

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Thomas W. Easterly Commissioner

Michael R. Pence Governor

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a Signficant Modification to a Part 70 Operating Permit for Louis Dreyfus Agricultural Industries (LDAI), LLC in Kosciusko County

> Significant Source Modification No.: 085-35870-00102 Significant Permit Modification No.: 085-35910-00102

The Indiana Department of Environmental Management (IDEM) has received an application from Louis Dreyfus Agricultural Industries (LDAI), LLC, located at 7344 State Road 15 South, Claypool, IN 46510, for a significant modification of its Part 70 Operating Permit Renewal issued on November 11, 2011. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Louis Dreyfus Agricultural Industries (LDAI), LLC to make certain changes at its existing source. Louis Dreyfus Agricultural Industries (LDAI), LLC to make certain changes at its existing source. Louis Dreyfus Agricultural Industries (LDAI), LLC has applied to add a new Vertical Seed Conditioner (VSC) air heater (VSC Air Heater No. 2, B020500) and cyclone (VSC Cyclone No. 2, B020700) to its soybean processing operations.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

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

Warsaw Community Public Library 315 E. Center Street Warsaw, IN 46580

and

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

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

How can you participate in this process?

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

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



you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SSM 085-35870-00102 and SPM 085-35910-00102 in all correspondence.

Comments should be sent to:

Tamera Wessel IDEM, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251 (800) 451-6027, ask for extension 4-8530 Or dial directly: (317) 234-8530 Fax: (317) 232-6749 attn: Tamera Wessel E-mail: twessel@idem.IN.gov

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

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <u>http://www.in.gov/idem/5881.htm</u>; and the Citizens' Guide to IDEM on the Internet at: <u>http://www.in.gov/idem/6900.htm</u>.

What will happen after IDEM makes a decision?

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

If you have any questions, please contact Tamera Wessel of my staff at the above address.

Jason R. Krawczyk, Section Chief Permits Branch Office of Air Quality

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Michael R. Pence Governor

Thomas W. Easterly Commissioner

DRAFT

Mr. David Selig Louis Dreyfus Agricultural Industries, LLC 7344 State Road 15 South Claypool, IN 46510

Re: 085-35870-00102 Significant Source Modification

Dear Mr. David Selig:

IDEM

Louis Dreyfus Agricultural Industries (LDAI), LLC was issued Part 70 Operating Permit Renewal No. T085-29197-00102 on November 22, 2011 for a stationary refined bleached soybean oil (RB Oil), soybean salad oil, soybean meal, and biodiesel manufacturing plant located at 7344 State Road 15 South, Claypool, IN 46510. An application to modify the source was received on May 27, 2015. Pursuant to the provisions of 326 IAC 2-7-10.5, a Significant Source Modification is hereby approved as described in the attached Technical Support Document.

Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
B020500	VSC Air Heater No. 2 *2015	264	VSC Cyclone No. 2	Stack S-6	Yes under NESHAP GGGG
B020700	VSC Cyclone No. 2 *2015	42,000 cfm		Stack S-6	Yes under NESHAP GGGG

The following construction conditions are applicable to the proposed modification:

General Construction Conditions

- 1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to <u>any</u> 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.

Effective Date of the Permit

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

Commenced Construction

- 4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(j), 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.





DRAFT

Approval to Construct

6. Pursuant to 326 IAC 2-7-10.5(h)(2), this Significant Source Modification authorizes the construction of the new emission unit(s), when the Significant Source Modification has been issued.

Pursuant to 326 IAC 2-7-10.5(m), the emission units constructed under this approval shall <u>not</u> be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

Pursuant to 326 IAC 2-7-12, operation of the new emission unit(s) is not approved until the Significant Permit Modification has been issued. Operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification in accordance with 326 IAC 2-7-10.5(m)(2) and 326 IAC 2-7-12 (Permit Modification).

A copy of the permit is available on the Internet at: <u>http://www.in.gov/ai/appfiles/idem-caats/</u>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <u>http://www.in.gov/idem/5881.htm</u>; and the Citizens' Guide to IDEM on the Internet at: <u>http://www.in.gov/idem/6900.htm</u>.

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 Tamera Wessel of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Tamera Wessel or extension 4-8530 or dial (317) 234-8530.

Sincerely,

Jason R. Krawczyk, Section Chief Permits Branch Office of Air Quality

Attachments: Significant Source Modification and Technical Support Document

cc: File - Kosciusko County Kosciusko County Health Department U.S. EPA, Region V Compliance and Enforcement Branch IDEM Northern Regional Office



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Michael R. Pence Governor



Thomas W. Easterly Commissioner

Significant Source Modification to a Part 70 Source

OFFICE OF AIR QUALITY

Louis Dreyfus Agricultural Industries LLC 7344 State Road 15 South Claypool, Indiana 46510-9746

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

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 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for new and/or existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

Significant Source Modification No.: 085-35870-00102						
Issued by:	Issuance Date:					
Jason R. Krawczyk, Section Chief, Permits Branch Office of Air Quality						





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- Attachment H: 40 CFR Part 63.2830, Subpart GGGG NESHAP: Solvent Extraction for Vegetable Oil Production
- Attachment I: 40 CFR 63.6580, Subpart ZZZZ NESHAP for Stationary Reciprocating Internal Combustion Engines
- Attachment J: 40 CFR 63.7480, Subpart DDDDD NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters
- Attachment K: 40 CFR 60.4230, Subpart JJJJ NSPS for Stationary Spark Ignition Internal Combustion Engines
- Attachment L: 40 CFR Part 60.40c, Subpart Dc, NSPS for Industrial-Commercial-Institutional Steam Generating Units
- Attachment M: 40 CFR Part 60.480a, Subpart VVa, NSPS for Equipment Leaks for VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction or Modification Commenced after November 7, 2006

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 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary refined bleached soybean oil (RB Oil), soybean salad oil, soybean meal, and biodiesel manufacturing plant.

Source Address:	7344 State Road 15 South, Claypool, Indiana 46510-
	9746
General Source Phone Number:	(574) 566-2100
SIC Code:	2075, 2079 & 2869
County Location:	Kosciusko
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program
	Minor Source, under PSD Rules
	Major Source, under Section 112 of the Clean Air Act
	Nested Source with chemical process plant (biodiesel),
	as 1 of 28 Source Categories, within a non-listed source

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

(a)

Unit ID	Description	(tons/hr)	Control	Discharging to Stack	Affected Facility?
A030000	Truck Dump No. 1 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A020000	Truck Dump No. 2 *2006	600	Grain Receiving /Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Truck Dump No. 3 (with doors)	Truck Dump No. 3 *2013	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A030100	Discharge Conveyor No. 1 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A020100	Discharge Conveyor No. 2 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A040000	Bean Receiving Leg No. 1 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A050000	Bean Receiving Leg No. 2 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD

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Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
A010000	Rail Dump and Rail Collection Conveyor *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A010100	Rail Scale Discharge Conveyor *2006	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A150100	Cross Bin No 1 thru 3 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A120100	Cross Bin No 4 thru 6 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A151000	Discharge Bin No 1 thru 3 *2006	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A121000	Discharge Bin No 4 thru 6 *2006	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A153000	Day Bin Leg *2006	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
AF-2 A200000	Grain Receiving/Meal Loadout Baghouse *2006, **2010	38,000 acfm @ 0.005 grain/acf outlet gr loading		Stack AF-2	Yes under NSPS DD
A152000	West Bin Cross Conveyor 1-3 *2006, **2010 and 2011	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A122000	East Bin Cross Conveyor 4-6 *2006, **2010	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A130100	West Bin Feed Conveyor *2006, **2010	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A100100	East Bin Feed Conveyor *2006, **2010	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
G020500	Meal Storage Feed Conveyor *2006, **2010, **2011, ** 2015	200	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G070300	Truck Meal Loadout Feed Conveyor *2006, **2010, ** 2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G290000	Truck Collection Conveyor *2010, ** 2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G280000	Truck Loader No.1 *2010, ** 2015	330	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG

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Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
G270000	Truck Loader No.2 *2010, ** 2015	330	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G080000	Truck Pelleted Hull Loadout Bin *2006, **2010, ** 2015	148	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G070000	Truck Meal Loadout Bin *2006, **2010, 2012, ** 2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G180000	Rail Pelleted Hull Loadout Bin *2010, ** 2015	148	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G130000	Rail Meal Loadout Bin *2006, **2010, 2012, **2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G160000	Pellet Hulls Conveyor to Loadout *2006, **2010, 2012, ** 2015	17.0	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G170000	Rail Car Collection Conveyor *2006, **2010, ** 2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G220000	Rail Car Loadout *2010, ** 2015	330	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G010100	Meal Reclaim Conveyor *2006, **2010, ** 2015	200	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G010200	Meal Reclaim Leg *2010, ** 2015	200	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
AF-1	Meal Loadout Baghouse *2015	22,125 cfm @ 0.005 grain/acf outlet gr loading		Stack AF-1	
Rail Receiving Leg	Rail Receiving Leg *2013	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Truck Dump No. 3 Receiving Conveyor	Truck Dump No. 3 Receiving Conveyor *2013	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Truck Dump No. 3 Receiving Leg	Truck Dump No. 3 Receiving Leg *2013	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Scalperator Leg	Scalperator Leg *2013	210	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Scalperator Feed Conveyor	Scalperator Feed Conveyor *2013	210	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Scalperator Jack Leg	Scalperator Jack Leg *2013	210	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD

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Unit ID	Description	Capacity	Control	Discharging	Affected Facility?
		(tons/hr)	Grain	to Stack	
Scalperator	Scalperator *2013	210	Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
		1		1	1
A060000	Screener *2006, **2011 and 2012	264	Prep Exhaust Baghouse	Stack AF-3	Yes under NESHAP GGGG
A160300	VSC Leg Feed Conveyor *2006, **2010 and 2012	264	Prep Exhaust Baghouse	Stack AF-3	Yes under NESHAP GGGG
A170000	Screenings Tank *2006	5	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
A170300	Screenings Recycle Leg *2006	5	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B011300	Bean Weigh Scale *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B310000	Screenings Weight Belt *2006	5	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
AF-7	Pod rinder/Screener Baghouse *2011	5,000 acfm		Stack AF-7	Yes under NESHAP GGGG
B310200	Pod rinder/Destoner *2006, **2010	5	Pod Grinder/ Screener Baghouse	Stack AF-7	Yes under NESHAP GGGG
B011200	VSC Feed Leg *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
A060400	Screener Feed Conveyor *2010, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B010100	Whole Bean Aspirator No 1 *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B020100	Whole Bean Aspirator No 2 *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B010900	Whole Bean Aspirator Cyclone *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B030800	Conditioned Bean Feed Conveyor *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B030900	Hull Collection Conveyor *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E130000	Hull Screener No.1 *2006	9.6	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E150000	Hull Screener No.2 *2006	9.6	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B440000	Secondary Hull Collection L-Path *2010, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B430000	Secondary Hull Collection Conveyor *2010, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E070300	4 Hour Hull Tank *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E080000	Pellet Cooler *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E090000	Pellet Cooler Cyclone *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG

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Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
E050200	Hull Hammer Mill Feeder *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E050000	Hull Hammer Mill *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E050100	Hull Hammer Mill Plenum *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
G050100	Pelleted Hulls Leg *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
G050300	Pelleted Hulls Storage Conveyor *2006, **2010, 2012, **2015	17.0	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
E050400	Hulls Addition Screw *2011, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B010300	Conditioner Bean Loop Path *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
AF-3 G100000	Prep exhaust baghouse *2006	28,900 acfm @ 0.005 grain/acf outlet grain loading		Stack AF-3	Yes under NESHAP GGGG
	Bean Storage Bins #2, #3, #6, and #7 *2006	600 tons/hr and each Bin has a maximum storage capacity of 500,000 bushels	None	None	Yes under NSPS DD
	Bean Storage Bins #4 and #8 *2013	600 tons/hr and each Bin has a maximum storage capacity of 500,000 bushels	None	None	Yes under NSPS DD
	Bean Storage Silos #1 and #5 *2008	600 tons/hr and each Bin has a maximum storage capacity of 500,000 bushels	None	None	Yes under NSPS DD

Note *Approved in the year indicated above for construction. Note **Approved in the year indicated above for modification.

(b)

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
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Piles #1 and #2 *2008	Two (2) covered seasonal grain storage piles	each with a maximum storage capacity of 1,000,000 bushels of sovbeans	None	None	Yes under NSPS DD
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Note *Approved in the year indicated above for construction.

(c)

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
C200100	Flaker Feed Loop Conveyor *2010, **2012	247	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C010600	Flake Collection Conveyor (12 flakers) *2006, **2010 and 2012	247	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C010000	Flaking Roll No. 1 *2013	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C020000	Flaking Roll No. 2 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C030000	Flaking Roll No. 3 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C040000	Flaking Roll No. 4 *2012	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C050000	Flaking Roll No. 5 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C060000	Flaking Roll No. 6 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C070000	Flaking Roll No. 7 *2012	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C080000	Flaking Roll No. 8 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C090000	Flaking Roll No. 9 *2006	22.9	Flaker aspiration	Stack AF-4	Yes under NESHAP GGGG
C100000	Flaking Roll No. 10 *2013	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C0110000	Flaking Roll No. 11 *2009	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C0120000	Flaking Roll No. 12 *2009	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
AF-4 C110000	Flaker aspiration baghouse *2006	24,000 acfm @ 0.005 grain/acf outlet grain loading		Stack AF-4	Yes under NESHAP GGGG
	Hulloosenator No. 1		Hot debulling		Yes under
B040000	*2006, **2012	66.0	baghouse	Stack AF-5	NESHAP GGGG
B080100	Hulloosenator No. 2 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B130000	Hulloosenator No. 3 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B170000	Hulloosenator No. 4 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B050000	Cascade Dryer No. 1 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B090000	Cascade Dryer No. 2 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B140000	Cascade Dryer No. 3 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG

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Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
B180000	Cascade Dryer No. 4 *2006. **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B210000	CCD Cyclone *2006_**2010	42,000 cfm	Hot dehulling	Stack AF-5	Yes under
B060000	Cracking Roll No.1	66.0	Hot dehulling	Stack AF-5	Yes under
B100000	Cracking Roll No.2 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B150000	Cracking Roll No.3 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B190000	Cracking Roll No.4 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B070000	Cascade Conditioner No. 1 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B110000	Cascade Conditioner No. 2 *2006 **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B160000	Cascade Conditioner No. 3 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B200000	Cascade Conditioner No. 4 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B230000	CCC Cyclone *2006, **2010	42,000 cfm	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
E130100	Secondary Aspirator No 1 *2006, **2010	9.6	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
E150100	Secondary Aspirator No 2 *2006, **2010	9.6	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
E160000	Secondary Aspirator Cyclone *2006, **2010	9.6	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
A160100	Feed Day Tank Conveyor *2006	600	Hot dehulling baghouse	Stack AF-5	Yes under NSPS DD
A160000 (Day Tank) A160500 (Aspirator) B420000 (Cyclone)	Day Tank (with Aspirator and cyclone) *2006, **2010 , **2012, and **2014	264	Hot dehulling baghouse	Stack AF-5	Yes under NSPS DD
AF-5 B260000	Hot dehulling baghouse *2006	43,000 acfm @ 0.005 grain/acf outlet grain loading		Stack AF-5	Yes under NESHAP GGGG
	Grinding Discharge		Mool Crindian		Vanunder
E020300	Conveyor *2011, **2012	198	Baghouse	Stack AF-6	NESHAP GGGG
E020400	Hammer Mill Mixing Conveyor *2006, **2011 and 2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E010100	Meal L-Path Conveyor *2006, **2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E010300	Meal Hammer Mill Feed Conveyor *2006, **2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG

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Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
E020200	Meal Hammer Mill Feeder No. 1 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E030200	Meal Hammer Mill Feeder No. 2 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E040200	Meal Hammer Mill Feeder No. 3 (switch) *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E020000	Meal Hammer Mill No. 1 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E030000	Meal Hammer Mill No. 2 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E040000	Meal Hammer Mill No. 3 (switch) *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E020100	Meal Hammer Mill Bin No. 1 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E030100	Meal Hammer Mill Bin No. 2 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E040100	Meal Hammer Mill Bin No. 3 (switch) *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E230200	Meal Hammer Mill Feeder No. 5 *2012	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E230000	Meal Hammer Mill No. 5 *2012	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E230100	Meal Hammer Mill Bin No. 5 *2012	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
G010300	Meal Leg *2006, **2010 and 2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
G150000	Meal Conveyor to Loadout *2006, **2012, ** 2015	198	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
AF-6 E110000	Mill Grinding Baghouse *2006	18,000 acfm @ 0.005 grain/acf outlet grain loading		Stack AF-6	Yes under NESHAP GGGG
B010000	VSC No. 1	132	VSC Cyclone No. 1	Stack S-1	Yes under
B020000	*2006, **2012 VSC No. 2	132	VSC Cyclone No. 2	Stack S-6	NESHAP GGGG Yes under
B010500	VSC Air Heater No. 1	264	VSC Cyclone No. 1	Stack S-1	Yes under
B020500	VSC Air Heater No. 2	264	VSC Cyclone No. 2	Stack S-6	Yes under
B010700	VSC Cyclone No. 1 *2006. **2010	42,000 cfm		Stack S-1	Yes under NESHAP GGGG
B020700	VSC Cyclone No. 2 *2015	42,000 cfm		Stack S-6	Yes under NESHAP GGGG
B120000	Jet Dryer No. 1 *2006, **2010 and 2012	132	Jet Dryer Baghouse AF-8	Stack S-1	Yes under NESHAP GGGG
B030000	Jet Dryer No. 2 *2006, **2012	132	Jet Dryer Baghouse AF-9	Stack S-1	Yes under NESHAP GGGG

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
B120100A	Jet Dryer Baghouse AF- 8	74,000 acfm		Stack S-1	Yes under NESHAP GGGG
B120100B	Jet Dryer Baghouse AF- 9	74,000 acfm		Stack S-1	Yes under NESHAP GGGG

Note *Approved in the year indicated above for construction. Note **Approved in the year indicated above for modification. Note ***The Flaker aspiration baghouse has been determined to be integral to the process for this unit.

(d)

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
D010000	Soybean oil extractor *2006, **2010 and 2012	264	Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
	One (1) set of evaporators *2006		Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
D020000	One (1) Desolventizer/toaster *2006, **2010		Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
	One (1) set of water separators *2006		Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
D060000	Main Vent Condenser *2006		Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
	Five (5) hexane storage tank *2006 for original tank, and 2010 for other tanks **2010 for original tank	20,690 gallons each	Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
1220000	One (1) soybean oil pre- treat Tank *2010	35,170 gallons			Yes under NESHAP GGGG
	Three (3) soybean oil storage tank (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) *2006 for original tank and 2010 for other tanks, **2010 for original tank	725,000 gallons each			Yes under NESHAP GGGG
D070000	Mineral oil absorber *2006			Stack S-4	Yes under NESHAP GGGG
D310000-1	DC Deck No. 1 *2006, **2010 and 2012	208	DC Deck Cyclone No. 1	Stack S-2	Yes under NESHAP GGGG
D310000-2	DC Deck No. 2 *2006, **2010, 2011, and 2012	208	DC Deck Cyclone No. 2	Stack S-2	Yes under NESHAP GGGG
D310000-3	DC Deck No. 3 *2006, **2010 and 2012	208	DC Deck Cyclone No. 3	Stack S-2	Yes under NESHAP GGGG
D310000-4	DC Deck No. 4 *2006, **2010 and 2012	208	DC Deck Cyclone No. 4	Stack S-2	Yes under NESHAP GGGG
D310700	DC Deck Cyclone No. 1 *2006, **2010 and 2011	18,000 scfm		Stack S-2	Yes under NESHAP GGGG
D310800	DC Deck Cyclone No. 2 *2006, **2010 and 2011	18,000 scfm		Stack S-2	Yes under NESHAP GGGG
D310900	DC Deck Cyclone No. 3 *2010, ** 2011	18,000 scfm		Stack S-2	Yes under NESHAP GGGG

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Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
D311000	DC Deck Cyclone No. 4 *2010, **2011	18,000 scfm		Stack S-2	Yes under NESHAP GGGG

Note *Approved in the year indicated above for construction. Note **Approved in the year indicated above for modification.

(e)

Unit ID	Description	Capacity (tons/br)	Control	Discharging to Stack	Affected Facility?
CL-5045	1st Primary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
CL-5046	1st Secondary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
CL-5063	2nd Primary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
CL-5064	2nd Secondary Transester Column *2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
R-8171	Esterification Reactor *2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
VU010000	Vacuum group package *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS VV, and NESHAP FFFF
	Biodiesel Mineral Oil Absorber *2010			Stack S-5	Yes under NSPS VV, and NESHAP FFFF
	Biodiesel Water Absorber *2006, **2007	0.448 gpm		Stack S-5	Yes under NSPS VV, and NESHAP FFFF
Biodiesel Distillation	Biodiesel Distillation *2013	15	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VVa, NSPS NNN, & NESHAP FFFF
1040000	Biodiesel Storage Tank #4 *2006, **2007	725,000 gals			Yes under NSPS VV, and NESHAP FFFF
1050000	Biodiesel Storage Tank #5 *2006, **2007	725,000 gals			Yes under NSPS VV, and NESHAP FFFF
1060000	Biodiesel Storage Tank #6 *2009	325,000			Yes under NSPS VV, and NESHAP FFFF
1070000	Biodiesel Storage Tank #7 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1080000	Biodiesel Storage Tank #8 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF

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Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
1090000	Biodiesel Storage Tank #9 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1100000	Biodiesel Storage Tank #10 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
l110000	Biodiesel Storage Tank #11 *2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1140000	Biodiesel Storage Tank #0 *2009	735,000			Yes under NSPS VV, and NESHAP FFFF
1120000	Glycerin Tank #12 *2006, **2010	360,000 gals			Yes under NSPS VV, and NESHAP FFFF
1130000	Glycerin Tank #13 *2006, **2010	360,000 gals			Yes under NSPS VV, and NESHAP FFFF
1250000	Methanol Storage Tank #1 *2006, **2007 and **2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1260000	Methanol Storage Tank #2 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1270000	Methanol Storage Tank #3 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1280000	Methanol Storage Tank #4 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1290000	Methanol Storage Tank #5 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1300000	Methanol Storage Tank #6 *2007	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1230000	Sodium Methylate (catalyst) Storage Tank #1 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1240000	Sodium Methylate (catalyst) Storage Tank #2 *2007, **2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
Rail Rack	Loading Rack (Rail) *2006, **2007, **2010 and **2011	500 gallons per minute			Yes under NSPS VV, and NESHAP FFFF
Truck Rack #1	Loading Rack (Truck) *2006, **2007, **2010 and **2011	430 gallons per minute			Yes under NSPS VV, and NESHAP FFFF
Truck Rack #2	Loading Rack (Truck) *2011	430 gallons per minute			Yes under NSPS VV, and NESHAP FFFF

Note *Approved in the year indicated above for construction. Note **Approved in the year indicated above for modification.

