only changes to the permit:

- (a) The source plans to add a mini bulk bagging system, which will be controlled by the existing Baghouse 8A. The addition of this system will not result in an increase in the potential emissions, since the current emission calculations include emissions from packaging operations at the maximum plant capacity of 30 tons of grain per hour (1,000 bushels per hour). The addition of the mini bulk bagging system to the facility descriptions is considered a notice-only change pursuant to 326 IAC 2-6.1-6(d)(2), since it is a change in descriptive information concerning the source.
- (b) The source also requested that the permit be revised to include an existing bulk bagging system, which is controlled by the existing Baghouse 8A. The addition of this system will not result in an increase in the potential emissions, since the current emission calculations include emissions from packaging operations at the maximum plant capacity of 30 tons of grain per hour (1,000 bushels per hour). Inclusion of the bulk bagging system in the facility descriptions is considered a notice-only change pursuant to 326 IAC 2-6.1-6(d)(2), since it is a change in descriptive information concerning the source.
- (c) The source plans to add four (4) storage bins, each with a maximum grain storage capacity of 1,000 bushels, controlled by one (1) baghouse with a control efficiency of 99% and a maximum gas flow rate of five hundred (500) actual cubic feet per minute (acfm). The addition of the storage bins is considered a notice-only change, since the potential emissions of regulated criteria pollutants and hazardous air pollutants less than the ranges specified 326 IAC 2-6.1-6(g)(4) and 326 IAC 2-6.1-6(d)(10), respectively. The addition of the storage bins will not cause the source's potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 or 326 IAC 2-3. The attached calculation tables contain the revised potential to emit of the entire source after addition of the storage bins.

Pursuant to the provisions of 326 IAC 2-6.1-6, the permit is hereby revised as follows with new language **bolded**:

A.2 Emissions Units and Pollution Control Equipment Summary

- (f) One (1) baghouse (identified as baghouse 8A), constructed September 20, 2000, venting otherwise fugitive emissions from storage bins, scales, conveyors, **mini bulk bagging**

system, bulk bagging system, and bag filters located inside the Packaging Tower and the Conditioning Tower. Exhaust air is returned to the Packaging Tower.

- (g) **Four (4) storage bins, each with a maximum grain storage capacity of 1,000 bushels, controlled by one (1) baghouse with a control efficiency of 99% and a maximum gas flow rate of five hundred (500) actual cubic feet per minute (acfm).**

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

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

- (f) One (1) baghouse (identified as baghouse 8A), constructed September 20, 2000, venting otherwise fugitive emissions from storage bins, scales, conveyors, **mini bulk bagging system, bulk bagging system**, and bag filters located inside the Packaging Tower and the Conditioning Tower. Exhaust air is returned to the Packaging Tower.
- (g) **Four (4) storage bins, each with a maximum grain storage capacity of one thousand (1,000) bushels, controlled by one (1) baghouse with a control efficiency of 99% and a maximum gas flow rate of five hundred (500) actual cubic feet per minute (acfm).**

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

D.1.3 Particulate [326 IAC 6-3]

Pursuant to 326 IAC 6-3, particulate emissions from the soybean cleaners, spirals, gravity tables, packaging, ~~and~~-aspirators, **and storage bins** shall not exceed the pound per hour limit provided in the table below.

Facility	Process Weight (tons/hr)	Particulate Emission Limit (lbs/hr)
Storage Bins	30	40.04

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this letter and the following revised permit pages to the front of the original 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 Nathan C. Bell, 100 North Senate Avenue, Indianapolis, Indiana, 46204, at 317-234-3350 or at 1-800-451-6027 (ext 43350).

Sincerely,

Original signed by
Nysa L. James, Section Chief
Permits Branch
Office of Air Quality

ncb

Attachment: Calculation tables and revised permit pages

cc: File - Tipton County
U.S. EPA, Region V
Tipton County Health Department
Air Compliance Section Inspector - Marc Goldman
Compliance Data Section
Administrative and Development



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MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**Monsanto Global Seed Company
 908 North Independence
 Windfall, Indiana 46076**

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

Operation Permit No.: MSOP 159-15902-00010	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 28, 2003 Expiration Date: February 28, 2008
First Notice Only Change: 159-21175-00010	Pages Affected: 4, 15, 16
Issued by: Original signed by Nysa L. James, Section Chief Office of Air Quality	Issuance Date: May 24, 2005

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 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates stationary soybean processing plant.