(f)

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
B-1	Main Boiler, natural gas fired and #2 fuel oil as back up fuel *2006	220 MMBtu/hr	Low NOx burner and Flue gas recirculation	Stack S-3	Yes under NSPS Db and NESHAP DDDDD

B-S	Temporary Mobile Boiler, Firing Natural Gas, *2013	40 MMBtu/hr	None	Stack S-MB	-

Note *Approved in the year indicated above for construction.

(g)

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
G010000	Meal Bin No. 1*** *2006, **2010, 2011, and 2012	198	Meal Bin Filter No.1	Stack MBF-1	Yes under NESHAP GGGG
G020000	Meal Bin No. 2*** *2006, **2010, 2011, and 2012	198	Meal Bin Filter No.2	Stack MBF-2	Yes under NESHAP GGGG
G030000	Meal Bin No. 3*** *2006, **2010, 2011, and 2012	198	Meal Bin Filter No.3	Stack MBF-3	Yes under NESHAP GGGG
G040000	Meal Bin No. 4*** *2006, **2010, 2011, and 2012	198	Meal Bin Filter No.4	Stack MBF-4	Yes under NESHAP GGGG
G050000	Meal Bin No. 5*** *2010, **2011, 2012, and 2012	198	Meal Bin Filter No.5	Stack MBF-5	Yes under NESHAP GGGG

Note *Approved in the year indicated above for construction.

Note **Approved in the year indicated above for modification.

Note ***There are five meal bins. However, the plant is only physically capable of loading one meal bin at a time. Thus, the PTE for these units is calculated at a rate of 198 tons/hr for all five meal bins combined.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

Description	Capacity	Control	Affected Facility?
Kaolin Receiving Tank [326 IAC 2-2][326 IAC 6-3-2] *2006, **2010	10,800 and 40 tons per hour	Bin Filter	
Hull Overflow Tank [326 IAC 2-2][326 IAC 6-3-2] *2006, **2010 and 2012	13,900 cu. ft and 17 tons per hour	None	
diesel/#2 fuel oil storage tank [326 IAC 2-2] *2006, **2011	44,839 gallons	None	
Cooling tower with a maximum drift rate of 0.005% *2006	11,000 gpm	None	
Three (3) Emergency Diesel Fire Pumps [326 IAC 2-2] *2006	575 BHP each	None	Yes under NSPS IIII and NESHAP ZZZZ
One (1) natural gas-fired emergency generator *2013	3.413 MMBtu per hour (>500 HP)	None	Yes under NSPS JJJJ and NESHAP ZZZZ
Two (2) natural gas-fired space heaters *2013	0.25 MMBtu per hour, each	None	
Diatomaceous Earth (DE) Storage Bin [326 IAC 6-3-2] *2009, **2011	767 tons per year	Filter	

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			Vec Under
Hot Oil Heater	6 MMBtu/br	None	
*2013		None	
Glycerin Boiler *2013	10 MMBtu/hr	None	Yes, Under NSPS Dc & NESHAP DDDDD
Natural Gas-Fired Glycerin Steam Boiler	1.0 MMBtu/hr	None	Yes, Under NESHAP DDDDD
Glycerin Refinery *2013, **2014	7.0 tons per hour	None	Yes, Under NSPS VVa, NSPS NNN, and NESHAP FFFF
Glycerin Truck/ Rail Loadout	7.0 tons per hour	None	Yes, Under NSPS VVa and NESHAP FFFF
Glycerin Yellow Tank	8,000 gallons	None	Yes, Under NSPS VVa and NESHAP FFFF
Glycerin Yellow Tank 1	50,000 gallons	None	Yes, Under NSPS VVa and NESHAP FFFF
Glycerin Yellow Tank 2	50,000 gallons	None	Yes, Under NSPS VVa and NESHAP FFFF
Glycerin Yellow Tank 3	50,000 gallons	None	Yes, Under NSPS VVa and NESHAP FFFF
Glycerin Yellow Tank 4	50,000 gallons	None	Yes, Under NSPS VVa and NESHAP FFFF
Enzyme Degumming Reactor 1 (EDG Reactor 1)	29,000 gallons	None	No
Enzyme Degumming Reactor 2 (EDG Reactor 2)	29,000 gallons	None	No
Enzyme Degumming Reactor 3 (EDG Reactor 3)	29,000 gallons	None	No

Note *Approved in the year indicated above for construction. Note **Approved in the year indicated above for modification.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).



SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

- B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]
 - (a) This permit, T085-29197-00102, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
 - (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.
- B.4 Enforceability [326 IAC 2-7-7][IC 13-17-12]

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

B.5 Severability [326 IAC 2-7-5(5)]

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.6Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]This permit does not convey any property rights of any sort or any exclusive privilege.
- B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
 - (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
 - (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.
- B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
 - (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
 - it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), 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) A "responsible official" is defined at 326 IAC 2-7-1(35).
- B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
 - (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

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (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 2-7-5(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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

- (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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (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.11 Emergency Provisions [326 IAC 2-7-16]

- (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.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, or Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)

Facsimile Number: 317-233-6865

Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877.

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

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

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

The notice fulfills the requirement of 326 IAC 2-7-5(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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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 2-7-4(c)(8) 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 2-7 and any other applicable rules.
- (g) 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.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

- (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
- (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
- (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]
- B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]
 - (a) All terms and conditions of permits established prior to T085-29197-00102 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
 - (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.
- B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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 2-7-3 and 326 IAC 2-7-4(a).

- B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]
 - (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
 - (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 2-7-9(a)(3)]

- (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 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(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 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(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 2-7-4. 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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 2-7 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 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]
 - (a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
 - (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.
- B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]
 - (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (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 preconstruction approval required by 326 IAC 2-7-10.5 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 2-7-20(b) or (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 2-7-20(b)(1) and (c)(1).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(37)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (c) Emission Trades [326 IAC 2-7-20(c)] The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)] The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.
- B.20
 Source Modification Requirement [326 IAC 2-7-10.5]

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

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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:

- Enter upon the Permittee's premises where a Part 70 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 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 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 substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- B.23 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-7-5(7)][326 IAC 2-1.1-7]
 - (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
 - (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
 - (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.
- B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][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 2-7-5(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 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.3 Open Burning [326 IAC 4-1][IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]

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

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

- C.7 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]
 - (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

- C.8 Performance Testing [326 IAC 3-6]
 - (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:
Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

- C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]
 - (a) 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

(b) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(c) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.11 Instrument Specifications [326 IAC 2-1.1-11][326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

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

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

- C.12 Emergency Reduction Plans [326 IAC 1-5-2][326 IAC 1-5-3] 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 2-7-5(11)][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 [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5][326 IAC 2-7-6]
 - (I) 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.

(II)

- (a) CAM Response to excursions or exceedances.
 - (1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - (2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
- (b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the

frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

- (c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.
- (d) Elements of a QIP: The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).
- (e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
- (f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:
 - (1) Failed to address the cause of the control device performance problems; or
 - (2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.
- (h) CAM recordkeeping requirements.
 - (1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.
 - (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements
- C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]
 - (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.

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- (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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

- C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6] In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue MC 61-50 IGCN 1003 Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, where applicable:
 - (AA) All calibration and maintenance records.
 - (BB) All original strip chart recordings for continuous monitoring instrumentation.
 - (CC) Copies of all reports required by the Part 70 permit.

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

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

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

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

- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
- C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11][40 CFR 64][326 IAC 3-8]
 - (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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

- (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

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

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



SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a)

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
A030000	Truck Dump No. 1 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A020000	Truck Dump No. 2 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Truck Dump No. 3 (with doors)	Truck Dump No. 3 *2013	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A030100	Discharge Conveyor No. 1 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A020100	Discharge Conveyor No. 2 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A040000	Bean Receiving Leg No. 1 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A050000	Bean Receiving Leg No. 2 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A010000	Rail Dump and Rail Collection Conveyor *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A010100	Rail Scale Discharge Conveyor *2006	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A150100	Cross Bin No 1 thru 3 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A120100	Cross Bin No 4 thru 6 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A151000	Discharge Bin No 1 thru 3 *2006	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A121000	Discharge Bin No 4 thru 6 *2006	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD

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A153000	Day Bin Leg *2006	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
AF-2 A200000	Grain Receiving/Meal Loadout Baghouse *2006, **2010	38,000 acfm @ 0.005 grain/acf outlet gr loading		Stack AF-2	Yes under NSPS DD
A152000	West Bin Cross Conveyor 1-3 *2006, **2010 and 2011	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A122000	East Bin Cross Conveyor 4-6 *2006, **2010	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A130100	West Bin Feed Conveyor *2006, **2010	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A100100	East Bin Feed Conveyor *2006, **2010	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
G020500	Meal Storage Feed Conveyor *2006, **2010, **2011, ** 2015	200	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G070300	Truck Meal Loadout Feed Conveyor *2006, **2010, ** 2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G290000	Truck Collection Conveyor *2010, ** 2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G280000	Truck Loader No.1 *2010, ** 2015	330	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G270000	Truck Loader No.2 *2010, ** 2015	330	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G080000	Truck Pelleted Hull Loadout Bin *2006, **2010, ** 2015	148	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G070000	Truck Meal Loadout Bin *2006, **2010, 2012, ** 2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G180000	Rail Pelleted Hull Loadout Bin *2010, ** 2015	148	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G130000	Rail Meal Loadout Bin *2006, **2010, 2012, **2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG

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G160000	Pellet Hulls Conveyor to Loadout *2006, **2010, 2012, ** 2015	17.0	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G170000	Rail Car Collection Conveyor *2006, **2010, ** 2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G220000	Rail Car Loadout *2010, ** 2015	330	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G010100	Meal Reclaim Conveyor *2006, **2010, ** 2015	200	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
G010200	Meal Reclaim Leg *2010, ** 2015	200	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
AF-1	Meal Loadout Baghouse *2015	22,125 cfm @ 0.005 grain/acf outlet gr loading		Stack AF-1	
Rail Receiving Leg	Rail Receiving Leg *2013	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Truck Dump No. 3 Receiving Conveyor	Truck Dump No. 3 Receiving Conveyor *2013	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Truck Dump No. 3 Receiving Leg	Truck Dump No. 3 Receiving Leg *2013	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Scalperator Leg	Scalperator Leg *2013	210	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Scalperator Feed Conveyor	Scalperator Feed Conveyor *2013	210	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Scalperator Jack Leg	Scalperator Jack Leg *2013	210	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Scalperator	Scalperator *2013	210	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A060000	Screener *2006, **2011 and 2012	264	Prep Exhaust Baghouse	Stack AF-3	Yes under NESHAP GGGG
A160300	VSC Leg Feed Conveyor *2006, **2010 and 2012	264	Prep Exhaust Baghouse	Stack AF-3	Yes under NESHAP GGGG

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A170000	Screenings Tank *2006	5	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
A170300	Screenings Recycle Leg *2006	5	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B011300	Bean Weigh Scale *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B310000	Screenings Weight Belt *2006	5	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
AF-7	Pod Grinder/Screener Baghouse *2011	5,000 acfm		Stack AF-7	Yes under NESHAP GGGG
B310200	Pod Grinder/Destoner *2006, **2010	5	Pod Grinder/ Screener Baghouse	Stack AF-7	Yes under NESHAP GGGG
B011200	VSC Feed Leg *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
A060400	Screener Feed Conveyor *2010, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B010100	Whole Bean Aspirator No 1 *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B020100	Whole Bean Aspirator No 2 *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B010900	Whole Bean Aspirator Cyclone *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B030800	Conditioned Bean Feed Conveyor *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B030900	Hull Collection Conveyor *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E130000	Hull Screener No.1 *2006	9.6	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E150000	Hull Screener No.2 *2006	9.6	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B440000	Secondary Hull Collection L-Path *2010, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B430000	Secondary Hull Collection Conveyor *2010, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E070300	4 Hour Hull Tank *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E080000	Pellet Cooler *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG

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E090000	Pellet Cooler Cyclone *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E050200	Hull Hammer Mill Feeder *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E050000	Hull Hammer Mill *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E050100	Hull Hammer Mill Plenum *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
G050100	Pelleted Hulls Leg *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
G050300	Pelleted Hulls Storage Conveyor *2006, **2010, 2012, **2015	17.0	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
E050400	Hulls Addition Screw *2011, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B010300	Conditioner Bean Loop Path *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
AF-3 G100000	Prep exhaust baghouse *2006	28,900 acfm @ 0.005 grain/acf outlet grain loading		Stack AF-3	Yes under NESHAP GGGG
	Bean Storage Bins #2, #3, #6, and #7 *2006	600 tons/hr and each Bin has a maximum storage capacity of 500,000 bushels	None	None	Yes under NSPS DD
	Bean Storage Bins #4 and #8 *2013	600 tons/hr and each Bin has a maximum storage capacity of 500,000 bushels	None	None	Yes under NSPS DD
	Bean Storage Silos #1 and #5 *2008	600 tons/hr and each Bin has a maximum storage capacity of 500,000 bushels	None	None	Yes under NSPS DD

(b)

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Unit ID	Description	Capacity (tons/hr)		Control	Discharging to Stack	Affected Facility?
Piles #1 and #2 *2008	Two (2) covered seasonal grain storage piles	each with a maximum storage capacity of 1,000,000 bushels of soybeans		None	None	Yes under NSPS DD
Note *Approved in the year indicated above for construction. (c)						
G150000	Meal Conveyor to Loadout *2006, **2012, ** 20	198	Meal L Baghc	oadout use AF-1	Stack AF-1	Yes under NESHAP GGGG
(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 2-7-5(1)]

D.1.1 PSD Minor Limit for Particulate [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following PM, PM_{10} , and $PM_{2.5}$ limits:

- (a) The amount of soybeans processed shall be less than 2,251,836 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The PM, PM₁₀, and PM_{2.5} emissions from the following Processes shall be less than the emission limits listed in the table below:

Process	Control	PM Limit (Ibs/hour)	PM ₁₀ Limit (Ibs/hour)	PM _{2.5} Limit (Ibs/hour)
Meal Loadout	Baghouse AF-1	0.95	0.95	0.95
Grain Receiving/Meal Loadout	Baghouse AF-2	1.64	1.64	1.64
Prep Area	Baghouse AF-3	1.26	1.26	1.26

(c) The PM, PM₁₀, and PM_{2.5} emissions from the following Process shall be less than the emission limits listed in the table below:

Process	Control	PM Limit (lbs/hour)	PM ₁₀ Limit (Ibs/hour)	PM _{2.5} Limit (Ibs/hour)
Pod Grinder/Destoner	Pod Grinder/ Screener Baghouse AF-7	1.5	1.5	1.5

Compliance with the soybean usage limit in Condition D.1.1(a) in combination with the PM, PM_{10} , and $PM_{2.5}$ emission limits in Conditions D.1.1(b), D.1.1(c), D.2.1, D.3.1, D.5.1, D.6.1 and D.7.1 and with the potential to emit PM, PM_{10} , and $PM_{2.5}$ from all other emission units at the source, shall limit the PM, PM_{10} , and $PM_{2.5}$ emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 Particulate Emissions Limitations [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the following processes shall not exceed the pound per hour limitations specified in the following table:

Emission unit ID	Emissions Units	¹ Baghouse ID	Maximum Process Weight (tons/hour) for each unit	326 IAC 6-3 Limit (lbs/hr) for each unit
G160000	Pellet Hulls Conveyor to Loadout	AF-1	17.0	27.36
B030900	Hull Collection Conveyor	AF-3	17.0	27.36
E130000 and E150000	Hull Screener No. 1 and No. 2	AF-3	9.6	18.66
B430000	Secondary Hull Collection Conveyor	AF-3	17.0	27.36
B440000	Secondary Hull Collection L-Path	AF-3	17.0	27.36
E080000	Pellet Cooler	AF-3	17.0	27.36
E050000, E050200, and E050100	Hull Hammer Mill, Hull Hammer Mill Feeder, and Hull Hammer Mill Plenum	AF-3	17.0	27.36
G050100	Pelleted Hulls Leg	AF-3	17.0	27.36
G050300	Pelleted Hulls Storage Conveyor	AF-1	17.0	27.36
E050400	Hulls Addition Screw	AF-3	17.0	27.36
B310200	Pod Grinder/Destoner	AF-7	5.0	12.05

Note 1: For emission units that exhaust through the same stack, the source will need to demonstrate compliance with 326 IAC 6-3-2 during normal operations using the most stringent limit (e.g. calculated from the emission unit operating at the lowest process weight in ton/hr).

The particulate emissions limitations from the above table shall be 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:

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

(b) Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the following processes shall not exceed the pound per hour limitations specified in the following table:

Emission unit ID	Emissions Units	¹ Baghouse ID	Maximum Process Weight (tons/hour) for each unit	326 IAC 6-3 Limit (lbs/hr) for each unit
A030000 and A020000	Truck Dumps No. 1 and No. 2	AF-2	600	71.16
Truck Dump No. 3	Truck Dump No. 3	AF-2	360	65.09

Emission unit ID	Emissions Units	¹ Baghouse ID	Maximum Process Weight (tons/hour) for each unit	326 IAC 6-3 Limit (lbs/hr) for each unit
A030100, A020100, A040000, A050000, A130100, and A100100	Discharge Conveyors No. 1 and No. 2, Bean Receiving Legs No. 1 and No. 2, and East and West Bin Feed Conveyors	AF-2	600	71.16
A010000	Rail Dump and Rail Collection Conveyor	AF-2	600	71.16
A150100 and A120100	Cross Bins No 1 thru 6	AF-2	600	71.16
A153000, A010100, A151000, A121000, A152000, and A122000	Day Bin Leg, Rail Scale Discharge Conveyor, Discharge Bin No 1 thru 6, West Bin Cross Conveyor 1-3, and East Bin Cross Conveyor 4-6	AF-2	360.0	65.09
G280000 and G270000	Truck Loader No.1 and No. 2	AF-1	330	64.09
G220000	Rail Car Loadout (Pellets/Hulls)	AF-1	330	64.09
G130000 and G070000	Rail Meal Loadout Bin and Truck Meal Loadout Bin	AF-1	300	63.00
G150000	Meal Conveyor to Loadout	AF-1	198	58.40
G020500	Meal Storage Feed Conveyor	AF-2	200	58.51
G070300, G170000 and G290000	Truck Meal Loadout Feed Conveyor, Rail Car Collection Conveyor and Truck Collection Conveyor	AF-1	300	63.00
G010100 and G010200	Meal Reclaim Conveyor and Meal Reclaim Leg	AF-1	200	58.51
Piles #1 and #2	Two (2) covered seasonal grain storage piles, identified as Piles #1 and #2	N/A	360	65.09
A060000	Screener	AF-3	264	61.56
B011300	Bean Weigh Scale	AF-3	264	61.56
B011200, A160300, B060400 and B030800	VSC Feed Leg, VSC Leg Feed Conveyor, Screener Feed Conveyor and Conditioned Bean Feed Conveyor	AF-3	264	61.56
B010100 and B020100	Whole Bean Aspiration No. 1 and No. 2	AF-3	264	61.56
B010300	Conditioner Bean Loop Path	AF-3	264	61.56
	Bean Storage Bins #2, #3, #4, #6, #7, and #8	N/A	600	71.16

Emission unit ID	Emissions Units	¹ Baghouse ID	Maximum Process Weight (tons/hour) for each unit	326 IAC 6-3 Limit (lbs/hr) for each unit
	Bean Storage Silos #1 and #5	N/A	600	71.16
Rail Receiving Leg, Truck Dump No. 3 Receiving Conveyor & Truck Dump No. 3 Receiving Leg	Rail Receiving Leg, Truck Dump No. 3 Receiving Conveyor & Truck Dump No. 3 Receiving Leg	AF-2	360	65.09
Scalperator Leg, Scalperator Feed Conveyor, Scalperator Jack Leg, Scalperator	Scalperator Leg, Scalperator Feed Conveyor, Scalperator Jack Leg, Scalperator	AF-2	210	59.03

Note 1: For emission units that exhaust through the same stack, the source will need to demonstrate compliance with 326 IAC 6-3-2 during normal operations using the most stringent limit (e.g. calculated from the emission unit operating at the lowest process weight in ton/hr).

The particulate emissions limitations from the above table shall be calculated using the following equation:

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

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

(c) Pursuant to 326 IAC 6-3-2(e)(3), when the process weight exceeds 200 tons per hour, the maximum allowable emissions may exceed the emission limits shown paragraph (a), provided the concentration of particulate matter in the gas discharged to the atmosphere is less than 0.10 pounds per 1,000 pounds of gases.

D.1.3 Significant Source Modification Avoidance Limit [326 IAC 2-7-10.5(f)]

Pursuant to Minor Source Modification (MSM) No. 085-24676-00102, issued on April 28, 2008, in order to render the requirements of 326 IAC 2-7-10.5(f) not applicable, the Permittee shall comply with the following PM, PM_{10} , and $PM_{2.5}$ limits:

- (a) The emissions for PM shall not exceed 0.061 pound/Ton of material for the two (2) Storage Bean Piles #1 and #2;
- (b) The emissions for PM_{10} shall not exceed 0.034 pound/Ton of material for the two (2) Storage Bean Piles #1 and #2;
- (c) The emissions for PM_{2.5} shall not exceed 0.0058 pound/Ton of material for the two (2) Storage Bean Piles #1 and #2; and
- (d) The soybean throughput to the two (2) Storage Bean Piles #1 and #2 shall be less than 8,000,000 bushels per twelve (12) consecutive month period with compliance determined at the end of each month.

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

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

D15	Particulate	Control
D.1.0	Falliculate	CONTINUE

- (a) In order to comply with Conditions D.1.1(b) and D.1.1(c), baghouses AF-1, AF-2, AF-3, and AF-7 shall be in operation and control emissions from all emission units exhausting to stacks AF-1, AF-2, AF-3, and AF-7 at all times when an emission unit that the baghouses control are in operation.
- (b) In order to comply with Condition D.1.2, Baghouse AF-1 shall be in operation and control emissions from all emission units exhausting to baghouse AF-1 at all times an emission unit that the baghouse controls is in operation.
- (c) In order to comply with Condition D.1.2, Baghouse AF-2 shall be in operation and control emissions from Truck Dumps No. 1 and No. 2 at all times the Truck Dumps No. 1 and No.2 are in operation.
- (d) In order to comply with Condition D.1.2, baghouse AF-3 shall be in operation and control emissions from the Hull Hammer Mill, Hull Hammer Mill Feeder, and Hull Hammer Mill Plenum at all times the Hull Hammer Mill, Hull Hammer Mill Feeder, and Hull Hammer Mill Plenum are in operation.
- (e) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.6 Testing Requirements [326 IAC 2-1.1-11]

- (a) Not later than 60 days after achieving maximum production but no later than 180 days after initial startup of the baghouse AF-1 (associated with the meal loadout operations), in order to demonstrate compliance with Conditions D.1.1(b) and D.1.2, the Permittee shall perform PM, PM10 and PM2.5 testing for the baghouse AF-1, utilizing methods as approved by the Commissioner at least once every five (5) 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.
- (b) In order to demonstrate compliance with Conditions D.1.1(b), D.1.2 and E.2.2 (40 CFR 60.302(b)(1)), the Permittee shall perform PM, PM10 and PM2.5 testing for the baghouse AF-2 (associated with the grain receiving/meal loadout system), no later than one hundred and eighty (180) days after the initial startup of new emission units as permitted by Significant Source Modification No. 085-33392-00102 utilizing methods as approved by the Commissioner at least once every five (5) 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.

(c) In order to demonstrate compliance with Conditions D.1.1(b) and D.1.2 and E.2.2 (40 CFR 60.302(b)(1)), the Permittee shall perform PM, PM10 and PM2.5 testing for the baghouse AF-3 (associated with the prep system), no later than one hundred and eighty (180) days after initial startup of the extraction plant new units as permitted by Significant Source Modification No. 085-31960-00102 utilizing methods as approved by the Commissioner at least once every five (5) 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.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

- D.1.7 Visible Emissions Notations
 - (a) Pursuant to 40 CFR 64 (CAM), visible emission notations of the stacks AF-1, AF-2, AF-3, and AF-7 exhausts 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response shall be considered a deviation from this permit.
- D.1.8 Parametric Monitoring [40 CFR 64]
 - (a) The Permittee shall record pressure drop across baghouses AF-2, and AF-3, used in conjunction with the grain receiving/meal loadout system and prep system, at least once per day when the grain receiving/meal loadout system and prep system are in operation. When for any one reading, the pressure drop across Baghouses AF-2 and AF-3 is outside the normal range established during the latest stack test, the Permittee shall take a reasonable response. 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 twelve (12) months or more frequently if recommended by the instrument manufacture's specifications.
- D.1.9 Broken or Failed Bag Detection [40 CFR 64]
 - (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

- D.1.10 Record Keeping Requirements
 - (a) To document the compliance status with Condition D.1.1(a), the Permittee shall maintain records of the quantity of soybeans processed.
 - (b) To document the compliance status with Condition D.1.3(d), the Permittee shall maintain monthly records of the soybean throughput in the two (2) Storage Bean Piles #1 and #2. Records necessary to demonstrate compliance shall be available no later than 30 days of the end of each compliance period.
 - (c) To document the compliance status with Condition D.1.7 the Permittee shall maintain a daily record of visible emission notations of the stack exhaust from Stacks AF-1, AF-2, AF-3, and AF-7. 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).
 - (d) To document the compliance status with Condition D.1.8 the Permittee shall maintain a daily record of the pressure drop across baghouses AF-2 and AF-3, used to control the grain receiving and prep system. 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).
 - (e) Section C General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.1.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.1.1(a) and Condition D.1.3(d) shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. 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 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).



SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
C200100	Flaker Feed Loop Conveyor *2010, **2012	247	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C010600	Flake Collection Conveyor (12 flakers) *2006, **2010 and 2012	247	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C010000	Flaking Roll No. 1 *2013	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C020000	Flaking Roll No. 2 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C030000	Flaking Roll No. 3 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C040000	Flaking Roll No. 4 *2012	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C050000	Flaking Roll No. 5 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C060000	Flaking Roll No. 6 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C070000	Flaking Roll No. 7 *2012	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C080000	Flaking Roll No. 8 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C090000	Flaking Roll No. 9 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C100000	Flaking Roll No. 10 *2013	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C0110000	Flaking Roll No. 11 *2009	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C0120000	Flaking Roll No. 12 *2009	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
AF-4 C110000	Flaker aspiration baghouse *2006	24,000 acfm @ 0.005 grain/acf outlet grain loading		Stack AF-4	Yes under NESHAP GGGG
B040000	Hulloosenator No. 1 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B080100	Hulloosenator No. 2 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B130000	Hulloosenator No. 3 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B170000	Hulloosenator No. 4 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG

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B050000	Cascade Dryer No. 1 *2006, **2012	66.0	Hot dehulling	Stack AF-5	Yes under NESHAP GGGG
B090000	Cascade Dryer No. 2 *2006_**2012	66.0	Hot dehulling	Stack AF-5	Yes under NESHAP GGGG
B140000	Cascade Dryer No. 3	66.0	Hot dehulling	Stack AF-5	Yes under
B180000	Cascade Dryer No. 4	66.0	Hot dehulling	Stack AF-5	Yes under
B210000	CCD Cyclone	42,000	Hot dehulling	Stack AF-5	Yes under
B060000	*2006, **2010 Cracking Roll No.1	ctm 66.0	baghouse Hot dehulling	Stack AE-5	Yes under
B400000	*2006, **2012 Cracking Roll No.2	00.0	baghouse Hot dehulling		NESHAP GGGG Yes under
Б100000	*2006, **2012 Cracking Roll No.3	00.0	baghouse Hot dehulling		NESHAP GGGG Yes under
B150000	*2006, **2012	66.0	baghouse	Stack AF-5	NESHAP GGGG
B190000	*2006, **2012	66.0	baghouse	Stack AF-5	NESHAP GGGG
B070000	Cascade Conditioner No. 1 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B110000	Cascade Conditioner No. 2 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B160000	Cascade Conditioner No. 3 *2006. **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B200000	Cascade Conditioner No. 4 *2006 **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B230000	CCC Cyclone *2006, **2010	42,000 cfm	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
E130100	Secondary Aspirator No 1 *2006. **2010	9.6	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
E150100	Secondary Aspirator No 2 *2006, **2010	9.6	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
E160000	Secondary Aspirator Cyclone *2006. **2010	9.6	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
A160100	Feed Day Tank Conveyor *2006	600	Hot dehulling baghouse	Stack AF-5	Yes under NSPS DD
A160000 (Day Tank) A160500 (Aspirator) B420000 (Cyclone)	Day Tank (with aspirator and cyclone) *2006, **2010 , **2012, and **2014	264	Hot dehulling baghouse	Stack AF-5	Yes under NSPS DD
AF-5 B260000	Hot dehulling baghouse *2006	43,000 acfm @ 0.005 grain/acf outlet grain loading		Stack AF-5	Yes under NESHAP GGGG
E020300	Grinding Discharge Conveyor *2011, **2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E020400	Hammer Mill Mixing Conveyor *2006, **2011 and 2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG

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E010100	Meal L-Path Conveyor *2006, **2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E010300	Meal Hammer Mill Feed Conveyor *2006, **2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E020200	Meal Hammer Mill Feeder No. 1 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E030200	Meal Hammer Mill Feeder No. 2 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E040200	Meal Hammer Mill Feeder No. 3 (switch) *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E020000	Meal Hammer Mill No. 1 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E030000	Meal Hammer Mill No. 2 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E040000	Meal Hammer Mill No. 3 (switch) *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E020100	Meal Hammer Mill Bin No. 1 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E030100	Meal Hammer Mill Bin No. 2 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E040100	Meal Hammer Mill Bin No. 3 (switch) *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E230200	Meal Hammer Mill Feeder No. 5 *2012	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E230000	Meal Hammer Mill No. 5 *2012	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E230100	Meal Hammer Mill Bin No. 5 *2012	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
G010300	Meal Leg *2006, **2010 and 2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
AF-6 E110000	Mill Grinding Baghouse *2006	18,000 acfm @ 0.005 grain/acf outlet grain loading		Stack AF-6	Yes under NESHAP GGGG
B010000	VSC No. 1 *2006, **2012	132	VSC Cyclone No. 1	Stack S-1	Yes under NESHAP GGGG
B020000	VSC No. 2 *2006, **2012	132	VSC Cyclone No. 2	Stack S-6	Yes under NESHAP GGGG
B010500	VSC Air Heater No. 1 *2006, **2012	264	VSC Cyclone No. 1	Stack S-1	Yes under NESHAP GGGG
B020500	VSC Air Heater No. 2 *2015	264	VSC Cyclone No. 2	Stack S-6	Yes under NESHAP GGGG
B010700	VSC Cyclone No. 1 *2006, **2010	42,000 cfm		Stack S-1	Yes under NESHAP GGGG
B020700	VSC Cyclone No. 2 *2015	42,000 cfm		Stack S-6	Yes under NESHAP GGGG

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B120000	Jet Dryer No. 1 *2006, **2010 and 2012	132	Jet Dryer Baghouse AF-8	Stack S-1	Yes under NESHAP GGGG
B030000	Jet Dryer No. 2 *2006, **2012	132	Jet Dryer Baghouse AF-9	Stack S-1	Yes under NESHAP GGGG
B120100A	Jet Dryer Baghouse AF-8	74,000 acfm		Stack S-1	Yes under NESHAP GGGG
B120100B	Jet Dryer Baghouse AF-9	74,000 acfm		Stack S-1	Yes under NESHAP GGGG
Note *	Approved in the year inc	licated abov	e for construction.		
Note **Approved in the year indicated above for modification.					
Note ***The Flaker aspiration baghouse has been determined to be integral to the process for					
this un	it.	-		-	

(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 2-7-5(1)]

D.2.1 PSD Minor Limit for Particulate [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following PM, PM_{10} , and $PM_{2.5}$ limits:

The PM, PM_{10} , and $PM_{2.5}$ emissions from the following Processes shall be less than the emission limits listed in the table below:

Process	Control	PM Limit (lbs/hour)	PM ₁₀ Limit (Ibs/hour)	PM _{2.5} Limit (Ibs/hour)
Jet Dryer/VSC	VSC cyclones and Jet Dryer Baghouses AF-8 and AF-9	4.93	3.35	3.35
Hot Dehulling	Baghouse AF-5	2.56	2.56	2.56
Flaker Aspiration	Baghouse AF-4	1.03	1.03	1.03
Meal Grinding	Baghouse AF-6	0.945	0.945	0.945

Compliance with the above limits, in combination with the soybean usage limit in Condition D.1.1(a) and with the PM, PM_{10} , and $PM_{2.5}$ emission limits in Conditions D.1.1(b), D.1.1(c), D.3.1, D.5.1, D.6.1, and D.7.1, and with the potential to emit PM, PM_{10} , and $PM_{2.5}$ from all other emission units at the source, shall limit the PM, PM_{10} , and $PM_{2.5}$ emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render the requirements of (326 IAC 2-2 Prevention of Significant Deterioration (PSD)) not applicable.

D.2.2 Particulate Emissions Limitations [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the following processes shall not exceed the pound per hour limitations specified in the following table:

Emission unit ID	Emissions Units	¹ Baghouse ID	Maximum Process Weight (tons/hour) for each unit	326 IAC 6-3 Limit (lbs/hr) for each unit
E130100 and E150100	Secondary Aspirator No 1, and No. 2	AF-5	9.6	18.66
C020000, C030000, C050000, C060000, C080000, and C090000	Flaking Rolls No. 2, 3, 5, 6, 8, and 9	AF-4	22.9	33.41

Note 1: For emission units that exhaust through the same stack, the source will need to demonstrate compliance with 326 IAC 6-3-2 during normal operations using the most stringent limit (e.g. calculated from the emission unit operating at the lowest process weight in ton/hr).

The particulate emissions limitations from the above table shall be 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}	where	E = rate of emission in pounds per hour; and
		P = process weight rate in tons per hour

(b) Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the following processes shall not exceed the pound per hour limitations specified in the following table:

Emission unit ID	Emissions Units	¹ Baghouse ID	Maximum Process Weight (tons/hour) for each unit	326 IAC 6-3 Limit (lbs/hr) for each unit
B120000 and B030000	Jet Dryer No. 1 and No. 2	Jet Dryer Baghouses AF-8 and AF-9	132	54.11
B010500	VSC Air Heater No. 1	VSC Cyclone No. 1	264	61.56
B020500	VSC Air Heater No. 2	VSC Cyclone No. 2	264	61.56
B010000 and B020000	Vertical Seed Conditioner (VSC) No. 1 and No. 2	VSC Cyclones	132	54.11
B040000, B080100, B130000, and B170000	Hulloosenator No. 1, No. 2, No. 3, and No. 4	AF-5	66.0	47.20
B050000, B090000, B140000, and B180000	Cascade Dryer No. 1, No. 2, No. 3 and No. 4	AF-5	66.0	47.20
B060000, B100000, B150000, and B190000	Cracking Roll No.1, No. 2, No. 3 and No. 4	AF-5	66.0	47.20
B070000, B110000, B160000, and B200000	Cascade Conditioner No. 1, No. 2, No. 3 and No. 4	AF-5	66.0	47.20
C200100 and C010600	Flaker Feed Loop Conveyor and Flake Collection Conveyor	AF-4	247	60.82

Emission unit ID	Emissions Units	¹ Baghouse ID	Maximum Process Weight (tons/hour) for each unit	326 IAC 6-3 Limit (lbs/hr) for each unit
E020300, E020400, E010100, and E010300	Grinding Discharge Conveyor, Hammer Mill Mixing Conveyor, Meal L-Path Conveyor, and Meal Hammer Mill Feed Conveyor	AF-6	198	58.40
E020200, E030200, E040200, E020000, E030000, and E040000	Meal Hammer Mill Feeders No. 1, No. 2 and No. 3, Meal Hammer Mills No. 1, No. 2 and No. 3	AF-6	74	48.30
E230200 and E230000	Meal Hammer Mill Feeder No. 5 and Meal Hammer Mill No. 5	AF-6	74.0	48.30
G010300	Meal Leg	AF-6	198	58.40
E020100, E030100, and E040100	Meal Hammer Mill Bins No. 1, No. 2 and No. 3	AF-6	74	48.30
E230100	Meal Hammer Mill Bin No. 5	AF-6	74.0	48.30
A160100	Feed Day Tank Conveyor	AF-5	600	71.16
A160000 A160500 B420000	Day Tank (with aspirator and cyclone)	AF-5	264	61.56

Note 1: For emission units that exhaust through the same stack, the source will need to demonstrate compliance with 326 IAC 6-3-2 during normal operations using the most stringent limit (e.g. calculated from the emission unit operating at the lowest process weight in ton/hr).

The particulate emissions limitations from the above table shall be calculated using the following equation:

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

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

D.2.3 Preventive Maintenance Plan [326 IAC 1-6-3]

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.2.4 Particulate Control
 - (a) In order to comply with Conditions D.2.1, baghouses AF-4, AF-5, AF-6, the VSC cyclones, and jet dryers baghouses AF-8 and AF-9 shall be in operation and control emissions from all emission units exhausting to stacks, AF-4, AF-5, AF-6, AF-8, AF-9,S-1 and S-6 at all times when an emission unit that the baghouses or the cyclones control is in operation.
 - (b) In order to comply with Conditions D.2.2, baghouse AF-4 shall be in operation and control emissions from the Flaker Feed Loop Conveyor and Flake Collection Conveyor at all times the Flaker Feed Loop Conveyor and Flake Collection Conveyor are in operation.
 - (c) In order to comply with Conditions D.2.2, baghouse AF-5 shall be in operation and control emissions from the Hulloosenators No. 1, No. 2, No. 3, and No. 4 and Cracking Rolls No.1, No. 2, No. 3 and No. 4 at all times the Hulloosenators No. 1, No. 2, No. 3, and No. 4, Cracking Rolls No.1, No. 2, No. 3 and No. 4 are in operation.

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- (d) In order to comply with Conditions D.2.2, baghouse AF-6 shall be in operation and control emissions from the Meal Hammer Mill Feeders No. 1, No. 2, No. 3, and No. 5 and Meal Hammer Mills No. 1, No. 2, No. 3, and No. 5 at all times the Meal Hammer Mill Feeders No. 1, No. 2, No. 3, and No. 5 and Meal Hammer Mills No. 1, No. 2, No. 3, and No. 5 and Meal Hammer Mills No. 1, No. 2, No. 3, and No. 5 are in operation.
- (e) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- D.2.5 Testing Requirements [326 IAC 2-1.1-11]
 - (a) No later than five (5) years after the most recent valid compliance demonstration but no later than 180 days after startup of the extraction plant new units as permitted by Significant Source Modification No. 085-31960-00102, the Permittee shall conduct PM, PM₁₀, and PM_{2.5} testing on baghouses AF-4, AF-5, AF-6, AF-8, and AF-9 and VSC cyclones (associated with the flaking system, dehulling system, meal grinding/conveying, and VSC system) to verify compliance with Condition D.2.1 and Condition D.2.2, utilizing methods as approved by the Commissioner.
 - (b) No later than 180 days after the issuance date of Significant Source Modification No. 085-29971-00102 and Part 70 Operating Permit Renewal No. T085-29197-00102, the Permittee shall conduct PM, PM₁₀, and PM_{2.5} testing on baghouses AF-8 and AF-9 (associated with the jet drying) to verify compliance with Condition D.2.1 and Condition D.2.2, utilizing methods as approved by the Commissioner.
 - (c) No later than 180 days after initial startup, the Permittee shall conduct PM, PM₁₀, and PM_{2.5} testing on VSC Cyclone No. 2 to verify compliance with Condition D.2.1 and Condition D.2.2(b), utilizing methods as approved by the Commissioner.

These tests shall be repeated at least once every five (5) 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 these conditions. PM_{10} and $PM_{2.5}$ include filterable and condensable PM.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

- D.2.6 Visible Emissions Notations [40 CFR 64]
 - (a) Visible emission notations of the stacks AF-4, AF-5, AF-6, S-1, and S-6 exhausts 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response shall be considered a deviation from this permit.

D.2.7 Parametric Monitoring [40 CFR 64]

The Permittee shall record the pressure drop across baghouses AF-4, AF-5, AF-6, AF-8, and AF-9 used in conjunction with the flaking system, dehulling system, and meal grinding system, at least once per day when the flaking system, dehulling system, and meal grinding system are in operation. When for any one reading, the pressure drop across Baghouses AF-4, AF-5 and AF-6, AF-8 and AF-9 is outside the normal range presented in the table below or established during the latest stack test, the Permittee shall take reasonable response steps. 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.

Baghouse	Lower Limit (inches of water)	Upper Limit (inches of water)
AF-4	0.5	11.0
AF-5	0.5	13.0
AF-6	0.5	18.0
AF-8	0.5	8.0
AF-9	0.5	8.0

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 twelve (12) months or more frequently if recommended by the instrument manufacture's specifications.

D.2.8 Broken or Failed Bag Detection [40 CFR 64]

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

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

D.2.9 Cyclone Failure Detection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

In the event that cyclone failure has been observed:

The feed to the process shall be shut down immediately until the failed units have been repaired or replaced. The emission units shall be shut down no later than the completion of the processing of the material in the emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.2.10 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.6, the Permittee shall maintain a daily record of visible emission notations of the stack exhaust from Stacks AF-4, AF-5, AF-6, S-1, and S-6. 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).
- (b) To document the compliance status with Condition D.2.7 the Permittee shall maintain a daily record of the pressure drop across baghouses, AF-4, AF-5, AF-6, AF-8 and AF-9 used to control loadout, flaking, dehulling system, and meal grinding. 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).
- (c) Section C General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.



SECTION D.3

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
D010000	Soybean oil extractor *2006, **2010 and 2012	264	Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
	One (1) set of evaporators *2006		Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
D020000	One (1) Desolventizer/toaster *2006, **2010		Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
	One (1) set of water separators *2006		Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
D060000	Main Vent Condenser *2006		Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
	Five (5) hexane storage tank *2006 for original tank, and 2010 for other tanks **2010 for original tank	20,690 gallons each	Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
1220000	One (1) soybean oil pre-treat Tank *2010	35,170 gallons			Yes under NESHAP GGGG
	Three (3) soybean oil storage tank (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) *2006 for original tank and 2010 for other tanks, **2010 for original tank	725,000 gallons each			Yes under NESHAP GGGG
D070000	Mineral oil absorber *2006			Stack S-4	Yes under NESHAP GGGG
		1	1	1	
D310000-1	DC Deck No. 1 *2006, **2010 and 2012	208	DC Deck Cyclone No. 1	Stack S-2	Yes under NESHAP GGGG
D310000-2	DC Deck No. 2 *2006, **2010, 2011, and 2012	208	DC Deck Cyclone No. 2	Stack S-2	Yes under NESHAP GGGG
D310000-3	DC Deck No. 3 *2006, **2010 and 2012	208	DC Deck Cyclone No. 3	Stack S-2	Yes under NESHAP GGGG
D310000-4	DC Deck No. 4 *2006, **2010 and 2012	208	DC Deck Cyclone No. 4	Stack S-2	Yes under NESHAP GGGG
D310700	DC Deck Cyclone No.1 *2006, **2010 and 2011	18,000 scfm		Stack S-2	Yes under NESHAP GGGG
D310800	DC Deck Cyclone No.2 *2006, **2010 and 2011	18,000 scfm		Stack S-2	Yes under NESHAP GGGG

D310900	DC Deck Cyclone No.3 *2010, ** 2011	18,000 scfm		Stack S-2	Yes under NESHAP GGGG
D311000	DC Deck Cyclone No.4 *2010, **2011	18,000 scfm		Stack S-2	Yes under NESHAP GGGG
Note *Approved in the year indicated above for construction.					

Note **Approved in the year indicated above for modification.

(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 2-7-5(1)]

D.3.1 PSD Minor Limits for Particulate [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following PM, PM_{10} , and $PM_{2.5}$ limits:

The PM, PM_{10} , and $PM_{2.5}$ emissions from the following Processes shall be less than the emission limits listed in the table below:

Process	Control	PM Limit (Ibs/hour)	PM ₁₀ Limit (Ibs/hour)	PM _{2.5} Limit (Ibs/hour)
DC Decks	DC Deck Cyclone No. 1 DC Deck Cyclone No. 2 DC Deck Cyclone No. 3 DC Deck Cyclone No. 4	10.74	7.28	7.28

Compliance with the above limits, in combination with the soybean usage limit in Condition D.1.1(a) and with the PM, PM_{10} , and $PM_{2.5}$ emission limits in Conditions D.1.1(b), D.1.1(c), D.2.1, D.5.1, D.6.1 and D.7.1 and with the potential to emit PM, PM_{10} , and $PM_{2.5}$ from all other emission units at the source, shall limit the PM, PM_{10} , and $PM_{2.5}$ emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.3.2 PSD Minor Limit for VOC [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the VOC emissions from the following Processes shall be less than the emission limits in the table below:

Process	Control	VOC Limit (Ibs/hour)
Soybean oil extractor system Normal operation	Mineral oil absorber	9.3
DC Decks	DC Decks	32.8
Normal operation	Cyclones	

Compliance with the above VOC emission limits, the VOC emission limits in Condition D.4.1, the VOC emission limit in Condition D.5.2, the VOC emission limits in Condition D.7.2, and the potential to emit VOC from other units at the source shall limit the VOC emissions from the entire source to less 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) not applicable.