Authorized Individual: Site Manager
Source Address: 908 North Independence, Windfall, Indiana 46076
Mailing Address: 908 North Independence, Windfall, Indiana 46076
General Source Phone: 765-945-7121
SIC Code: 0723
County Location: Tipton
Source Location Status: Attainment for all criteria pollutants
Source Status: Minor Source, under PSD;
Minor Source, Section 112 of the Clean Air Act
Not 1 of 28 Source Categories

A.2 Emissions Units and Pollution Control Equipment Summary

- (a) One (1) soybean receiving pit (identified as 1E), constructed prior to 1978, with a maximum receiving capacity of one hundred and eighty thousand (180,000) pounds of soybean seeds per hour, using a cyclone as control and exhausting to stack 1A.
- (b) Two (2) cleaners (identified as 3E), constructed prior to 1978, with a combined maximum cleaning capacity of sixty thousand (60,000) pounds of soybean seeds per hour, using a baghouse as control, and exhausting to stack 3A.
- (c) Eight (8) spirals, (identified as 4E), with a combined maximum sorting capacity of sixty thousand (60,000) pounds of soybean seeds per hour, using hanging bags as control, and exhausting inside the building.
- (d) Three (3) gravity tables (identified as 5E, 6E and 7E), constructed prior to 1978, with a combined capacity of sixty thousand (60,000) pounds of soybean seeds per hour, using three (3) cyclones as control, and exhausting to stack 5A, 6A and 7A.
- (e) One (1) aspirator (identified as 2E), constructed prior to 1978, with a maximum aspirating capacity of sixty thousand (60,000) pounds of soybean seeds per hour, using a cyclone as control, and exhausting to stack 2A.
- (f) One (1) baghouse (identified as baghouse 8A), constructed September 20, 2000, venting otherwise fugitive emissions from storage bins, scales, conveyors, mini bulk bagging system, bulk bagging system, and bag filters located inside the Packaging Tower and the Conditioning Tower. Exhaust air is returned to the Packaging Tower.
- (g) Four (4) storage bins, each with a maximum grain storage capacity of one thousand (1,000) bushels, controlled by one (1) baghouse with a control efficiency of 99% and a maximum gas flow rate of five hundred (500) actual cubic feet per minute (acfm).

SECTION D.1

FACILITY OPERATION CONDITIONS

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

- (a) One (1) soybean receiving pit (identified as 1E), constructed prior to 1978, with a maximum receiving capacity of one hundred and eighty thousand (180,000) pounds of soybean seeds per hour, using a cyclone as control and exhausting to stack 1A.
- (b) Two (2) cleaners (identified as 3E), constructed prior to 1978, with a combined maximum cleaning capacity of sixty thousand (60,000) pounds of soybean seeds per hour, using a baghouse as control, and exhausting to stack 3A.
- (c) Eight (8) spirals, (identified as 4E), with a combined maximum sorting capacity of sixty thousand (60,000) pounds of soybean seeds per hour, using handing bags as control, and exhausting inside the building.
- (d) Three (3) gravity tables (identified as 5E, 6E and 7E), constructed prior to 1978, with a combined capacity of sixty thousand (60,000) pounds of soybean seeds per hour, using three (3) cyclones as control, and exhausting to stack 5A, 6A and 7A.
- (e) One (1) aspirator (identified as 2E), constructed prior to 1978, with a maximum aspirating capacity of sixty thousand (60,000) pounds of soybean seeds per hour, using a cyclone as control, and exhausting to stack 2A.
- (f) One (1) baghouse (identified as baghouse 8A), constructed September 20, 2000, venting otherwise fugitive emissions from storage bins, scales, conveyors, mini bulk bagging system, bulk bagging system, and bag filters located inside the Packaging Tower and the Conditioning Tower. Exhaust air is returned to the Packaging Tower.
- (g) Four (4) storage bins, each with a maximum grain storage capacity of one thousand (1,000) bushels, controlled by one (1) baghouse with a control efficiency of 99% and a maximum gas flow rate of five hundred (500) actual cubic feet per minute (acfm).