D.3.3 Particulate Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the following processes shall not exceed the pound per hour limitations specified in the following table:

Emission unit ID	Emissions Units	Cyclone ID	Maximum Process Weight (tons/hour) for each unit	326 IAC 6-3 Limit (lbs/hr) for each unit
D310000-1, D310000-2, D310000-3, and D310000-4	DC Decks No. 1, No. 2, No. 3, and No. 4	DC Deck Cyclones No. 1 through 4	208	58.93

The particulate emissions limitations from the above table shall be calculated using the following equation:

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

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

D.3.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-6] Significant Source Modification No. 085-31960-00102 revised the BACT requirements pursuant to 326 IAC 8-1-6 as follows:

- (a) The VOC emissions from the combined condenser and mineral oil absorber system for the extractor vent system shall not exceed 0.048 pounds per ton of soybean processed and shall not exceed 9.3 pounds per hour.
- (b) The VOC emissions from the meal dryers and meal cooler (DC Decks No. 1, No. 2, No. 3, and No. 4) shall not exceed 0.03 gallons of VOC per ton of soybean processed and shall not exceed 32.8 pounds per hour.
- (c) The overall solvent loss ratio shall not exceed 0.141 gallons per ton of soybean crushed from the whole plant per twelve (12) consecutive month period, with compliance determined at the end of each month. The Permittee shall also follow the leak detection and repair program as part of BACT.
- (d) The maximum annual throughput of soybeans processed shall not exceed 2,251,836 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (e) BACT for the fugitive hexane loss shall include an enhanced inspection, maintenance, and repair program (LDAR Program). No later than 60 days of achieving full production, but in no case later than 180 days after initial startup, the Permittee shall institute the following enhanced inspection, maintenance, and repair program for equipment in VOC service located in the solvent extraction portion of the installation. Equipment in vacuum service is exempt from this monitoring requirement pursuant to 40 CFR Part 60.482-1(d).

Table 1		
Equipment	Leak Standard	
Pumps	500 ppm	
Valves	500 ppm	
Pressure relief Devices	500 ppm	
Flanges, Connectors, and Seals	10,000 ppm	

(1) The Permittee shall determine compliance with the standards in Table 1 by using the procedures of 40 CFR Part 60, Appendix A, Method 21. The instrument shall be calibrated before each day of its use by the procedures as specified in Method 21. A leak is defined as an instrument reading of 500 ppm above background or greater, except for flanges, and connectors where a leak is defined as 10,000 ppm above background.

- (2) The Permittee shall immediately tag all detected leaks with a weatherproof, and readily visible, identification tag with a distinct number. Once a leaking component is detected, first-attempt repairs must be done no later than five days and be completed no later than 15 days of detecting the leaking components. If the repair cannot be accomplished no later than 15 days, then the Permittee shall send a notice of inability to repair to the OAQ no later than 20 days of detecting the leak. The notice must be received by the Compliance and Enforcement Branch, Office of Air Quality, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, no later than 20 days after the leak was detected. At a minimum the notice shall include the following:
 - (A) Equipment, operator, and instrument identification number;
 - (B) Date of leak detection;
 - (C) Measured concentration (ppm) and background (ppm);
 - (D) Leak identification number associated with the corresponding tag; and
 - (E) Reason of inability to repair no later than 5 to 15 days of detection.
- (3) The Permittee shall maintain records of the following to verify compliance with the enhanced inspection, maintenance, and repair program:
 - (A) equipment inspected;
 - (B) date of inspection; and
 - (C) determination of whether a leak was detected.
- (4) If a leak is detected, the Permittee shall record the following information to verify compliance with the enhanced inspection, maintenance, and repair program:
 - (A) the equipment, operator, and instrument identification number;
 - (B) measured concentration;
 - (C) leak identification number associated with the corresponding tag;
 - (D) date of repair;
 - (E) reason for non-repair if unable to repair no later than 5 to 15 days of detection; and
 - (F) maintenance recheck if repaired-date, concentration, background.
- (5) Definitions contained in 40 CFR Part 60, Subpart VV shall be utilized where necessary to implement this program.

D.3.5 Preventive Maintenance Plan [326 IAC 1-6-3]

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.3.6 Particulate Control

In order to comply with Conditions D.3.1, and D.3.3, DC Deck Cyclones No. 1, No. 2, No. 3, and No. 4 shall be in operation and control emissions from the DC Decks No. 1, No. 2, No. 3, and No. 4 at all times the DC Decks No. 1, No. 2, No. 3, and No. 4 are in operation.

D.3.7 Volatile Organic Compounds (VOC)

In order to comply with Conditions D.3.2 and D.3.4(a), the mineral oil absorber system and the soybean oil stripper shall be in operation and control emissions from the oil extractor process at all times the oil extractor process is in operation.

- D.3.8 Testing Requirements [326 IAC 2-1.1-11]
 - (a) No later than five (5) years after the most recent valid compliance demonstration but no later than 180 days after startup of the extraction plant new units as permitted by Significant Source Modification No. 085-31960-00102, the Permittee shall conduct PM, PM₁₀, and PM_{2.5} testing on stack S-2 (associated with the meal dryers and cooler) to verify compliance with Conditions D.3.1 and D.3.3, utilizing methods as approved by the Commissioner. PM₁₀ and PM_{2.5} include filterable and condensable PM. This test shall be repeated at least every five (5) years from the date of the most recent valid compliance demonstration.
 - (b) No later than five (5) years after the most recent valid compliance demonstration but no later than 180 days after startup of the extraction plant new units as permitted by Significant Source Modification No. 085-31960-00102, the Permittee shall perform VOC testing on the mineral oil absorber stack (stack S-4) and determine the mineral oil absorber's mineral oil flow rate and the temperature of mineral oil to the absorber to verify compliance with Conditions D.3.2 and D.3.4(a), utilizing methods as approved by the Commissioner. This test shall be repeated at least once five (5) years from the date of the most recent valid compliance demonstration.
 - (c) No later than five (5) years after the most recent valid compliance demonstration but no later than 180 days after startup of the extraction plant new units as permitted by Significant Source Modification No. 085-31960-00102, the Permittee shall perform VOC testing on the meal dryers and cooler cyclones stack (stack S-2) to verify compliance with Conditions D.3.2 and D.3.4(b), utilizing methods as approved by the Commissioner. This test shall be repeated at least once five (5) 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 these conditions.

D.3.9 Leak Detection and Repair (LDAR) Program [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the following is required to demonstrate compliance with the requirements of Condition D.3.4(c):

- (a) For pumps
 - (i) For the first year:
 - (A) Weekly visual check for leakage; and
 - (B) Semi-annual organic vapor analyzer inspection (leak definition = 500 ppm above background concentrations).

- (ii) After the first year:
 - (A) Weekly visual check for leakage;
 - (B) Annual organic vapor analyzer inspection (leak definition = 500 ppm above background concentrations).
- When a unit has a leak detected during an annual organic vapor analyzer inspection, the frequency of organic vapor analyzer inspections shall become semi-annual;
- (iv) When that unit has no leak detected for two (2) consecutive semi-annual vapor analyzer inspections, the frequency of the inspections shall return to annual.
- (b) For valves
 - (i) For the first year:
 - (A) Semi-annual organic vapor analyzer inspection (leak definition = 500 ppm above background concentrations).
 - (ii) After the first year:
 - (A) Annual organic vapor analyzer inspection (leak definition = 500 ppm above background concentrations);
 - (B) When a unit has a leak detected during an annual organic vapor analyzer inspection, the frequency of organic vapor analyzer inspections shall become semi-annual; and
 - (C) When that unit has no leak detected for two (2) consecutive semi-annual vapor analyzer inspections, the frequency of the inspections shall return to annual.
- (c) For pressure relief devices:
 - (i) No later than five (5) calendar days after a pressure release, the pressure release device shall be monitored to confirm conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background concentrations or a calibrated LEL Monitor reading of less than 3%. Any pressure relief device that is equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device is exempt from the above requirement.
- (d) For connectors, flanges, and seals, the annual organic vapor analyzer inspections shall be made (leak definition = 10,000 ppm above background concentrations).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

D.3.10 Visible Emissions Notations [40 CFR 64]

- (a) Visible emission notations of Stack S-2 exhaust 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response shall be considered a deviation from this permit.

D.3.11 Monitoring for Mineral Oil Absorber and Mineral Oil Stripping Column [40 CFR 64]

- (a) The Permittee shall monitor and record the mineral oil flow rate to the mineral oil absorber at least once per day.
- (b) A continuous monitoring system shall be calibrated, maintained, and operated on the mineral oil absorber for measuring operating temperature. For purposes of this condition continuous shall mean temperature measurement no less than once per minute. The output of this system shall be recorded as a 3-hour block average. The Permittee shall operate the mineral oil absorber at or below the 3-hour block average temperature as determined from the most recent valid stack test.
 - (1) The Permittee shall determine the 3-hour block average temperature from the most recent valid stack test that demonstrates compliance with the limits in conditions D.3.2 and D.3.4(a).
 - (2) On and after the date the stack test results are available, the Permittee shall maintain the temperature of the mineral oil to the absorber at or below the 3-hour block average temperature as observed during the compliant stack test.
- (c) A continuous monitoring system shall be calibrated, maintained, and operated on the mineral oil stripper for measuring the temperature of mineral oil to the stripper. For purposes of this condition continuous shall mean temperature measurement no less than once per minute. The output of this system shall be recorded as a 3-hour block average. The Permittee shall operate the mineral oil stripper at or above the 3-hour block average temperature as determined from the most recent valid stack test.
 - (1) The Permittee shall determine the 3-hour block average temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.3.2.
 - (2) On and after the date the stack test results are available, the Permittee shall operate the mineral oil stripper at or above the 3-hour block average temperature as observed during the compliant stack test.
- If any of the following operating conditions occur, the Permittee shall take a reasonable response. Section C Response to Excursions or 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.
 - (1) When the mineral oil flow rate reading is below the minimum mineral oil flow rate for any one reading. The minimum mineral oil flow rate to the mineral oil absorber will be as recommended by the manufacturer or the minimum flow rate established during the latest stack test.
 - (2) When the 3-hour block average temperature reading of the mineral oil to the absorber is above the temperature for any 3-hour block average. The 3-hour block average temperature of the mineral oil to the absorber will be as recommended by the manufacturer or the maximum temperature established during the latest stack test.

(3) When the 3-hour block average temperature reading of the mineral oil to the stripper is below the minimum temperature for any 3-hour block average. The minimum temperature of the mineral oil to the stripper will be as recommended by the manufacturer or the minimum temperature established during the latest stack test.

Operating conditions above or below the values specified in (1) through (3) above shall not be considered a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

- (e) The instruments used for determining the flow rate and temperature readings shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.
- (f) The gauge employed to take the mineral oil flow to the mineral oil absorber shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within + 10% of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.

D.3.12 Cyclone Failure Detection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)][40 CFR 64] In the event that cyclone failure has been observed:

The feed to the process shall be shut down immediately until the failed units have been repaired or replaced. The emission units shall be shut down no later than the completion of the processing of the material in the emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.3.13 Record Keeping Requirements

- (a) To document the compliance status with Condition D.3.4(c), the Permittee shall maintain monthly records of the source wide solvent loss ratio (SLR).
- (b) To document the compliance status with Condition D.3.4(d), the Permittee shall maintain records of the monthly soybean throughput.
- (c) To document the compliance status with Condition D.3.10, the Permittee shall maintain a daily record of visible emission notations of the stack exhaust from Stack S-2. 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).
- (d) To document the compliance status with Condition D.3.11, the Permittee shall maintain a daily record of the mineral oil flow rate, the 3-hour block average temperatures of the mineral oil to the absorber, and the 3-hour block average temperatures of the mineral oil to the stripping column. The Permittee shall include in its daily record when a parametric notation is not taken and the reason for the lack of parametric notation (e.g. the process did not operate that day).
- (e) Section C General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.3.14 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.3.4(c) and D.3.4(d) shall be submitted using the reporting forms located at the end of this
permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. 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 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).



SECTION D.4

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(e)

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
CL-5045	1st Primary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
CL-5046	1st Secondary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
CL-5063	2nd Primary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
CL-5064	2nd Secondary Transester Column *2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
R-8171	Esterification Reactor *2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
VU010000	Vacuum group package *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS VV, and NESHAP FFFF
	Biodiesel Mineral Oil Absorber *2010			Stack S-5	Yes under NSPS VV, and NESHAP FFFF
	Biodiesel Water Absorber *2006, **2007	2.2 gpm		Stack S-5	Yes under NSPS VV, and NESHAP FFFF
Biodiesel Distillation	Biodiesel Distillation *2013	15	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSP VVa, NSPS NNN, NESHAP FFFF
1040000	Biodiesel Storage Tank #4 *2006, **2007	725,000 gals			Yes under NSPS VV, and NESHAP FFFF
1050000	Biodiesel Storage Tank #5 *2006, **2007	725,000 gals			Yes under NSPS VV, and NESHAP FFFF
1060000	Biodiesel Storage Tank #6 *2009	3250,000			Yes under NSPS VV, and NESHAP FFFF
1070000	Biodiesel Storage Tank #7 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1080000	Biodiesel Storage Tank #8 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1090000	Biodiesel Storage Tank #9 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1100000	Biodiesel Storage Tank #10 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF

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	1			1	
1110000	Biodiesel Storage Tank #11 *2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1140000	Biodiesel Storage Tank #0 *2009	735,000			Yes under NSPS VV, and NESHAP FFFF
1120000	Glycerin Tank #12 *2006, **2010	360,000 gals			Yes under NSPS VV, and NESHAP FFFF
1130000	Glycerin Tank #13 *2006, **2010	360,000 gals			Yes under NSPS VV, and NESHAP FFFF
1250000	Methanol Storage Tank #1 *2006, **2007 and **2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1260000	Methanol Storage Tank #2 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1270000	Methanol Storage Tank #3 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1280000	Methanol Storage Tank #4 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1290000	Methanol Storage Tank #5 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1300000	Methanol Storage Tank #6 *2007	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1230000	Sodium Methylate (catalyst) Storage Tank #1 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1240000	Sodium Methylate (catalyst) Storage Tank #2 *2007, **2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
Rail Rack	Loading Rack (Rail) *2006, **2007, **2010 and **2011	500 gallons per minute			Yes under NSPS VV, and NESHAP FFFF
Truck Rack #1	Loading Rack (Truck) *2006, **2007, **2010 and **2011	430 gallons per minute			Yes under NSPS VV, and NESHAP FFFF
Truck Rack #2	Loading Rack (Truck) *2011	430 gallons per minute			Yes under NSPS VV, and NESHAP FFFF

Note *Approved in the year indicated above for construction.

Note **Approved in the year indicated above for modification.

(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 2-7-5(1)]

D.4.1 PSD Minor Limits for VOC [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

(a) The VOC emissions from the following Processes shall be less than the emission limits listed in the table below:

Process	Control	VOC (lbs/hour)	Limit
Biodiesel manufacturing process Normal operation	Mineral Oil Absorber and Water absorber	0.30	
Biodiesel manufacturing process with methanol tank loading	Mineral Oil Absorber and Water absorber	0.63	1,000 hours per twelve (12) consecutive months.
Biodiesel manufacturing process upset operation	Mineral Oil Absorber and Water absorber	29.4	24 hours per twelve (12) consecutive months.
Glycerin storage tanks	None	0.0011	
Biodiesel wastewater	None	0.77	
Biodiesel fugitive emissions	LDR as required by 40 CFR 60, Subpart VV	0.64	

- (b) The amount of purchased seed oil shall be less than 80 million gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) The amount of seed oil processed to manufacture biodiesel shall be less than 110,000,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (d) The VOC emissions from the loading racks shall be less than 0.02 lbs/kgal.
- (e) The maximum biodiesel loadout throughput rate for the loading racks shall be less than 110,000,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the purchased seed oil limit in Condition D.4.1(b), in combination with the above VOC emission limits in Condition D.4.1 shall limit the potential to emit of VOC from the biodiesel process to less than 100 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) not applicable.

Compliance with the purchased seed oil limit in Condition D.4.1(b), in combination with the above VOC emission limits in Condition D.4.1, the VOC emission limits in Condition D.3.2, the VOC emission limit in Condition D.5.2, the VOC emission limits in Condition D.7.2, and the potential to emit from other units at the source, shall limit the VOC emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) not applicable.

D.4.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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.4.3 Volatile Organic Compounds (VOC)

In order to comply with Condition D.4.1(a), the mineral oil absorber and water absorber shall be in operation and control emissions from the biodiesel manufacturing process and the methanol tank unloading at all times the biodiesel manufacturing process and the methanol tank unloading process are in operation.

D.4.4 Testing Requirements [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.4.1(a), the Permittee shall perform VOC testing on the outlet of the Mineral Oil Absorber with methanol unloading and without methanol unloading; and determine the Mineral Oil Absorber's mineral oil flow rate and water absorber's water flow rate, but no later than one hundred and eighty (180) days after initial startup of the Mineral Oil Absorber that replace the Soy Oil Absorber, utilizing methods as approved by the Commissioner at least once every five (5) 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.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

- D.4.5 Monitoring for mineral oil absorber and water absorber [40 CFR 64]
 - (a) The Permittee shall monitor and record the mineral oil flow rate for the mineral oil absorber at least once per day.
 - (b) The Permittee shall monitor and record the water flow rate for the water absorber at least once per day.
 - (c) A continuous monitoring system shall be calibrated, maintained, and operated on the mineral oil absorber for measuring the temperature of the mineral oil to the mineral oil absorber. For purposes of this condition continuous shall mean temperature measurement no less than once per minute. The output of this system shall be recorded as a 3-hour average. The Permittee shall operate the mineral oil absorber at or below the 3-hour average temperature as determined from the most recent valid stack test.
 - (1) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with the limits in condition D.4.1(a).
 - (2) On and after the date the stack test results are available, the Permittee shall operate the mineral oil absorber at or below the 3-hour average temperature as observed during the compliant stack test.
 - (d) A continuous monitoring system shall be calibrated, maintained, and operated for measuring the temperature of the water to the water absorber. For purposes of this condition continuous shall mean temperature measurement no less than once per minute. The output of this system shall be recorded as a 3-hour average. The Permittee shall operate the water absorber at or below the 3-hour average temperature as determined from the most recent valid stack test.
 - (1) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.4.1(a).
 - (2) On and after the date the stack test results are available, the Permittee shall operate the water absorber at or below the 3-hour average temperature as observed during the compliant stack test.

- (e) If any of the following operating conditions occur, the Permittee shall take a reasonable response. Section C Response to Excursions or 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.
 - (1) When the mineral oil flow rate reading is below the minimum flow rate for any one reading. The minimum flow rate for the mineral oil absorber will be 1.5 gpm or the minimum mineral oil flow rate established during the latest stack test.
 - (2) When the water flow rate reading is below the minimum flow rate for any one reading. The minimum flow rate for the water absorber will be 2.2 gpm or the minimum water flow rate established during the latest stack test.
 - (3) When the mineral oil absorber 3-hour average temperature reading is above the temperature for any 3-hour average. The 3-hour average temperature for the mineral oil absorber will be as recommended by the manufacturer or the maximum temperature established during the latest stack test.
 - (4) When the water absorber 3-hour average temperature reading is above the 3hour average temperature for any one reading. The 3-hour average temperature for the water absorber will be as recommended by the manufacturer or the maximum temperature established during the latest stack test.

Operating conditions above or below the values specified in (1) through (4) above shall not be considered a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

- (f) The instruments used for determining the flow rate and temperature reading shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (g) The gauges employed to take the mineral oil flow and water flow across the mineral oil absorber or water absorber, respectively, shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within + 10% of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

- D.4.6 Record Keeping Requirements
 - (a) To document the compliance status with Condition D.4.1 (b), the Permittee shall maintain records of the amount of the purchased seed oil.
 - (b) To document the compliance status with Condition D.4.1(c), the Permittee shall maintain records of the amount of the seed oil used to manufacture biodiesel.
 - (c) To document the compliance status with Condition D.4.1(a), the Permittee shall maintain records of the operating hours for the biodiesel manufacturing process during the following operating scenarios:
 - (1) Normal operation with methanol tank loading.
 - (2) Upset conditions.
 - (d) To document the compliance status with Condition D.4.1(e), the Permittee shall maintain records of the amount of the biodiesel loaded out through the biodiesel loading racks.

- (e) To document the compliance status with Conditions D.4.5(a) and (b), the Permittee shall maintain a daily record of the mineral oil flow rate of the mineral oil absorber, and the water flow rate of the water absorber. The Permittee shall include in its daily record when a parametric notation is not taken and the reason for the lack of a parametric notation (e.g. the process did not operate that day).
- (f) To document the compliance status with Condition D.4.5(c) and (d), the Permittee shall maintain a daily record of the 3-hour average operating temperatures of the mineral oil absorber and water absorber. The Permittee shall include in its daily record when a parametric notation is not taken and the reason for the lack of parametric notation (e.g. the process did not operate that day).
- (g) Section C General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.4.7 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.4.1(b), (c), and (e) shall be submitted using the reporting forms located at the end of this permit, or their equivalent, within 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 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).



SECTION D.5

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Uni	t Description:				
(f)					
Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
B-1	Main Boiler, natural gas fired and #2 fuel oil as back up fuel *2006	220 MMBtu/hr	Low NOx burner and Flue gas recirculation	Stack S-3	Yes under NSPS Db and NESHAP DDDDD
B-S	Temporary Mobile Boiler, Firing Natural Gas, *2013	40 MMBtu/hr	None	Stack S-MB	-
Note *A	pproved in the year indi	cated above	for construction.		
Insignificant Act	ivities				
Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
	Two (2) natural gas- fired space heaters *2013	0.25 MMBtu per hour, each	None		
Note *A	pproved in the year indi	cated above	for construction.		·
(The information information and	n describing the process does not constitute enfo	contained in prceable conc	this emissions unit litions.)	description bo	k is descriptive

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 PSD Minor Limit for Particulate [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following PM, PM_{10} , and $PM_{2.5}$ limits:

The PM, PM_{10} , and $PM_{2.5}$ emissions from the main boiler shall be less than the emission limits listed in the table below:

Process	Control	PM Limit (Ibs/hour)	PM ₁₀ Limit (Ibs/hour)	PM _{2.5} Limit (Ibs/hour)
Main Boiler	None	3.14	5.19	5.19

Compliance with the above limits, in combination with the soybean usage limit in Condition D.1.1(a), in combination with the PM, PM_{10} , and $PM_{2.5}$ emission limits in Conditions D.1.1(b), D.1.1(c), D.2.1, D.3.1, D.6.1 and D.7.1, and with the potential to emit PM, PM_{10} , and $PM_{2.5}$ from all other emission units at the source, shall limit the PM, PM_{10} , and $PM_{2.5}$ emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.5.2 PSD Minor Limit for VOC [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following VOC limit:

The VOC emissions from the Boiler shall be less than the emission limits listed in the table below:

Drococo	Control	VOC
Process	Control	(lbs/hour)
Boiler	None	1.19

Compliance with the above limits, in combination with the purchased seed oil limit in Condition D.4.1(b), the VOC emission limits in Condition D.3.2, the VOC emission limits in Condition D.4.1, the VOC emission limits in Condition D.7.2, and the potential to emit VOC from other units at the source, shall limit the VOC emissions from the entire source to less 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) not applicable.

D.5.3 PSD Minor Limit for SO₂ [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

- (a) The amount of #2 fuel oil combusted in the main boiler shall not exceed 7,000,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) SO2 emissions shall not exceed the value of the one hundred forty-two (142) times the percent (%) sulfur content by weight of the #2 fuel oil being used, expressed in pounds of SO₂ per thousand gallons of #2 fuel oil (lbs/kgal) used, as shown in the following equation:

 $E_{SO2} = 142.0 \text{ x S}, \text{ where}$

E_{SO2} is the calculated SO₂ emissions for #2 fuel oil used;

142 is the factor applied as found in AP-42 Table 1.3-1; and S is the % sulfur content by weight of the #2 fuel oil used.

Compliance with the above limits, combined with the potential to emit SO_2 from other units at the source shall limit the SO_2 emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.5.4 Particulate [326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the total particulate emissions from the boiler shall be less than 0.265 pounds per million British thermal units (Ib/MMBtu) heat input.
- (b) Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the total particulate emissions from the temporary mobile boiler (B-S) shall be less than 0.253 pounds per million British thermal units (Ib/MMBtu) heat input.

D.5.5 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-2][326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1-2 (SO₂ Emissions Limitations), the SO₂ emissions from the boiler shall be less than five tenths (0.5) pounds per MMBtu heat input when combusting #2 fuel oil. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.5.6 Preventive Maintenance Plan [326 IAC 1-6-3]

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.5.7 Sulfur Dioxide Emissions and Sulfur Content

Compliance with Condition D.5.5 shall be determined using one of the following options:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pound per million Btu heat input by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

- D.5.8 Visible Emissions Notations
 - (a) Visible emission notations of the boiler stack S-3 exhaust shall be performed once per day during normal daylight operations while combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
 - (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
 - (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
 - (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response shall be considered a deviation from this permit.
- D.5.9 Continuous Emission Monitoring [326 IAC 3-5]
 - (a) Pursuant to 326 IAC 3-5-1(c)(2)(A) (Continuous Monitoring of Emissions), continuous emission monitoring systems (CEMS) and related equipment for the boiler shall be calibrated, maintained, and operated for measuring NO_X, in accordance with applicable federal regulations and 326 IAC 3-5.

- (b) The CEMS shall be operated at all times, except during CEMS malfunctions, reasonable periods of necessary CEMS calibration or CEMS maintenance activities. CEMS calibration and maintenance activities shall be properly documented and shall be conducted pursuant to the standard operating procedures under 326 IAC 3-5-4(a).
- (c) The Permittee shall keep records in accordance with 326 IAC 3-5-6(b) that includes the following:
 - (1) All documentation relating to:
 - (A) design, installation, and testing of all elements of the monitoring system; and
 - (B) required corrective action or compliance plan activities.
 - (2) All maintenance logs, calibration checks, and other required quality assurance activities.
 - (3) All records of corrective and preventive action.
 - (4) A log of plant operations, including the following:
 - (A) Date of facility downtime.
 - (B) Time of commencement and completion of each downtime.
 - (C) Reason for each downtime.
- (d) In accordance with 326 IAC 3-5-7(5), the Permittee shall submit reports of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately. The reports shall include the following:
 - (1) Date of downtime.
 - (2) Time of commencement.
 - (3) Duration of each downtime.
 - (4) Reasons for each downtime.
 - (5) Nature of system repairs and adjustments.
- (e) Except where permit conditions streamline similar applicable requirements pursuant to 326 IAC 2-7-24, nothing in this permit shall excuse the Permittee from complying with 326 IAC 3-5.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.5.10 Record Keeping Requirements

- (a) To document the compliance status with Conditions D.5.3(a), the Permittee shall maintain monthly records of the amount of #2 fuel oil combusted in the main boiler.
- (b) To document the compliance status with Condition D.5.5, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limit established in Condition D.5.5.
 - (1) Calendar dates covered in the compliance determination period;

- (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
- (3) To certify compliance when burning natural gas only, the Permittee shall maintain records of fuel used.

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (c) To document the compliance status with Condition D.5.8, the Permittee shall maintain records of visible emission notations of the boiler stack S-3 exhaust while combusting fuel oil. 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).
- (d) Section C General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.5.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.5.3(a), shall be submitted using the reporting forms located at the end of this permit, or their equivalent, within 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 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).



SECTION D.6

EMISSIONS UNIT OPERATION CONDITIONS

(g)

(3)					
Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
G010000	Meal Bin No. 1*** *2006, **2010, 2011, and 2012	198	Meal Bin Filter No. 1	Stack MBF-1	Yes under NESHAP GGGG
G020000	Meal Bin No. 2*** *2006, **2010, 2011, and 2012	198	Meal Bin Filter No. 2	Stack MBF-2	Yes under NESHAP GGGG
G030000	Meal Bin No. 3*** *2006, **2010, 2011, and 2012	198	Meal Bin Filter No. 3	Stack MBF-3	Yes under NESHAP GGGG
G040000	Meal Bin No. 4*** *2006, **2010, 2011, and 2012	198	Meal Bin Filter No. 4	Stack MBF-4	Yes under NESHAP GGGG
G050000	Meal Bin No. 5*** *2010, **2011 and 2012	198	Meal Bin Filter No. 5	Stack MBF-5	Yes under NESHAP GGGG

Note *Approved in the year indicated above for construction.

Note **Approved in the year indicated above for modification.

Note ***There are five meal bins. However, the plant is only physically capable of loading one meal bin at a time. Thus, the PTE for these units is calculated at a rate of 198 tons/hr for all five meal bins combined.

(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 2-7-5(1)]

D.6.1 PSD Minor Limit for Particulate [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

The PM, PM_{10} and $PM_{2.5}$ emissions from the following Processes shall be less than the emission limits listed in the table below:

Process	Control	PM Limit (Ibs/hour)	PM ₁₀ Limit (Ibs/hour)	PM _{2.5} Limit (Ibs/hour)
Meal Bin No. 1	Meal Bin Filter No. 1	0.93	0.93	0.93
Meal Bin No. 2	Meal Bin Filter No. 2	0.93	0.93	0.93
Meal Bin No. 3	Meal Bin Filter No. 3	0.93	0.93	0.93
Meal Bin No. 4	Meal Bin Filter No. 4	0.93	0.93	0.93
Meal Bin No. 5	Meal Bin Filter No. 5	0.93	0.93	0.93

Compliance with the above limits, in combination with the soybean usage limit in Condition D.1.1(a) and with the PM, PM_{10} and $PM_{2.5}$ emission limits in Conditions D.1.1(b), D.1.1(c), D.2.1, D.3.1, D.5.1, and D.7.1, and with the potential to emit PM, PM_{10} and $PM_{2.5}$ from other emission units at the source, shall limit the PM, PM_{10} and $PM_{2.5}$ emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) not applicable.

D.6.2 Particulate Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the following processes shall not exceed the pound per hour limitations specified in the following table:

Emission unit ID	Emissions Units	Control	Maximum Process Weight (tons/hour) for each unit	326 IAC 6-3 Limit (lbs/hr) for each unit
G010000, G020000, G030000, G040000 and G050000	Meal Bins No. 1 thru 5	Meal Bin Filters No. 1 thru No. 5	198	58.40

The particulate emissions limitations from the above table shall be calculated using the following equation:

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

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

D.6.3 Preventive Maintenance Plan [326 IAC 1-6-3]

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.6.4 Particulate Control
 - (a) In order to comply with Condition D.6.1, Meal Bin Filters No. 1 thru No. 5 shall be in operation and control emissions from the Meal Bins No. 1 thru 5 at all times the Meal Bins No. 1 thru 5 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 [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

- D.6.5 Visible Emissions Notations
 - (a) Visible emission notations of Stack exhausts MBF-1, MBF-2, MBF-3, MBF-4 and MBF-5 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 reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response shall be considered a deviation from this permit.

D.6.6 Broken or Failed Bag Detection

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

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

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.6.7 Record Keeping Requirements
 - (a) To document the compliance status with Condition D.6.5 the Permittee shall maintain a daily record of visible emission notations of the stack exhaust from Stacks MBF-1, MBF-2, MBF-3, MBF-4 and MBF-5. 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).
 - (b) Section C General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.



SECTION D.7

EMISSIONS UNIT OPERATION CONDITIONS

Description	Capacity	Control	Affected Facility?
Kaolin Receiving Tank [326 IAC 2-2][326 IAC 6-3-2] *2006, **2010	10,800 and 40 tons per hour	Bin Filter	
Hull Overflow Tank [326 IAC 2-2][326 IAC 6-3-2] *2006, **2010 and 2012	13,900 cu. ft and 17 tons per hour	None	
diesel/#2 fuel oil storage tank [326 IAC 2-2] *2006, **2011	44,839 gallons	None	
Cooling tower with a maximum drift rate of 0.005% *2006	11,000 gpm	None	
Three (3) Emergency Diesel Fire Pumps [326 IAC 2-2] *2006	575 BHP each	None	Yes under NSPS IIII and NESHAP ZZZZ
One (1) natural gas-fired emergency generator *2013	3.413 MMBtu per hour (>500 HP)	None	Yes under NSPS JJJJ and NESHAP ZZZZ
Two (2) natural gas-fired space heaters *2013	0.25 MMBtu per hour, each	None	
Diatomaceous Earth (DE) Storage Bin [326 IAC 6-3-2] *2009, **2011	767 tons per year	Filter	
Hot Oil Heater *2013	6 MMBtu/hr	None	Yes, Under NESHAP DDDDD
Glycerin Boiler *2013	10 MMBtu/hr	None	Yes, Under NSPS Dc & NESHAP DDDDD
Natural Gas-Fired Glycerin Steam Boiler, *2014	1.0 MMBtu/hr	None	Yes, Under NESHAP DDDDD
Glycerin Refinery *2013, **2014	7.0 tons per hour	None	Yes, Under NSPS VVa, NSPS NNN,

Note *Approved in the year indicated above for construction.

Note **Approved in the year indicated above for modification.

(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 2-7-5(1)]

D.7.1 PSD Minor Limits for Particulate [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following PM, PM_{10} , and $PM_{2.5}$ limits:

The PM, PM_{10} , and $PM_{2.5}$ emissions from the following emission units shall be less than the emission limits listed in the table below:

Process	Control	PM Limit (lbs/hour)	PM10 Limit (lbs/hour)	PM2.5 Limit (lbs/hour)
Kaolin Receiving Tank	Bin Filter	1.9	1.9	1.9

Compliance with the above limits, in combination with the soybean usage limit in Condition D.1.1(a) in combination with the PM, PM_{10} , and $PM_{2.5}$ emission limits in Conditions D.1.1(b), D.1.1(c), D.2.1, D.3.1, D.6.1 and D.5.1, and with the potential to emit PM, PM_{10} , and $PM_{2.5}$ from other emission units at the source, shall limit the PM, PM_{10} , and $PM_{2.5}$ emissions from the entire source to less 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) not applicable.

D.7.2 PSD Minor Limit for VOC [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following VOC limit:

The VOC emissions from the following Processes shall be less than the emission limits listed in the table below:

Process	Control	VOC (lbs/hour)
diesel/#2 fuel oil storage tank	None	0.002
Diesel fire pumps	None	0.57

Compliance with the above limits, in combination with the purchased seed oil limit in Condition D.4.1(b), the VOC emission limits in Condition D.3.2, the VOC emission limits in Condition D.4.1, the VOC emission limits in Condition D.5.2, and the potential to emit VOC from other units at the source, shall limit the VOC emissions from the entire source to less 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) not applicable.

D.7.3 Particulate Emissions Limitations [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the following processes shall not exceed the pound per hour limitations specified in the following table:

Emissions Units	Baghouse ID	Maximum Process Weight (tons/hour) for each unit	326 IAC 6-3 Limit (lbs/hr) for each unit
Diatomaceous Earth (DE) Storage Bin	Filter	0.0875	0.80

The particulate emissions limitations from the above table shall be 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}	where E = rate of emission in pounds per hour; and
	P = process weight rate in tons per hour

(b) Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the following processes shall not exceed the pound per hour limitations specified in the following table:

Emissions Units	Baghouse ID	Maximum Process Weight (tons/hour) for each unit	326 IAC 6-3 Limit (lbs/hr) for each unit
Kaolin Receiving Tank	Bin Filter	40	42.53

The particulate emissions limitations from the above table shall be calculated using the following equation:

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

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

D.7.4 Particulate [326 IAC 6-2-4]

- Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the particulate emissions from the one (1) 10 MMBtu/hr glycerin boiler and one (1) 6 MMBtu/hr hot oil heater shall each be less than 0.263 pounds per million British thermal units (lb/MMBtu) heat input each.
- (b) Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the particulate emissions from one (1) 1.0 MMBtu/hr natural gas-fired glycerin steam boiler shall be less than 0.252 pounds per million British thermal units (Ib/MMBtu) heat input.

D.7.5 Preventive Maintenance Plan [326 IAC 1-6-3]

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 Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

- D.7.6 Visible Emissions Notations
 - (a) Visible emission notations of the Kaolin Receiving Tank exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
 - (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
 - (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
 - (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response shall be considered a deviation from this permit.
- D.7.7 Broken or Failed Bag Detection
 - (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shutdown immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
 - (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

- D.7.8 Record Keeping Requirements
 - (a) To document the compliance status with Condition D.7.6 the Permittee shall maintain a daily record of visible emission notations from the Kaolin Receiving Tank exhaust. 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).
 - (b) Section C General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.



SECTION E.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:						
(f)						
Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?	
B-1	Main Boiler, natural gas fired and #2 fuel oil as back up fuel *2006	220 MMBtu/hr	Low NOx burner and Flue gas recirculation	Stack S-3	Yes under NSPS Db and NESHAP DDDDD	
Note *A	Note *Approved in the year indicated above for construction.					

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

E.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, except when otherwise specified in 40 CFR Part 60, Subpart Db (included as Attachment A of this permit).

E.1.2 New Source Performance Standards (NSPS) for Industrial-Commercial-Institutional Steam Generating Units [326 IAC 12][40 CFR Part 60, Subpart Db]

The boiler (B-1) shall comply with the following provisions of 40 CFR Part 60, Subpart Db (included as Attachment A of this permit):

- (1) 40 CFR 60.40b(a), (g), and (j)
- (2) 40 CFR 60.41b
- (3) 40 CFR 60.42b (e), (g), and (k)
- (4) 40 CFR 60.43b (f), (g), and (h)
- (5) 40 CFR 60.44b(a), (h), (i), (l)(1), and (l)(2)
- (6) 40 CFR 60.45b(a), (b) and (j)
- (7) 40 CFR 60.46b(a), (b), (c), (d), (e)(1), and (e)(4)
- (8) 40 CFR 60.47b (f)
- (9) 40 CFR 60.48b(a), (b), (c), (d), (e)(2), (e)(3), (f), and (g)
- (10) 40 CFR 60.49b (a)(1), (b), (d), (f), (g), (h)(2), (h)(4), (i), (j), (o), (r), (v), and (w)



SECTION E.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
A030000	Truck Dump No. 1 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A020000	Truck Dump No. 2 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Truck Dump No. 3 (with doors)	Truck Dump No. 3 *2013	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A030100	Discharge Conveyor No. 1 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A020100	Discharge Conveyor No. 2 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A040000	Bean Receiving Leg No. 1 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A050000	Bean Receiving Leg No. 2 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A010000	Rail Dump and Rail Collection Conveyor *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A010100	Rail Scale Discharge Conveyor *2006	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A150100	Cross Bin No 1 thru 3 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A120100	Cross Bin No 4 thru 6 *2006	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A151000	Discharge Bin No 1 thru 3 *2006	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A121000	Discharge Bin No 4 thru 6 *2006	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A153000	Day Bin Leg *2006	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
AF-2 A200000	Grain Receiving/Meal Loadout Baghouse *2006, **2010	38,000 acfm @ 0.005 grain/acf outlet gr loading		Stack AF-2	Yes under NSPS DD
A152000	West Bin Cross Conveyor 1-3 *2006, **2010 and 2011	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A122000	East Bin Cross Conveyor 4-6 *2006, **2010	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
A130100	West Bin Feed Conveyor *2006, **2010	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD

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A100100	East Bin Feed Conveyor *2006, **2010	600	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Rail Receiving Leg	Rail Receiving Leg *2013	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Truck Dump No. 3 Receiving Conveyor	Truck Dump No. 3 Receiving Conveyor *2013	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Truck Dump No. 3 Receiving Leg	Truck Dump No. 3 Receiving Leg *2013	360	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Scalperator Leg	Scalperator Leg *2013	210	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Scalperator Feed Conveyor	Scalperator Feed Conveyor *2013	210	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Scalperator Jack Leg	Scalperator Jack Leg *2013	210	Grain Receiving/Meal Loadout Baghouse	Stack AF-2	Yes under NSPS DD
Scalperator	Scalperator *2013	210	Grain Receiving/Meal	Stack AF-2	Yes under NSPS DD
A170300	Screenings Recycle Leg *2006	5	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B011300	Bean Weigh Scale *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B310000	Screenings Weight Belt *2006	5	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B010100	Whole Bean Aspirator No 1 *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B020100	Whole Bean Aspirator No 2 *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B010900	Whole Bean Aspirator Cyclone *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
	Bean Storage Bins #2, #3, #6, and #7 *2006	600 tons/hr and each Bin has a maximum storage capacity of 500,000 bushels	None	None	Yes under NSPS DD
	Bean Storage Bins #4 and #8 *2013	600 tons/hr and each Bin has a maximum storage capacity of 500,000 bushels	None	None	Yes under NSPS DD

	Bean Storage Silos #1 and #5 *2008	600 tons/hr and each Bin has a maximum storage capacity of 500,000 bushels	None	None	Yes under NSPS DD
	Note *Approved in the year i	indicated abo	ve for construction.		
	Note **Approved in the year	indicated abo	ove for modification.		
(b)					

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
Piles #1 and #2 *2008	Two (2) covered seasonal grain storage piles	each with a maximum storage capacity of 1,000,000 bushels of soybeans	None	None	Yes under NSPS DD

Note *Approved in the year indicated above for construction.

(C)

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
A160100	Feed Day Tank Conveyor *2006	600	Hot dehulling baghouse	Stack AF-5	Yes under NSPS DD
A160000 (Day Tank) A160400 (Aspirator) B420000 (Cyclone)	Day Tank (with Aspirator and cyclone) *2006, **2010, **2012, and **2014	264	Hot dehulling baghouse	Stack AF-5	Yes under NSPS DD

Note *Approved in the year indicated above for construction.

Note **Approved in the year indicated above for modification.

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

E.2.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, except when otherwise specified in 40 CFR Part 60, Subpart DD (included as Attachment B of this permit).

E.2.2 New Source Performance Standards (NSPS) for Grain Elevators [326 IAC 12][40 CFR Part 60, Subpart DD]

The truck unloading station, truck loading station, railcar loading station, railcar unloading station, and all grain handling operations at the grain storage elevator shall comply with the following provisions of 40 CFR Part 60, Subpart DD (included as Attachment B of this permit):

- (1) 40 CFR 60.300
- (2) 40 CFR 60.301
- (3) 40 CFR 60.302 (a)(1), (b), (c)(1), (c)(2), and (c)(3)
- (4) 40 CFR 60.303
- (5) 40 CFR 60.304

The stack testing requirements under 40 CFR § 60.303 shall not apply to the Bean Storage Bins #2, #3, #4, #6, #7, and #8, Bean Storage Silos #1 and #5, and the seasonal grain storage Piles #1 and #2.



SECTION E.3

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

< ,			1	1	-
Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
CL-5045	1st Primary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
CL-5046	1st Secondary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
CL-5063	2nd Primary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
CL-5064	2nd Secondary Transester Column *2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
R-8171	Esterification Reactor *2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
VU010000	Vacuum group package *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS VV, and NESHAP FFFF
	Biodiesel Mineral Oil Absorber *2010			Stack S-5	Yes under NSPS VV, and NESHAP FFFF
	Biodiesel Water Absorber *2006, **2007	0.448 gpm		Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1040000	Biodiesel Storage Tank #4 *2006, **2007	725,000 gals			Yes under NSPS VV, and NESHAP FFFF
1050000	Biodiesel Storage Tank #5 *2006, **2007	725,000 gals			Yes under NSPS VV, and NESHAP FFFF
1060000	Biodiesel Storage Tank #6 *2009	325,000			Yes under NSPS VV, and NESHAP FFFF
1070000	Biodiesel Storage Tank #7 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1080000	Biodiesel Storage Tank #8 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1090000	Biodiesel Storage Tank #9 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1100000	Biodiesel Storage Tank #10 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF

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		•		-	
1110000	Biodiesel Storage Tank	325,000			Yes under
1110000	*2007	gals			NESHAP FFFF
	Biodiesel Storage Tank				Yes under
1140000	#0	735,000			NSPS VV, and
	*2009				NESHAP FFFF
1120000	Glycerin Tank #12	360,000			NSPS VV and
1120000	*2006, **2010	gals			NESHAP FFFF
	Glycerin Tank #13	360.000			Yes under
1130000	*2006, **2010	gals			NSPS VV, and
	Methanol Storage Tank	5			NESHAP FFFF
1050000	#1	38.850	Mineral Oil		Yes under
1250000	*2006, **2007 and	gallons	Absorber and	Stack S-5	
	**2010				NEGHAFTTT
1260000	Methanol Storage Tank	38,850	Mineral Oil	Stock S 5	Yes under
1200000	*2006, **2007 and 2010	gallons	water absorber	Slack S-S	NESHAP FFFF
	Methanol Storage Tank	20.050	Mineral Oil		Yes under
1270000	#3	dallons	Absorber and	Stack S-5	NSPS VV, and
	*2006, **2007 and 2010	ganorio	water absorber		NESHAP FFFF
1280000		38,850	Mineral Oli Absorber and	Stack S-5	Yes under
1200000	*2006, **2007 and 2010	gallons	water absorber		NESHAP FFFF
	Methanol Storage Tank	38 850	Mineral Oil		Yes under
1290000	#5	gallons	Absorber and	Stack S-5	NSPS VV, and
	Methanol Storage Tank	•	Mineral Oil		NESHAP FFFF Ves under
1300000	#6	38,850 gallons	Absorber and	Stack S-5	NSPS VV, and
	*2007		water absorber		NESHAP FFFF
	Sodium Methylate	00.050	Mineral Oil		Yes under
1230000	(catalyst) Storage Tank	38,850 gallons	Absorber and	Stack S-5	NSPS VV, and
	*2006. **2007 and 2010	galions	water absorber		NESHAP FFFF
	Sodium Methylate		Mineral Oil		Ves under
1240000	(catalyst) Storage Tank	38,850	Absorber and	Stack S-5	NSPS VV. and
	#2	gallons	water absorber		NESHAP FFFF
	Loading Rack (Rail)				Yes under
Rail Rack	*2006, **2007, **2010	500 gallons			NSPS VV, and
	and **2011	perminute			NESHAP FFFF
Truck D. 1. // f	Loading Rack (Truck)	430 gallons			Yes under
	and **2011	per minute			NESHAP FFFF
	Loading Pack (Truck)	120 gallona			Yes under
Truck Rack #2	*2011	per minute			NSPS VV, and
					NESHAP FFFF

Note *Approved in the year indicated above for construction.