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

Emission Limitations and Standards

D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The particulate matter emissions from the soybean processing plant shall not exceed the following pound per hour limitations:

Facility	PM Limit (lbs/hr)
Soybean receiving pit	0.32
Internal handling	0.18
Cleaners	0.23
Gravity tables	2.25
Spirals	0.23
Soybean packaging	0.42
Aspirator	0.90

Compliance with these limits makes 326 IAC 2-2 and 40 CFR 52.21 not applicable.

D.1.2 Particulate [326 IAC 6-3]

Pursuant to 326 IAC 6-3, particulate emissions from the soybean receiving pit shall not exceed 50.23 pounds per hour when operating at a process weight of 90 tons per hour. The pounds per hour limitation was calculated using the following equation:

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

$$E = 4.10 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.3 Particulate [326 IAC 6-3]

Pursuant to 326 IAC 6-3, particulate emissions from the soybean cleaners, spirals, gravity tables, packaging, aspirators, and storage bins shall not exceed the pound per hour limit provided in the table below.

Facility	Process Weight (tons/hr)	Particulate Emission Limit (lbs/hr)
Cleaners (2) (per cleaner)	15	25.16
Spirals (8) (per spiral)	3.75	9.94
Gravity Tables (3) (per gravity table)	10	19.18
Packaging	30	40.04
Aspirator	30	40.04
Storage Bins	30	40.04

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

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:

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

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

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

Compliance Determination Requirements

D.1.5 Particulate Control

Pursuant to F159-11180-00010, issued January 25, 2000, and in order to comply with Conditions D.1.1 and D.1.2, the cyclone and baghouse for particulate control shall be in operation and control emissions from the soybean seed processing facilities at all times these facilities are in operation.

Particulate from Storage Bins**Company Name: Monsanto Company****Address: 908 N. Independence Drive, Windfall, IN 46076****Operation Permit No.: 159-15902-00010****Notice Only Change No.: 159-21175****Reviewer: Nathan Bell****Date: May 19, 2005****Particulate Emissions**

Pollutant	Maximum Capacity (tons/hr)	Emission Factor* (lbs/ton)	PTE Before Controls (tons/yr)	Baghouse Control Efficiency	PTE After Controls (tons/yr)
PM	30	0.025	3.29	99%	0.033
PM ₁₀	30	0.0063	0.83	99%	0.008

* Emission factors from AP-42, Table 9.9.1-1 (Storage bin (vent) (SCC 3-02-005-40)). March 2003

Methodology

PTE = Receiving capacity (tons/hr) * PM emission factor (lbs/hr) * 1 ton/2000 lbs * 8760 hr/yr

326 IAC 6-3-2 Compliance Calculations:

Process Weight (tons/hr)	Allowable Emission Rate (lbs/hr)	PTE of PM Before Controls (lb/hr)	PTE of PM After Controls (lb/hr)
30	40.04	0.75	0.008

Methodology

$E = (4.10 * P^{0.67})$ (For process weights equal to or less than 60,000 lbs/hr)

where: E = allowable emission rate in lbs/hr

P = process weight in tons/hr

Particulate (PM) emissions before controls is considerably less than the allowable emissions. PM emissions after controls is negligible. Therefore, the applicant will be in compliance with 326 IAC 6-3.

**Entire Source
Emission Summary**

Company Name: Monsanto Company
Address: 908 N. Independence Drive, Windfall, IN 46076
Operation Permit No.: 159-15902-00010
Notice Only Change No.: 159-21175
Reviewer: Nathan Bell
Date: May 19, 2005

Emissions Before Controls (tons/yr)

		PM	PM10
Existing Processes/Facilities			
	soyabean receiving pit	13.8	3.07
	internal handling	8.02	4.47
	cleaners	98.55	24.64
	gravity tables	98.55	24.64
	spirals	98.55	24.64
	soyabean packaging	1.84	1.84
	aspirator	3.94	3.94
New Processes/Facilities			
	storage bins	3.29	0.83
Total		326.5	88.1

Emissions After Controls (tons/yr)

		PM	PM10
Existing Processes/Facilities			
	soyabean receiving pit	1.38	0.31
	internal handling	0.80	0.45
	cleaners	0.99	0.02
	gravity tables	9.86	0.23
	spirals	0.99	0.02
	soyabean packaging	1.84	1.84
	aspirator	0.04	0.04
New Processes/Facilities			
	storage bins	0.033	0.008
Total		15.9	2.92