Note **Approved in the year indicated above for modification.

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

E.3.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, except when otherwise specified in 40 CFR Part 60, Subpart VV (included as Attachment C of this permit).

E.3.2 New Source Performance Standards (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006 [326 IAC 12][40 CFR Part 60, Subpart VV]

Each pump, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or any other connector in VOC service at the biodiesel production line shall comply with the following provisions of 40 CFR Part 60, Subpart VV (included as Attachment C of this permit):

- (1) 40 CFR 60.480(a), (b), (c), and (f)
- (2) 40 CFR 60.481
- (3) 40 CFR 60.482-1
- (4) 40 CFR 60.482-2
- (5) 40 CFR 60.482-3
- (6) 40 CFR 60.482-4
- (7) 40 CFR 60.482-5
- (8) 40 CFR 60.482-6
- (9) 40 CFR 60.482-7
- (10) 40 CFR 60.482-8
- (11) 40 CFR 60.482-9
- (12) 40 CFR 60.482-10
- (13) 40 CFR 60.483-1
- (14) 40 CFR 60.483-2
- (15) 40 CFR 60.484
- (16) 40 CFR 60.485
- (17) 40 CFR 60.486
- (18) 40 CFR 60.487
- (19) 40 CFR 60.488
- (20) 40 CFR 60.489



NESHAP FFFF Yes under

NSPS NNN, &,

NESHAP FFFF

NSPS VVa,

Stack S-5

SECTION E.4

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: (e) Affected Capacity Discharging Unit ID Description Control (tons/hr) to Stack Facility? Yes under **1st Primary Transester** Mineral Oil NSPS NNN, 12,960 CL-5045 Column Absorber and Stack S-5 NSPS RRR, gals/hr *2006, **2007 and 2010 water absorber NSPS VV, and **NESHAP FFFF** Yes under 1st Secondary Mineral Oil NSPS NNN, 12.960 CL-5046 Transester Column Absorber and Stack S-5 NSPS RRR, gals/hr *2006, **2007 and 2010 water absorber NSPS VV, and **NESHAP FFFF** Yes under 2nd Primary Transester Mineral Oil NSPS NNN, CL-5063 12,960 Column Absorber and Stack S-5 NSPS RRR, gals/hr *2006, **2007 and 2010 NSPS VV, and water absorber NESHAP FFFF Yes under 2nd Secondary Mineral Oil NSPS NNN, 12,960 CL-5064 Transester Column NSPS RRR, Absorber and Stack S-5 gals/hr *2010 NSPS VV, and water absorber NESHAP FFFF Yes under Mineral Oil NSPS NNN, **Esterification Reactor** 12,960 R-8171 Absorber and Stack S-5 NSPS RRR, *2010 gals/hr water absorber NSPS VV, and **NESHAP FFFF** Yes under Mineral Oil Vacuum group package 12.960 NSPS NNN. VU010000 Absorber and Stack S-5 *2006. **2007 and 2010 gals/hr NSPS VV. and water absorber

Note *Approved in the year indicated above for construction. Note **Approved in the year indicated above for modification.

15

Biodiesel Distillation

*2013

Insignificant Activities:

Biodiesel

Distillation

Description	Capacity	Control	Affected Facility?
Glycerin Refinery *2013, **2014	7.0 tons per hour	None	Yes, Under NSPS VVa, NSPS NNN, and NESHAP FFFF

Mineral Oil

Absorber and

water absorber

Note *Approved in the year indicated above for construction.

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

General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A] E.4.1

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, except when otherwise specified in 40 CFR Part 60, Subpart NNN (included as Attachment D of this permit).

E.4.2 New Source Performance Standards (NSPS) for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations [326 IAC 12][40 CFR Part 60, Subpart NNN]

The distillation unit of the biodiesel manufacturing process, Biodiesel Distillation (permitted for construction in 2013) and glycerin refinery shall comply with the following provisions of 40 CFR Part 60, Subpart NNN (included as Attachment D of this permit):

- (1) 40 CFR 60.660(a), (b)(1), and (c)(4)
- (2) 40 CFR 60.661
- (3) 40 CFR 60.662(c)
- (4) 40 CFR 60.664(e) and (f)
- (5) 40 CFR 60.665(a), (b), (h), (k), (l), (m), and (p)
- (6) 40 CFR 60.666
- (7) 40 CFR 60.667
- (8) 40 CFR 60.668



SECTION E.5

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:						
(e)						
Unit ID	Description	Capaci (tons/h				
	1st Primary Transester					

Unit ID	Description	(tons/hr)	Control	to Stack	Affected Facility?	
CL-5045	1st Primary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF	
CL-5046	1st Secondary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF	
CL-5063	2nd Primary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF	
CL-5064	2nd Secondary Transester Column *2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF	
R-8171	Esterification Reactor *2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF	
Note *Approved in the year indicated above for construction						

Note "Approved in the year indicated above for construction.

Note **Approved in the year indicated above for modification.

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

E.5.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, except when otherwise specified in 40 CFR Part 60, Subpart RRR (included as Attachment E of this permit).

E.5.2 New Source Performance Standards (NSPS) for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes [326 IAC 12][40 CFR Part 60, Subpart RRR]

The reactor unit, which is part of a biodiesel manufacturing process that produces glycerol, shall comply with the following provisions of 40 CFR Part 60, Subpart RRR (included as Attachment E of this permit):

- (1) 40 CFR 60.700(c)(4)
- (2) 40 CFR 60.701
- (3) 40 CFR 60.704(g)
- (4) 40 CFR 60.705(h), (l)(4), and (o)
- (5) 40 CFR 60.706
- (6) 40 CFR 60.707
- (7) 40 CFR 60.708

SECTION E.6

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Insignificant Activities

Description	Capacity	Control	Affected Facility?
Three (3) Diesel Fire Pumps [326 IAC 2-2]	575 BHP each	None	Yes under NSPS
*2006			ZZZZ

Note *Approved in the year indicated above for construction.

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

E.6.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, except when otherwise specified in 40 CFR Part 60, Subpart IIII (included as Attachment F of this permit).

E.6.2 New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines [326 IAC 12][40 CFR Part 60, Subpart IIII]

The three (3) diesel fire pumps shall comply with the following provisions of 40 CFR Part 60, Subpart IIII (included as Attachment F of this permit):

- (1) 40 CFR 60.4200(a)(2)(ii)
- (2) 40 CFR 60.4205(c)
- (3) 40 CFR 60.4206
- (4) 40 CFR 60.4207(a) and (b)
- (5) 40 CFR 60.4209
- (6) 40 CFR 60.4211(a), (b) and (f)
- (7) 40 CFR 60.4214(b) and (c)
- (8) 40 CFR 60.4218
- (9) 40 CFR 60.4219
- (10) Table 3 to Subpart IIII
- (11) Table 4 to Subpart IIII
- (12) Table 8 to Subpart IIII

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SECTION E.7

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

· ·			1		1
Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
CL-5045	1st Primary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
CL-5046	1st Secondary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
CL-5063	2nd Primary Transester Column *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
CL-5064	2nd Secondary Transester Column *2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
R-8171	Esterification Reactor *2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS RRR, NSPS VV, and NESHAP FFFF
VU010000	Vacuum group package *2006, **2007 and 2010	12,960 gals/hr	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS NNN, NSPS VV, and NESHAP FFFF
	Biodiesel Mineral Oil Absorber *2010			Stack S-5	Yes under NSPS VV, and NESHAP FFFF
	Biodiesel Water Absorber *2006, **2007	0.448 gpm		Stack S-5	Yes under NSPS VV, and NESHAP FFFF
Biodiesel Distillation	Biodiesel Distillation *2013	15	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VVa, NSPS NNN& NESHAP FFFF
1040000	Biodiesel Storage Tank #4 *2006, **2007	725,000 gals			Yes under NSPS VV, and NESHAP FFFF
1050000	Biodiesel Storage Tank #5 *2006, **2007	725,000 gals			Yes under NSPS VV, and NESHAP FFFF
1060000	Biodiesel Storage Tank #6 *2009	325,000			Yes under NSPS VV, and NESHAP FFFF
1070000	Biodiesel Storage Tank #7 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1080000	Biodiesel Storage Tank #8 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF

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1090000	Biodiesel Storage Tank #9	325,000			Yes under NSPS VV. and
	*2006, **2007	gals			NESHAP FFFF
1100000	Biodiesel Storage Tank #10 *2006, **2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1110000	Biodiesel Storage Tank #11 *2007	325,000 gals			Yes under NSPS VV, and NESHAP FFFF
1140000	Biodiesel Storage Tank #0 *2009	735,000			Yes under NSPS VV, and NESHAP FFFF
1120000	Glycerin Tank #12 *2006, **2010	360,000 gals			Yes under NSPS VV, and NESHAP FFFF
1130000	Glycerin Tank #13 *2006, **2010	360,000 gals			Yes under NSPS VV, and NESHAP FFFF
1250000	Methanol Storage Tank #1 *2006, **2007 and **2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1260000	Methanol Storage Tank #2 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1270000	Methanol Storage Tank #3 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1280000	Methanol Storage Tank #4 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1290000	Methanol Storage Tank #5 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1300000	Methanol Storage Tank #6 *2007	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1230000	Sodium Methylate (catalyst) Storage Tank #1 *2006, **2007 and 2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
1240000	Sodium Methylate (catalyst) Storage Tank #2 *2007, **2010	38,850 gallons	Mineral Oil Absorber and water absorber	Stack S-5	Yes under NSPS VV, and NESHAP FFFF
Rail Rack	Loading Rack (Rail) *2006, **2007, **2010 and **2011	500 gallons per minute			Yes under NSPS VV, and NESHAP FFFF
Truck Rack #1	Loading Rack (Truck) *2006, **2007, **2010 and **2011	430 gallons per minute			Yes under NSPS VV, and NESHAP FFFF
Truck Rack #2	Loading Rack (Truck) *2011	430 gallons per minute			Yes under NSPS VV, and NESHAP EFEE

Insignificant Activities:

Description	Capacity	Control	Affected Facility?
Glycerin Refinery *2013, **2014			Yes, Under NSPS
	7.0 tons per hour	None	VVa, NSPS NNN,
			and NESHAP FFFF

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Glycerin Truck/ Rail Loadout	7.0 tons per hour	None	Yes, Under NSPS VVa and NESHAP FFFF
Glycerin Yellow Tank	8,000 gallons	None	Yes, Under NSPS VVa and NESHAP FFFF
Glycerin Yellow Tank 1	50,000 gallons	None	Yes, Under NSPS VVa and NESHAP FFFF
Glycerin Yellow Tank 2	50,000 gallons	None	Yes, Under NSPS VVa and NESHAP FFFF
Glycerin Yellow Tank 3	50,000 gallons	None	Yes, Under NSPS VVa and NESHAP FFFF
Glycerin Yellow Tank 4	50,000 gallons	None	Yes, Under NSPS VVa and NESHAP FFFF

Note *Approved in the year indicated above for construction.

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

E.7.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR 63, Subpart A]

- (a) Pursuant to 40 CFR 63.2540, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, as specified in Table 12 of 40 CFR 63, Subpart FFFF in accordance with the schedule in 40 CFR 63, Subpart FFFF.
- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

E.7.2 National Emission Standard for Hazardous Air Pollutants for Miscellaneous Organic Chemical Manufacturing [40 CFR Part 63, Subpart FFFF][326 IAC 20-84]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart FFFF (included as Attachment G of this permit), which are incorporated by reference as 326 IAC 20-84:

- (1) 40 CFR 63.2430
- (2) 40 CFR 63.2435(a), (b), (d), and (e)
- (3) 40 CFR 63.2440
- (4) 40 CFR 63.2445(a)(2), (c), (d), and (f)
- (5) 40 CFR 63.2450(a), (c)(1), (c)(2), (e)(1), (e)(2), (g), (h), (k)(5), (l), (m), (p), and (r)
- (6) 40 CFR 63.2460
- (7) 40 CFR 63.2470
- (8) 40 CFR 63.2475
- (9) 40 CFR 63.2480(a), (b), and (d)

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- (10) 40 CFR 63.2500(b) through (f)
- (11) 40 CFR 63.2505
- (12) 40 CFR 63.2515
- (13) 40 CFR 63.2520
- (14) 40 CFR 63.2525(b), (c), (d), (f), and (g)
- (15) 40 CFR 63.2540
- (16) 40 CFR 63.2545
- (17) 40 CFR 63.2550
- (18) Table 2 to Subpart FFFF
- (19) Table 4 to Subpart FFFF
- (20) Table 5 to Subpart FFFF
- (21) Table 6 to Subpart FFFF
- (22) Table 9 to Subpart FFFF
- (23) Table 11 to Subpart FFFF
- (24) Table 12 to Subpart FFFF



SECTION E.8

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?	
G020500	Meal Storage Feed Conveyor *2006, **2010, **2011, ** 2015	200	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G070300	Truck Meal Loadout Feed Conveyor *2006, **2010, ** 2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G290000	Truck Collection Conveyor *2010, ** 2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G280000	Truck Loader No.1 *2010, ** 2015	330	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G270000	Truck Loader No.2 *2010, ** 2015	330	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G080000	Truck Pelleted Hull Loadout Bin *2006, **2010, ** 2015	148	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G070000	Truck Meal Loadout Bin *2006, **2010, 2012, ** 2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G180000	Rail Pelleted Hull Loadout Bin *2010, ** 2015	148	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G130000	Rail Meal Loadout Bin *2006, **2010, 2012, **2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G160000	Pellet Hulls Conveyor to Loadout *2006, **2010, 2012, ** 2015	17.0	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G170000	Rail Car Collection Conveyor *2006, **2010, ** 2015	300	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G220000	Rail Car Loadout *2010, ** 2015	330	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G010100	Meal Reclaim Conveyor *2006, **2010, ** 2015	200	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
G010200	Meal Reclaim Leg *2010, ** 2015	200	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG	
A060000	Screener *2006, **2011 and 2012	264	Prep Exhaust Baghouse	Stack AF-3	Yes under NESHAP GGGG	

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A160300	VSC Leg Feed Conveyor *2006, **2010 and 2012	264	Prep Exhaust Baghouse	Stack AF-3	Yes under NESHAP GGGG
A170000	Screenings Tank *2006	5	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
A170300	Screenings Recycle Leg *2006	5	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B011300	Bean Weigh Scale *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B310000	Screenings Weight Belt *2006	5	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
AF-7	Pod Grinder/Screener Baghouse *2011	5,000 acfm		Stack AF-7	Yes under NESHAP GGGG
B310200	Pod Grinder/Destoner *2006, **2010	5	Pod Grinder/ Screener Baghouse	Stack AF-7	Yes under NESHAP GGGG
B011200	VSC Feed Leg *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
A060400	Screener Feed Conveyor *2010, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B010100	Whole Bean Aspirator No 1 *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B020100	Whole Bean Aspirator No 2 *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B010900	Whole Bean Aspirator Cyclone *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NSPS DD and NESHAP GGGG
B030800	Conditioned Bean Feed Conveyor *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B030900	Hull Collection Conveyor *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E130000	Hull Screener No.1 *2006	9.6	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E150000	Hull Screener No.2 *2006	9.6	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B440000	Secondary Hull Collection L-Path *2010, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B430000	Secondary Hull Collection Conveyor *2010, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E070300	4 Hour Hull Tank *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E080000	Pellet Cooler *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E090000	Pellet Cooler Cyclone *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E050200	Hull Hammer Mill Feeder *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
E050000	Hull Hammer Mill *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
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E050100	Hull Hammer Mill Plenum *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
G050100	Pelleted Hulls Leg *2006, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
G050300	Pelleted Hulls Storage Conveyor *2006, **2010, 2012, **2015	17.0	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
E050400	Hulls Addition Screw *2011, **2012	17.0	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
B010300	Conditioner Bean Loop Path *2006, **2012	264	Prep exhaust baghouse	Stack AF-3	Yes under NESHAP GGGG
AF-3 G100000	Prep exhaust baghouse *2006	28,900 acfm @ 0.005 grain/acf outlet grain loading		Stack AF-3	Yes under NESHAP GGGG

Note *Approved in the year indicated above for construction. Note **Approved in the year indicated above for modification.

(C)

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
C200100	Flaker Feed Loop Conveyor *2010, **2012	247	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C010600	Flake Collection Conveyor (12 flakers) *2006, **2010 and 2012	247	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C010000	Flaking Roll No. 1 *2013	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C020000	Flaking Roll No. 2 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C030000	Flaking Roll No. 3 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C040000	Flaking Roll No. 4 *2012	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C050000	Flaking Roll No. 5 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C060000	Flaking Roll No. 6 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C070000	Flaking Roll No. 7 *2012	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C080000	Flaking Roll No. 8 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C090000	Flaking Roll No. 9 *2006	22.9	Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C100000	Flaking Roll No. 10 *2013	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C0110000	Flaking Roll No. 11 *2009	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG
C0120000	Flaking Roll No. 12 *2009	22.9	***Flaker aspiration baghouse	Stack AF-4	Yes under NESHAP GGGG

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AF-4 C110000	Flaker aspiration baghouse *2006	24,000 acfm @ 0.005 grain/acf outlet grain loading		Stack AF-4	Yes under NESHAP GGGG
B040000	Hulloosenator No. 1 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B080100	Hulloosenator No. 2 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B130000	Hulloosenator No. 3 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B170000	Hulloosenator No. 4 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B050000	Cascade Dryer No. 1 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B090000	Cascade Dryer No. 2 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B140000	Cascade Dryer No. 3 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B180000	Cascade Dryer No. 4 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B210000	CCD Cyclone *2006, **2010	42,000 cfm	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B060000	Cracking Roll No.1 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B100000	Cracking Roll No.2 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B150000	Cracking Roll No.3 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B190000	Cracking Roll No.4 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B070000	Cascade Conditioner No. 1 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B110000	Cascade Conditioner No. 2 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B160000	Cascade Conditioner No. 3 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B200000	Cascade Conditioner No. 4 *2006, **2012	66.0	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
B230000	CCC Cyclone *2006, **2010	42,000 cfm	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
E130100	Secondary Aspirator No 1 *2006, **2010	9.6	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
E150100	Secondary Aspirator No 2 *2006, **2010	9.6	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
E160000	Secondary Aspirator Cyclone *2006, **2010	9.6	Hot dehulling baghouse	Stack AF-5	Yes under NESHAP GGGG
AF-5 B260000	Hot dehulling baghouse *2006	43,000 acfm @ 0.005 grain/acf outlet grain loading		Stack AF-5	Yes under NESHAP GGGG

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E020300Grinding Discharge (2011, "2012)198Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020400Hammer Kill Mixing (2006, "2012)198Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE010100'2006, "2012198Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE010300Meal Hammer Mill Feeder No.174.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020200Feeder No.174.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE030200Meal Hammer Mill Feeder No.174.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040200Meal Hammer Mill Feeder No.3 (switch) '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040200Meal Hammer Mill Feeder No.3 (switch) '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000Meal Hammer Mill No.2 '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000Meal Hammer Mill No.3 '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000Meal Hammer Mill No.3 '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000Meal Hammer Mill No.3 '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000Meal Hammer			1		1	
E020400Hammer Mill Mixing Conveyor 2006, **2011 and 2012198Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE010100Meal L-Path Conveyor *2006, **2012198Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE010300Meal Hammer Mill Feeder No. 1 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020200Meal Hammer Mill Feeder No. 2 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGE040200Meal Hammer Mill Feeder No. 2 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGE040200Meal Hammer Mill Feeder No. 3 (switch) *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000Meal Hammer Mill No. 1 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000Meal Hammer Mill No. 2 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000Meal Hammer Mill No. 2 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE030100Meal Hammer Mill No. 2 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE030100Meal Hammer Mill No. 3 (switch) *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE030100Meal Hammer Mill No. 5 *201274.0Meal Grinding Baghouse <td>E020300</td> <td>Grinding Discharge Conveyor *2011, **2012</td> <td>198</td> <td>Meal Grinding Baghouse</td> <td>Stack AF-6</td> <td>Yes under NESHAP GGGG</td>	E020300	Grinding Discharge Conveyor *2011, **2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E010100 Meal L-Path Conveyor 2006, "2012 198 Meal Grinding Baghouse Stack AF-6 Yes under NESHAP GGG E010300 Meal Hammer Mill Feeder No. 1 198 Meal Grinding Baghouse Stack AF-6 Yes under NESHAP GGGG E020200 Meal Hammer Mill Feeder No. 1 74.0 Meal Grinding Baghouse Stack AF-6 Yes under NESHAP GGGG E030200 Meal Hammer Mill Feeder No. 2 74.0 Meal Grinding Baghouse Stack AF-6 Yes under NESHAP GGGG E040200 Meal Hammer Mill Feeder No. 2 74.0 Meal Grinding Baghouse Stack AF-6 Yes under NESHAP GGGG E040200 Meal Hammer Mill No. 1 74.0 Meal Grinding Baghouse Stack AF-6 Yes under NESHAP GGGG E040000 Meal Hammer Mill No. 1 74.0 Meal Grinding Baghouse Stack AF-6 Yes under NESHAP GGGG E040000 Meal Hammer Mill Bin No. 2 74.0 Meal Grinding Baghouse Stack AF-6 Yes under NESHAP GGGG E020100 Meal Hammer Mill Bin No. 5 74.0 Meal Grinding Baghouse Stack AF-6 Yes under NESHAP GGGG E230200 Meal Hammer Mill Bin No. 5	E020400	Hammer Mill Mixing Conveyor *2006, **2011 and 2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E010300Meal Hammer Mill Feed Conveyor *2006. **2012198Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020200Meal Hammer Mill Peeder No. 1 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE030200Meal Hammer Mill Peeder No. 2 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040200Meal Hammer Mill Peeder No. 3 (switch) *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020000Meal Hammer Mill No. 1 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020000Meal Hammer Mill No. 3 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000Meal Hammer Mill No. 3 (switch) *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020100Meal Hammer Mill No. 3 (switch) *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040100No. 1 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040100No. 5 *201274.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE230200Meal Hammer Mill No. 5 *201274.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE230200Meal Hammer Mill No. 5 *201274.0Meal Grinding BaghouseStack AF-6Yes under NE	E010100	Meal L-Path Conveyor *2006, **2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E020200Meal Hammer Mill Feeder No. 1 '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE030200Feeder No. 2 '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040200Meal Hammer Mill Feeder No. 3 (switch) '200674.0Meal Grinding 	E010300	Meal Hammer Mill Feed Conveyor *2006, **2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E030200Meal Hammer Mill Feeder No. 2 '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040200Feeder No. 3 (switch) '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020000Meal Hammer Mill No. 2 '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE030000Meal Hammer Mill No. 2 '200674.0Meal Grinding BaghouseStack AF-6Yes under 	E020200	Meal Hammer Mill Feeder No. 1 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E040200Meal Hammer Mill Feeder No. 3 (switch) *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020000Meal Hammer Mill No. 1 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000Meal Hammer Mill No. 3 (switch) *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000Meal Hammer Mill No. 3 (switch) 	E030200	Meal Hammer Mill Feeder No. 2 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E020000Meal Hammer Mill No. 1 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGE030000Meal Hammer Mill No. 2 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000Meal Hammer Mill Bin *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020100No. 1 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020100No. 1 	E040200	Meal Hammer Mill Feeder No. 3 (switch) *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E030000Meal Hammer Mill No. 2 '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040000(switch) '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020100Meal Hammer Mill Bin No. 1 '200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020100Meal Hammer Mill Bin No. 2 '200674.0Meal Grinding 	E020000	Meal Hammer Mill No. 1 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E040000Meal Hammer Mill No. 3 (switch) *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE020100No. 1*200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE030100No. 2 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040100No. 2 	E030000	Meal Hammer Mill No. 2 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E020100Meal Hammer Mill Bin No. 1 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE030100Meal Hammer Mill Bin No. 2 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040100Meal Hammer Mill Bin No. 3 (switch) 	E040000	Meal Hammer Mill No. 3 (switch) *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E030100Meal Hammer Mill Bin No. 2 *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE040100Meal Hammer Mill Bin No. 3 (switch) *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE230200Meal Hammer Mill Feeder No. 5 *201274.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE230200Meal Hammer Mill No. 5 	E020100	Meal Hammer Mill Bin No. 1 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E040100Meal Hammer Mill Bin No. 3 (switch) *200674.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE230200Meal Hammer Mill Feeder No. 5 *201274.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE230000Meal Hammer Mill No. 5 *201274.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE230100Meal Hammer Mill Bin No. 5 	E030100	Meal Hammer Mill Bin No. 2 *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E230200Meal Hammer Mill Feeder No. 5 *201274.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE230000Meal Hammer Mill No. 5 *201274.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE230100Meal Hammer Mill Bin No. 5 *201274.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGG010300Meal Leg *2006, *2010 and 2012198Meal Grinding 	E040100	Meal Hammer Mill Bin No. 3 (switch) *2006	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E230000Meal Hammer Mill No. 5 *201274.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGE230100Meal Hammer Mill Bin No. 5 *201274.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGG010300Meal Leg *2006, **2010 and 2012198Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGG150000Meal Conveyor to Loadout *2006, **2012, ** 2015198Meal Loadout 	E230200	Meal Hammer Mill Feeder No. 5 *2012	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
E230100Meal Hammer Mill Bin No. 5 *201274.0Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGG010300Meal Leg *2006, **2010 and 2012198Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGG150000Meal Conveyor to Loadout *2006, **2012, ** 2015198Meal Loadout Baghouse AF-1Stack AF-6Yes under NESHAP GGGGAF-6 E110000Mill Grinding Baghouse 	E230000	Meal Hammer Mill No. 5 *2012	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
G010300Meal Leg *2006, **2010 and 2012198Meal Grinding BaghouseStack AF-6Yes under NESHAP GGGGG150000Meal Conveyor to Loadout *2006, **2012, ** 2015198Meal Loadout Baghouse AF-1Stack AF-1Yes under NESHAP GGGGAF-6 E110000Mill Grinding Baghouse *200618,000 	E230100	Meal Hammer Mill Bin No. 5 *2012	74.0	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
G150000Meal Conveyor to Loadout *2006, **2012, ** 2015198Meal Loadout Baghouse AF-1Stack AF-1Yes under NESHAP GGGGAF-6 E110000Mill Grinding Baghouse *200618,000 acfm @ 0.005 grain/acf outlet grain loadingStack AF-6Yes under 	G010300	Meal Leg *2006, **2010 and 2012	198	Meal Grinding Baghouse	Stack AF-6	Yes under NESHAP GGGG
AF-6 E110000Mill Grinding Baghouse *200618,000 acfm @ 0.005 grain/acf outlet grain loadingStack AF-6Yes under NESHAP GGGGB010000VSC No. 1 	G150000	Meal Conveyor to Loadout *2006, **2012, ** 2015	198	Meal Loadout Baghouse AF-1	Stack AF-1	Yes under NESHAP GGGG
B010000 VSC No. 1 *2006, **2012 132 VSC Cyclone No. 1 Stack S-1 Yes under NESHAP GGGG B020000 VSC No. 2 *2006, **2012 132 VSC Cyclone No. 2 Stack S-6 Yes under NESHAP GGGG B010500 VSC Air Heater No. 1 *2006, **2012 264 VSC Cyclone No. 1 Stack S-1 Yes under NESHAP GGGG	AF-6 E110000	Mill Grinding Baghouse *2006	18,000 acfm @ 0.005 grain/acf outlet grain loading		Stack AF-6	Yes under NESHAP GGGG
*2006, **2012 102 102 100 of state of a line of a li	B010000	VSC No. 1	132	VSC Cyclone No. 1	Stack S-1	Yes under
2006, **2012 102 102 102 102 NESHAP GGGG B010500 VSC Air Heater No. 1 *2006, **2012 264 VSC Cyclone No. 1 Stack S-1 Yes under NESHAP GGGG	B020000	*2006, **2012 VSC No. 2	132	VSC Cyclone No. 2	Stack S-6	NESHAP GGGG Yes under
	B010500	*2006, **2012 VSC Air Heater No. 1	264	VSC Cyclone No. 1	Stack S-1	Yes under

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B020500	VSC Air Heater No. 2 *2015	264	VSC Cyclone No. 2	Stack S-6	Yes under NESHAP GGGG
B010700	VSC Cyclone No. 1 *2006, **2010	42,000 cfm		Stack S-1	Yes under NESHAP GGGG
B020700	VSC Cyclone No. 2 *2015	42,000 cfm		Stack S-6	Yes under NESHAP GGGG
B120000	Jet Dryer No. 1 *2006, **2010 and 2012	132	Jet Dryer Baghouse AF-8	Stack S-1	Yes under NESHAP GGGG
B030000	Jet Dryer No. 2 *2006, **2012	132	Jet Dryer Baghouse AF-9	Stack S-1	Yes under NESHAP GGGG
B120100A	Jet Dryer Baghouse AF- 8	74,000 acfm		Stack S-1	Yes under NESHAP GGGG
B120100B	Jet Dryer Baghouse AF- 9	74,000 acfm		Stack S-1	Yes under NESHAP GGGG

Note *Approved in the year indicated above for construction. Note **Approved in the year indicated above for modification. Note ***The Flaker aspiration baghouse has been determined to be integral to the process for this unit.

(d)

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
D010000	Soybean oil extractor *2006, **2010 and 2012	264	Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
	One (1) set of evaporators *2006		Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
D020000	One (1) Desolventizer/toaster *2006, **2010		Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
	One (1) set of water separators *2006		Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
D060000	Main Vent Condenser *2006		Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
	Five (5) hexane storage tank *2006 for original tank, and 2010 for other tanks **2010 for original tank	20,690 gallons each	Mineral oil absorber	Stack S-4	Yes under NESHAP GGGG
1220000	One (1) soybean oil pre- treat Tank *2010	35,170 gallons			Yes under NESHAP GGGG
	Three (3) soybean oil storage tank (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) *2006 for original tank and 2010 for other tanks, **2010 for original tank	725,000 gallons each			Yes under NESHAP GGGG
D070000	Mineral oil absorber *2006			Stack S-4	Yes under NESHAP GGGG
D310000-1	DC Deck No. 1 *2006, **2010 and 2012	208	DC Deck Cyclone No. 1	Stack S-2	Yes under NESHAP GGGG
D310000-2	DC Deck No. 2 *2006, **2010, 2011, and 2012	208	DC Deck Cyclone No. 2	Stack S-2	Yes under NESHAP GGGG

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D310000-3	DC Deck No. 3	208	DC Deck Cyclone	Stack S-2	Yes under
D310000-4	DC Deck No. 4	208	DC Deck Cyclone	Stack S-2	Yes under
D310700	DC Deck Cyclone No. 1 *2006, **2010 and 2011	18,000 scfm	NO. 4	Stack S-2	Yes under NESHAP GGGG
D310800	DC Deck Cyclone No. 2 *2006, **2010 and 2011	18,000 scfm		Stack S-2	Yes under NESHAP GGGG
D310900	DC Deck Cyclone No. 3 *2010, ** 2011	18,000 scfm		Stack S-2	Yes under NESHAP GGGG
D311000	DC Deck Cyclone No. 4 *2010, **2011	18,000 scfm		Stack S-2	Yes under NESHAP GGGG

Note *Approved in the year indicated above for construction.

Note **Approved in the year indicated above for modification.

(g)

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?
G010000	Meal Bin No. 1*** *2006, **2010, 2011, and 2012	198	Meal Bin Filter No. 1	Stack MBF-1	Yes under NESHAP GGGG
G020000	Meal Bin No. 2*** *2006, **2010, 2011, and 2012	198	Meal Bin Filter No. 2	Stack MBF-2	Yes under NESHAP GGGG
G030000	Meal Bin No. 3*** *2006, **2010, 2011, and 2012	198	Meal Bin Filter No. 3	Stack MBF-3	Yes under NESHAP GGGG
G040000	Meal Bin No. 4*** *2006, **2010, 2011, and 2012	198	Meal Bin Filter No. 4	Stack MBF-4	Yes under NESHAP GGGG
G050000	Meal Bin No. 5*** *2010, **2011 and 2012	198	Meal Bin Filter No. 5	Stack MBF-5	Yes under NESHAP GGGG

Note *Approved in the year indicated above for construction.

Note **Approved in the year indicated above for modification.

Note ***There are five meal bins. However, the plant is only physically capable of loading one meal bin at a time. Thus, the PTE for these units is calculated at a rate of 198 tons/hr for all five meal bins combined.

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

E.8.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR 63, Subpart A]

- (a) Pursuant to 40 CFR 63.2870, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, as specified in Table 1 of 40 CFR 63.2870, Subpart GGGG in accordance with the schedule in 40 CFR 63, Subpart GGGG.
- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

E.8.2 National Emission Standard for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production [40 CFR Part 63, Subpart GGGG][326 IAC 20-60]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart GGGG (included as Attachment H of this permit), which are incorporated by reference as 326 IAC 20-60:

- (1) 40 CFR 63.2830
- (2) 40 CFR 63.2831
- (3) 40 CFR 63.2832(a)
- (4) 40 CFR 63.2833
- (5) Table 1 to 63.2833(6)
- (6) 40 CFR 63.2834
- (7) Table 1 of 63.2834(c)
- (8) 40 CFR 63.2840(a), (b), (c),(d), and (f)
- (9) Table 1 of 63.2840(ix)
- (10) 40 CFR 63.2850(a), (c), (d), and (e)
- (11) Table 1 of 63.2850
- (12) Table 2 of 63.2850(b), and (c)
- (13) 40 CFR 63.2851
- (14) 40 CFR 63.2852
- (15) 40 CFR 63.2853
- (16) Table 1 of 63.2853
- (17) 40 CFR 63.2854
- (18) 40 CFR 63.2855
- (19) 40 CFR 63.2860(b), (c), and (d)
- (20) 40 CFR 63.2861
- (21) 40 CFR 63.2862
- (22) 40 CFR 63.2863
- (23) 40 CFR 63.2870
- (24) Table 1 of 63.2870
- (25) 40 CFR 63.2871
- (26) 40 CFR 63.2872

SECTION E.9

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Insignificant Activities

Description	Capacity	Control	Affected Facility?
Three (3) Emergency Diesel Fire Pumps [326 IAC 2-2] *2006	575 BHP each	None	Yes under NSPS IIII and NESHAP ZZZZ
One (1) natural gas- fired emergency generator *2013	3.413 MMBtu per hour (>500 HP)	None	Yes under NSPS JJJJ and NESHAP ZZZZ

Note *Approved in the year indicated above for construction.

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

E.9.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR 63, Subpart A]

- (a) Pursuant to 40 CFR 63.6665, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, as specified in Table 8 of 40 CFR 63, Subpart ZZZZ in accordance with the schedule in 40 CFR 63, Subpart ZZZZ.
- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

E.9.2 National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ][326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment I of this permit), which are incorporated by reference as 326 IAC 20-82:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585(a) and (b)
- (3) 40 CFR 63.6590(a)(2)(i)
- (4) 40 CFR 63.6590(b)(1)(i)
- (5) 40 CFR 63.6645(f)
- (6) 40 CFR 63.6665
- (7) 40 CFR 63.6670(a)
- (8) 40 CFR 63.6675



SECTION E.10

Natural Gas-Fired

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:								
(f)								
Unit ID	Descrip	tion	Сара	acity	Control		Discharging to Stack	Affected Facility?
B-1	Main Bo fired an back up *2006	biler, natural gas d #2 fuel oil as 9 fuel	220 MME	220 MMBtu/hr Low NOx burner and Flue gas recirculation		ər	Stack S-3	Yes under NSPS Db and NESHAP DDDDD
Note *A	pproved	in the year indic	cated	above f	or construction.	•		
Insignificant Act	ivities:							
Description Capacity			Control Affected Faci		Facility?			
Hot Oil Heater 6 MMBtu/h				None		Yes, Under NESHAP DDDDD		
Glycerin Boiler *2013		10 MMBtu/h	r		None	Yes, Under NSPS Dc & NESHAP DDDDD		S Dc & NESHAP DD

Glycerin Steam Boiler, 1.0 MMBtu/hr None Yes, Under NESHAP DDDDD *2014

Note *Approved in the year indicated above for construction.

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

E.10.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR 63, Subpart A]

- (a) Pursuant to 40 CFR 63.7565, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, as specified in Table 10 of 40 CFR 63.7480, Subpart DDDDD in accordance with the schedule in 40 CFR 63, Subpart DDDDD.
- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

 E.10.2 National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD][326 IAC 20-95]
 The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DDDDD (included as Attachment J of this permit), for Main Boiler (B-1), Glycerin Boiler and Hot Oil Heater which are incorporated by reference as 326 IAC 20-95: Louis Dreyfus Agricultural Industries LLC Claypool, Indiana Permit Reviewer: Sarah Conner, Ph. D.

DRAFT

Main B	Boiler (B-1)
(1)	40 CFR 63.7480;
(2)	40 CFR 63.7485;
(3)	40 CFR 63.7490(a);
(4)	40 CFR 63.7495(b), (d);
(5)	40 CFR 63.7499;
(6)	40 CFR 63.7500(a), (b), (f);
(7)	40 CFR 63.7501;
(8)	40 CFR 63.7505(a);
(9)	40 CFR 63.7510(g);
(10)	40 CFR 63.7515;
(11)	40 CFR 63.7520;
(12)	40 CFR 63.7521;
(13)	40 CFR 63.7525(a), (c);
(14)	40 CFR 63.7530;
(15)	40 CFR 63.7533;
(16)	40 CFR 63.7535;
(17)	40 CFR 63.7540(a), (b), (d);
(18)	40 CFR 63.7545;
(19)	40 CFR 63.7550;
(20)	40 CFR 63.7555;
(21)	40 CFR 63.7560;
(22)	40 CFR 63.7565;
(23)	40 CFR 63.7570;

- (24) 40 CFR 63.7575;
- (25) Table 2 to 40 CFR 63 Subpart DDDDD;
- (26) Table 3 to 40 CFR 63 Subpart DDDDD;
- (27) Table 4 to 40 CFR 63 Subpart DDDDD;
- (28) Table 5 to 40 CFR 63 Subpart DDDDD;
- (29) Table 6 to 40 CFR 63 Subpart DDDDD;
- (30) Table 7 to 40 CFR 63 Subpart DDDDD;
- (31) Table 8 to 40 CFR 63 Subpart DDDDD;
- (32) Table 9 to 40 CFR 63 Subpart DDDDD;
- (33) Table 10 to 40 CFR 63 Subpart DDDDD.

Glycerin Boilers

- (1) 40 CFR 63.74780;
- (2) 40 CFR 63.7485;
- (3) 40 CFR 63.7490(a), (b);
- (4) 40 CFR 63.7495(a), (d);
- (5) 40 CFR 63.7499;
- (6) 40 CFR 63.7500(e);
- (7) 40 CFR 63.7501;
- (8) 40 CFR 63.7505(a);
- (9) 40 CFR 63.7510(g);
- (10) 40 CFR 63.7515;
- (11) 40 CFR 63.7520;
- (12) 40 CFR 63.7521(f)(1);
- (12) 40 CFR 03.7521(1)(1),
- (13) 40 CFR 63.7530;
- (14) 40 CFR 63.7540;
- (15) 40 CFR 63.7545(c);
- (16) 40 CFR 63.7550;
- (17) 40 CFR 63.7555;
- (18) 40 CFR 63.7560;
- (19) 40 CFR 63.7565;
- (20) 40 CFR 63.7570;
- (21) 40 CFR 63.7575;
- (22) Table 3 to 40 CFR 63 Subpart DDDDD;
- (23) Table 9 to 40 CFR 63 Subpart DDDDD;
- (24) Table 10 to 40 CFR 63 Subpart DDDDD.

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Hot Oil Heater

- 40 CFR 63.74780;
 40 CFR 63.7485;
- (2) 40 CFR 63.7485;
 (3) 40 CFR 63.7490(a),
- (3) 40 CFR 63.7490(a), (b);
 (4) 40 CFR 63.7495(a), (d);
- (5) 40 CFR 63.7499;
- (6) 40 CFR 63.7500(e);
- (7) 40 CFR 63.7501;
- (8) 40 CFR 63.7505(a);
- (9) 40 CFR 63.7510(g);
- (10) 40 CFR 63.7515;
- (11) 40 CFR 63.7521(f)(1);
- (12) 40 CFR 63.7530;
- (13) 40 CFR 63.7540;
- (14) 40 CFR 63.7545(c);
- (15) 40 CFR 63.7550;
- (16) 40 CFR 63.7555;
- (17) 40 CFR 63.7560;
- (18) 40 CFR 63.7565;
- (19) 40 CFR 63.7570;
- (20) 40 CFR 63.7575;
- (21) Table 9 to 40 CFR 63 Subpart DDDDD;
- (22) Table 10 to 40 CFR 63 Subpart DDDDD.

SECTION E.11

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Insignificant Activities

Description	Capacity	Control	Affected Facility?
One (1) natural gas- fired emergency generator *2013	3.413 MMBtu per hour (>500 HP)	None	Yes under NSPS JJJJ and NESHAP ZZZZ

Note *Approved in the year indicated above for construction.

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

E.11.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, except when otherwise specified in 40 CFR Part 60, Subpart JJJJ (included as Attachment K of this permit).

E.11.2 New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines [326 IAC 12][40 CFR Part 60, Subpart JJJJ]

The natural gas-fired emergency generator shall comply with the following provisions of 40 CFR Part 60, Subpart JJJJ (included as Attachment K of this permit):

- (1)40 CFR Part 60.4230
- (2)40 CFR Part 60.4233
- (3) 40 CFR Part 60.4234
- (4) 40 CFR Part 60.4236
- (5) 40 CFR Part 60.4237
- (6)40 CFR Part 60.4243
- (7)40 CFR Part 60.4244
- (8) 40 CFR Part 60.4245
- (9) 40 CFR Part 60.4246 40 CFR Part 60.4248
- (10)
- Table 1 (11)
- Table 2 (12)
- Table 3 (13)

SECTION E.12 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Insignificant Activities

Description	Capacity	Control	Affected Facility?
Glycerin Boiler *2013	10 MMBtu/hr	None	Yes, Under NSPS Dc & NESHAP DDDDD

Note *Approved in the year indicated above for construction.

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

E.12.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, except when otherwise specified in 40 CFR Part 60, Subpart Dc (included as Attachment L of this permit).

E.12.2 New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units [326 IAC 12][40 CFR Part 60, Subpart Dc]

The natural gas-fired glycerin boiler shall comply with the following provisions of 40 CFR Part 60, Subpart Dc (included as Attachment L of this permit):

- (1) 40 CFR Part 60.300
- (2) 40 CFR Part 60.301
- (3) 40 CFR Part 60.302(a)(1), (b), (c)(1), (c)(2), and (c)(3)
- (4) 40 CFR Part 60.303
- (5) 40 CFR Part 60.304



SECTION E.13

EMISSIONS UNIT OPERATION CONDITIONS

Emiss	sions Unit	Description:					
(e)		-					
Unit I	Jnit ID Description		Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility	d ?
Biodi Distil	Biodiesel Biodiesel Distillation Distillation *2013		15	Mineral Oil Absorber and water absorber	Stack S-5	Yes und NSPS \ NSPS I NESHA	der ∕Va, NNN& ∖P FFFF
	Note *Ap	proved in the year indi	cated above for con	struction.			
Insigr	nificant Ad	ctivities:					
	Descriptio	n	Capacity	Control	Affected Facility	/?	
Glycerin Refinery *2013, **2014		7.0 tons per hour	None	Yes, Under N VVa, NSPS and NESHAP	NSPS NNN, FFFF		
	Glycerin Truck/ Rail Loadout 7.0 t		7.0 tons per hour	None	Yes, Under N VVa and NES FFFF	NSPS SHAP	
	Glycerin \	fellow Tank	8,000 gallons	None	Yes, Under NSPS VVa and NESHAP FFFF		
	Glycerin \	ellow Tank 1	50,000 gallons	None	Yes, Under NSPS VVa and NESHAP FFFF		
	Glycerin \	fellow Tank 2	50,000 gallons	None	Yes, Under N VVa and NES FFFF	NSPS SHAP	
	Glycerin \	fellow Tank 3	50,000 gallons	None	Yes, Under N VVa and NES FFFF	NSPS SHAP	
	Glycerin \	ellow Tank 4	50,000 gallons	None	Yes, Under N VVa and NES FFFF	NSPS SHAP	

Note *Approved in the year indicated above for construction.

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

E.13.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, except when otherwise specified in 40 CFR Part 60, Subpart VVa (included as Attachment M of this permit).

E.13.2 New Source Performance Standards (NSPS) Equipment Leaks for VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction or Modification Commenced after November 7, 2006 [326 IAC 12][40 CFR Part 60, Subpart VVa]

The Biodiesel Distillation and Glycerin Refinery shall comply with the following provisions of 40 CFR Part 60, Subpart VVa (included as Attachment M of this permit):

DRAFT

(1)	40 CFR Part 60.480a
(2)	40 CFR Part 60.481a
(3)	40 CFR Part 60.482-1a
(4)	40 CFR Part 60.482-2a
(5)	40 CFR Part 60.482-3a
(6)	40 CFR Part 60.482-4a
(̈́́́́́́́́́)	40 CFR Part 60.482-5a
(8)	40 CFR Part 60.482-6a
(9)	40 CFR Part 60.482-7a
(10)	40 CFR Part 60.482-8a
(11)	40 CFR Part 60.482-9a
(12)	40 CFR Part 60.482-10a
(13)	40 CFR Part 60.482-11a
(14)	40 CFR Part 60.483-1a
(15)	40 CFR Part 60.483-2a
(16)	40 CFR Part 60.484a
(17)	40 CFR Part 60.485a
(18)	40 CFR Part 60.486a
(19)	40 CFR Part 60.487a
(20)	40 CFR Part 60.488a
(21)	40 CFR Part 60.489a

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH PART 70 OPERATING PERMIT Certification

Source Name:Louis Dreyfus Agricultural Industries LLCSource Address:7344 State Road 15 South, Claypool, Indiana 46510-9746Part 70 Permit No.:T085-29197-00102

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:
Phone:
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

PART 70 OPERATING PERMIT Emergency Occurrence Report

Source Name:Louis Dreyfus Agricultural Industries LLCSource Address:7344 State Road 15 South, Claypool, Indiana 46510-9746Part 70 Permit No.:T085-29197-00102

This form consists of 2 pages

Page 1 of 2

□ This is an emergency as defined in 326 IAC 2-7-1(12) The Permittee must notify the Office of Air Quality (OAQ), no later than four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and The Permittee must submit notice in writing or by facsimile no later than two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

Louis Dreyfus Agricultural Industries LLC Claypool, Indiana Permit Reviewer: Sarah Conner, Ph. D. Significant Source Modification No.: 085-35870-00102 Modified by: Tamera Wessel	Page 121 of 132 T085-29197-00102
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 Describe:	Ν
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _X , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are imminent injury to persons, severe damage to equipment, substantial loss of ca of product or raw materials of substantial economic value:	necessary to prevent apital investment, or loss
<u> </u>	

Form Completed by:_____

Title / Position: _____

Date:		

Phone: _____

Part 70 Quarterly Report

Source Name:Louis Dreyfus Agricultural Industries LLCSource Address:7344 State Road 15 South, Claypool, Indiana 46510-9746Part 70 Permit No.:T085-29197-00102Facility:Grain Receiving/Meal Loadout and Prep AreaParameter:Soybeans processedLimit:shall be less than 2,251,836 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____YEAR: _____

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

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

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

Part 70 Quarterly Report

Source Name:Louis Dreyfus Agricultural Industries LLCSource Address:7344 State Road 15 South, Claypool, Indiana 46510-9746Part 70 Permit No.:T085-29197-00102Facility:Biodiesel ManufacturingParameter:Purchased seed oilLimit:shall be less than 80 million gallons per twelve (12) consecutive month period,
with compliance determined at the end of each month.

QUARTER: _____YEAR: _____

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

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

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

Part 70 Quarterly Report

Source Name:Louis Dreyfus Agricultural Industries LLCSource Address:7344 State Road 15 South, Claypool, Indiana 46510-9746Part 70 Permit No.:T085-29197-00102Facility:Biodiesel ReactorParameter:Seed oil processed to manufacture biodieselLimit:shall be less than 110,000,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER:_____YEAR:_____

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

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

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

Part 70 Quarterly Report

Source Name:Louis Dreyfus Agricultural Industries LLCSource Address:7344 State Road 15 South, Claypool, Indiana 46510-9746Part 70 Permit No.:T085-29197-00102Facility:Main BoilerParameter:#2 fuel oilLimit:shall be less than 7,000,000 gallons per twelve (12) consecutive month period,
with compliance determined at the end of each month.

QUARTER:_____YEAR:_____

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

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

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

Part 70 Quarterly Report

Source Name:	Louis Dreyfus Agricultural Industries LLC
Source Address:	7344 State Road 15 South, Claypool, Indiana 46510-9746
Part 70 Permit No.:	T085-29197-00102
Facility:	Biodiesel Manufacturing Process with Methanol Tank Loading
Parameter:	Operating Hours
Limit:	shall be less than 1,000 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____YEAR:

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

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

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

Part 70 Quarterly Report

Source Name:	Louis Dreyfus Agricultural Industries LLC
Source Address:	7344 State Road 15 South, Claypool, Indiana 46510-9746
Part 70 Permit No.:	T085-29197-00102
Facility:	Biodiesel Manufacturing Process upset operation
Parameter:	Operating Hours
Limit:	shall be less than 24 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____YEAR:

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

 \Box No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
 Deviation has been reported on:

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

Part 70 Quarterly Report

Source Name:Louis Dreyfus Agricultural Industries LLCSource Address:7344 State Road 15 South, Claypool, Indiana 46510-9746Part 70 Permit No.:T085-29197-00102Facility:Biodiesel Loading RacksParameter:Throughout RateLimit:shall be less than 110,000,000 gallons per twelve (12) consecutive month periodwith compliance determined at the end of each month.

QUARTER:_____YEAR:_____

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

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

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

Part 70 Quarterly Report

Source Name:Louis Dreyfus Agricultural Industries LLCSource Address:7344 State Road 15 South, Claypool, Indiana 46510-9746Part 70 Permit No.:T085-29197-00102Facility:Storage Bean Piles #1 and #2Parameter:Soybean throughputLimit:shall be less than 8,000,000 bushels per twelve (12) consecutive month period
with compliance determined at the end of each month.

QUARTER:_____YEAR:_____YEAR:_____

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

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

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



Part 70 Quarterly Report

Source Name: Source Address: Part 70 Permit No.: Facility: Parameter: Limit: Louis Dreyfus Agricultural Industries LLC 7344 State Road 15 South, Claypool, Indiana 46510-9746 T085-29197-00102 Overall source Solvent Loss Ratio The overall solvent loss ratio shall not exceed 0.141 gallons per ton of soybean crushed from the whole plant per twelve (12) consecutive month period, with compliance determined at the end of each month. The Permittee shall also follow the leak detection and repair program as part of BACT.

QUARTER:	YEAR:
----------	-------

Month	Hexane Usage This Month (gal)	Total Grain Processed This Month (tons)	Solvent Loss Ratio (gal/ton)

Solvent Loss Ratio (gal/ton) = Hexane Usage for This Month (gal) / Total Grain Processed for This Month (tons)

No deviation occurred in this quarter.

Deviations occurred in this quarter.
 Deviation has been reported on:

Submitted By: _____

Title/Position:

Signature:

Date:

Phone:

INDIANA DE CO Quarterl	PARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY MPLIANCE AND ENFORCEMENT BRANCH PART 70 OPERATING PERMIT y Deviation and Compliance Monitoring Report
Source Name:	Louis Dreyfus Agricultural Industries LLC
Source Address:	7344 State Road 15 South, Claypool, Indiana 46510-9746
Part 70 Permit No.:	T085-29197-00102

Months: _____ to ____Year: ___

Page 1 of 2

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

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

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



Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Form Completed by:	
Title / Position:	
Date:	

Phone: _____

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification and Significant Permit Modification

Source Description and Location

Source Name: Source Location: County:	Louis Dreyfus Agricultural Industries, LLC 7344 State Road 15 South, Claypool, IN 46510 Kosciusko
SIC Code:	2075 (Soybean Oil Mills), 2079 (Edible Fats and Oils), and 2869 (Industrial Organic Chemicals, NEC)
Operation Permit No.:	T085-29197-00102
Operation Permit Issuance Date:	November 22, 2011
Significant Source Modification No.:	085-35870-00102
Significant Permit Modification No.:	085-35910-00102
Permit Reviewer:	Tamera Wessel

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T085-29197-00102 on November 22, 2011. The source has since received the following approvals:

Permit Type	Permit Number	Issuance Date
Significant Permit Modification	085-31343-00102	04-18-2012
Administrative Amendment	085-31787-00102	05-23-2012
Interim Significant Source Modification	085-319601-00102	08-30-2012
Significant Source Modification	085-31960-00102	09-21-2012
Significant Permit Modification	085-31979-00102	10-11-2012
Interim Minor Source Modification	085-328461-00102	04-01-2013
Minor Source Modification	085-32846-00102	04-10-2013
Significant Permit Modification	085-32885-00102	06-07-2013
Interim Significant Source Modification	085-333921-00102	08-16-2013
Significant Source Modification	085-33392-00102	11-07-2013
Significant Permit Modification	085-33481-00102	11-25-2013
Minor Source Modification	085-33870-00102	12-17-2013
Minor Permit Modification	085-33904-00102	02-13-2014
Administrative Amendment	085-35037-00102	12-16-2014
Significant Permit Modification	085-35219-00102	Pending

County Attainment Status

The source is located in Kosciusko County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
PM _{2.5}	Unclassifiable or attainment effective April 5, 2005, for the annual PM2.5 standard.
PM _{2.5}	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM2.5 standard.
NO ₂	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
¹ Unclassifiable effective June	e or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked

(a) Ozone Standards

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

(b) PM_{2.5}

Kosciusko County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants

Kosciusko County has been classified as attainment or unclassifiable in Indiana for all other regulated pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

- (a) Louis Dreyfus is a nested source, with a biodiesel production plant (one of the twenty-eight (28) listed source categories) and a soybean oil extraction plant (a non-listed source). Therefore, the fugitive emissions from the biodiesel production plant (including the associated paved road emissions) are counted toward the determination of PSD, Emission Offset, and Part 70 applicability. However, the fugitive emissions from the soybean oil extraction plant are not counted toward the determination of PSD, Emission Offset, and Part 70 applicability, except as required in paragraph (b).
- (b) There is an applicable New Source Performance Standard that was in effect on August 7, 1980. Therefore, fugitive emissions from the grain elevator (including the associated paved road emissions) are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Source Status - Existing Source

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

Entire Source (Soybean Oil Extraction Plant & Biodiesel Plant)		
Pollutant	Emissions (ton/yr)	
PM	245.02	
PM ₁₀	169.34	
PM _{2.5}	152.35	
SO ₂	249.05	
VOC	193.09	
CO	99.84	
NO _X	166.29	
Single HAP	207.21 (Hexane)	
Total HAP	469.31	

Biodiesel Plant		
Pollutant	Emissions (ton/yr)	
PM	20.66	
PM ₁₀	8.13	
PM _{2.5}	5.69	
SO ₂	0.04	
VOC	22.25	
CO	6.13	
NO _X	7.30	
Single HAP	4.31 (Methanol)	
Total HAP	21.98	

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at <u>http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf</u>) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

- (a) This existing source consists of a soybean oil extraction plant (primary operation and a non-listed source) and a biodiesel production plant (one of the 28 listed source categories, which is a nested source for PSD applicability determination).
 - (1) The biodiesel production plant (one of the 28 source categories) is considered "nested" within a non-listed source. This existing biodiesel plant is a minor stationary source, under PSD (326 IAC 2-2) because no regulated pollutant is emitted at 100 tons per year or more.

- (2) The entire source (soybean oil extraction plant and the biodiesel production plant) is an existing minor stationary source under PSD (326 IAC 2-2) because no regulated pollutant is emitted at a rate of 250 tons per year or more.
- (b) This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).
- (c) These emissions are based upon the Appendix A emissions calculations for Significant Permit Modification No. 085-35219-00102, public noticed on July 7, 2015.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Louis Dreyfus Agricultural Industries, LLC (LDAI) on May 27, 2015, relating to the addition of a new Vertical Seed Conditioner (VSC) air heater (VSC Air Heater No. 2, B020500) and cyclone (VSC Cyclone No. 2, B020700) to its soybean processing operations.

The following is a list of the affected emission units and new pollution control device:

Unit ID	Description	Capacity ¹ (tons/hr)	Control	Discharging to Stack	Affected Facility?
B020500	VSC Air Heater No. 2 *2015	264	VSC Cyclone No. 2	Stack S-6	Yes under NESHAP GGGG

Notes: *Approved in the year indicated above for construction.

¹The maximum design capacity of the VSC air heater is 264 tons per hour; however, the vertical seed conditioner feeding the VSC air heater has a maximum output of 132 tons per hour, resulting in a potential bottleneck. It is possible for a process throughput configuration to exist, which could allow the option for both vertical seed conditioners to feed a single VSC air heater. Therefore, IDEM, OAQ has based the potential to emit calculations and State rule applicability determinations on the maximum design capacity of 264 tons per hour.

Enforcement Issues

There are no pending enforcement actions.

Stack Summary					
Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
S-6	VSC Air Heater No. 2, VSC Cyclone No. 2	145.00	3.67	42,000	125

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical

or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Increase in PTE Before Controls of the Modification						
Pollutant	Potential To Emit (ton/yr)					
PM	254.39					
PM ₁₀	63.60					
PM _{2.5}	10.87					
SO ₂	0					
VOC	0					
CO	0					
NO _X	0					
Single HAPs	0					
Total HAPs	0					

This source modification is subject to 326 IAC 2-7-10.5(g)(4)(a) because the potential to emit PM and PM10 is each greater than twenty-five (25) tons per year before control. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because the modification requires significant changes in existing Part 70 monitoring permit terms and conditions.

Permit Level Determination – PSD

This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit PM, PM10, and PM2.5 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 not applicable, the Permittee shall comply with the following PM, PM_{10} , and $PM_{2.5}$ limits:

(a) The PM, PM₁₀, and PM_{2.5} emissions from the following Processes shall be less than the emission limits listed in the table below:

Process	Control	PM Limit (Ibs/hour)	PM ₁₀ Limit (Ibs/hour)	PM _{2.5} Limit (Ibs/hour)
Jet Dryer No. 1 and No. 2 VSC Air Heater No. 1 and No. 2 and VSC No. 1 and No. 2	Jet Dryer Baghouses and VSC Cyclones No. 1 & No. 2	4.93	3.35	3.35

Compliance with these limits, in combination with the soybean usage limit in Condition D.1.1(a) and with the PM, PM_{10} , and $PM_{2.5}$ emission limits in Conditions D.1.1(b), D.1.1(c), D.3.1, D.5.1, D.6.1, and D.7.1, and with the potential to emit PM, PM_{10} , and $PM_{2.5}$ from all other emission units at this source, shall limit the PM, PM_{10} , and $PM_{2.5}$ emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 source modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Source Wide Emissions After Issuance (ton/yr)							
Process/ Emission Unit	PM	PM10	PM2.5	SO ₂	NOx	VOC	со	Total HAPs
Soybean Oil Extraction Plant								
Stack AF-2 (and uncaptured emissions)	21.65	12.77	8.38	0.0	0.0	0.0	0.0	0.0
Stack AF-1 (and uncaptured emissions)	23.91	9.08	8.83	0.0	0.0	0.0	0.0	0.0
Stacks MBF-1 through MBF-5	20.37	20.37	20.37	0.0	0.0	0.0	0.0	0.0
Piles #1 and #2 (no control)	7.32	4.08	0.70	0.0	0.0	0.0	0.0	0.0
Stack AF-3	5.52	5.52	5.52	0.0	0.0	0.0	0.0	0.0
Stack AF-7	6.57	6.57	6.57	0.0	0.0	0.0	0.0	0.0
Stacks S-1 and S-6	21.59	14.67	14.67	0.0	0.0	0.0	0.0	0.0
Stack AF-5	11.21	11.21	11.21	0.0	0.0	0.0	0.0	0.0
Stack AF-4	4.51	4.51	4.51	0.0	0.0	0.0	0.0	0.0
Stack AF-6	4.14	4.14	4.14	0.0	0.0	0.0	0.0	0.0
Stack S-2	47.04	31.89	31.89	0.0	0.0	0.0	0.0	0.0
Bin Filter	8.32	8.32	8.32	0.0	0.0	0.0	0.0	0.0
Hull Bin Filter	0.84	0.21	0.04	0.0	0.0	0.0	0.0	0.0
Bean Storage Bin No. 2 thru 4, 6, 7, and 8 and Bean Storage Silo No. 1 and 5	30.40	7.66	1.34	0.0	0.0	0.0	0.0	0.0
Diatomaceous Earth (DE) Storage Bin	0.38	0.06	0.02	0.0	0.0	0.0	0.0	0.0
Main Gas Vent (Soybean Oil Extractor System)	0.0	0.0	0.0	0.0	0.0	40.73	0.0	26.07
Desolventized Meal Dryers & Cooler	0.0	0.0	0.0	0.0	0.0	143.66	0.0	91.94
Meal Storage	0.0	0.0	0.0	0.0	0.0	fugitive	0.0	1.21
Bound In Product & Byproduct Desolventized Meal (fugitive)	0.0	0.0	0.0	0.0	0.0	fugitive	0.0	113.00
Plant Startup/Shutdown	0.0	0.0	0.0	0.0	0.0	fugitive	0.0	10.75

	Source Wide Emissions After Issuance (ton/yr)							
Process/ Emission Unit	PM	PM10	PM2.5	SO ₂	NOx	VOC	со	Total HAPs
General (equipment failure, leaks, etc.)	0.0	0.0	0.0	0.0	0.0	fugitive	0.0	207.21
Plant Upsets	0.0	0.0	0.0	0.0	0.0	fugitive	0.0	16.90
Combustion Sources	14.74	23.74	23.74	248.94	149.11	7.75	85.41	1.90
Temporary Mobile Boiler (B-S)	0.33	1.31	1.31	0.10	17.18	0.94	14.43	0.32
Total PTE from Soybean Oil Extraction Plant with Roads	245.02	169.34	152.34	249.05	166.29	193.09	99.84	469.31
Biodiesel Production	Plant							
Biodiesel Methanol Absorbers (worse case) ¹	0.0	0.0	0.0	0.0	0.0	1.83	0.0	1.83
Loading Racks ¹	0.0	0.0	0.0	0.0	0.0	1.10	0.0	1.10
Biodiesel Storage Tanks ¹	0.0	0.0	0.0	0.0	0.0	4.31	0.0	4.31
Glycerine Storage Tanks	0.0	0.0	0.0	0.0	0.0	negl.	0.0	negl.
Biodiesel Wastewater (fugitive)	0.0	0.0	0.0	0.0	0.0	3.37	0.0	3.37
Equipment Leaks (fugitive)	0.0	0.0	0.0	0.0	0.0	2.80	0.0	2.80
Diesel/#2 Fuel Oil Storage Tank	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01
One (1) Soybean Oil Pre-Treat Tank	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01
Six (6) Methanol Tanks	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.07
Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3)	0.0	0.0	0.0	0.0	0.0	<= 1.0	0.0	<= 1.0
Purchased Soybean Oil Unloading	0.0	0.0	0.0	0.0	0.0	4.00	0.0	4.00
Two (2) Sodium Methylate Tanks	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01
Five (5) Hexane tanks	0.0	0.0	0.0	0.0	0.0	2.01	0.0	2.01
Road Traffic at Source ²	16.18	3.24	0.79	0.0	0.0	0.0	0.0	0.0
Cooling Towers	4.34	4.34	4.34	0.0	0.0	0.0	0.0	0.0
Biodiesel Distillation	0.0	0.0	0.0	0.0	0.0	1.31	0.0	1.31
Hot Oil Heater	0.05	0.20	0.20	0.02	2.58	0.14	2.16	0.05

	Source Wide Emissions After Issuance (ton/yr)							
Process/ Emission Unit	PM	PM10	PM2.5	SO ₂	NOx	VOC	со	Total HAPs
Glycerin Boiler	0.08	0.33	0.33	0.03	4.29	0.24	3.61	0.08
Natural Gas-Fired Glycerin Steam Boiler	0.01	0.03	0.03	negl.	0.43	0.02	0.36	0.01
Glycerin Tanks	0.0	0.0	0.0	0.0	0.0	negl.	0.0	-
Glycerin Refinery/ Rail Loadout	0.0	0.0	0.0	0.0	0.0	negl.	0.0	-
Glycerin Refinery	0.0	0.0	0.0	0.0	0.0	negl.	0.0	negl.
Total PTE at Biodiesel Plant	20.66	8.13	5.69	0.04	7.30	22.25	6.13	21.98
Total PTE at Entire Source including Fugitives from Roads	249.51	174.21	157.24	249.09	173.59	215.34	105.97	491.29

Notes:

¹The VOC emissions from these units are mainly methanol which is also a HAP. Assumed all VOCs are HAPs as the worst case scenario.

² Fugitive road emissions are being counted for the soybean extraction plant because the operations are covered by the source category definition in NSPS DD (a pre-1980 NSPS).

In addition, fugitive road emissions are being counted because they include roads at the biodiesel production plant which is one of the 28 source categories.

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at <u>http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf</u>) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Federal Rule Applicability Determination

The following federal rules are being evaluated as part of this modification:

New Source Performance Standards (NSPS):

Standards of Performance for Grain Elevators (40 CFR Part 60, Subpart DD):

The requirements for the the New Source Performance Standards for Grain Elevators, 40 CFR Part 60, Subpart DD, which is incorporated by reference as 326 IAC 12, are not included in the permit for the new VSC Air Heater No. 2 (B020500) since this unit does not process 'grain', as defined in 40 CFR §60.301.

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
National Emission Standards for Hazardous Air Pollutants (NESHAP):

National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production (40 CFR Part 63, Subpart GGGG):

The VSC Air Heater No. 2 (B020500), as part of the soybean oil extraction process, is subject to the National Emission Standards for Hazardous Air Pollutants for Solvent Extraction for Vegetable Oil Production (40 CFR 63, Subpart GGGG), which is incorporated by reference as 326 IAC 20-60, because it is part of a vegetable oil production process as defined in 40 CFR Part 63.2872.

The VSC Heater No. 2, as part of the soybean oil extraction process, is subject to the following portions of Subpart GGGG:

- (1) 40 CFR 63.2830
- (2) 40 CFR 63.2831
- (3) 40 CFR 63.2832(a)
- (4) 40 CFR 63.2833
- (5) Table 1 to 63.2833(6)
- (6) 40 CFR 63.2834
- (7) Table 1 of 63.2834(c)
- (8) 40 CFR 63.2840(a), (b), (c),(d), and (f)
- (9) Table 1 of 63.2840(ix)
- (10) 40 CFR 63.2850(a), (c), (d), and (e)
- (11) Table 1 of 63.2850
- (12) Table 2 of 63.2850(b), and (c)
- (13) 40 CFR 63.2851
- (14) 40 CFR 63.2852
- (15) 40 CFR 63.2853
- (16) Table 1 of 63.2853
- (17) 40 CFR 63.2854
- (18) 40 CFR 63.2855
- (19) 40 CFR 63.2860(b), (c), and (d)
- (20) 40 CFR 63.2861
- (21) 40 CFR 63.2862
- (22) 40 CFR 63.2863
- (23) 40 CFR 63.2870
- (24) Table 1 of 63.2870
- (25) 40 CFR 63.2871
- (26) 40 CFR 63.2872

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the VSC Air Heater No. 2 (B020500) except when otherwise specified in 40 CFR 63 Subpart GGGG.

National Emission Standards for Hazardous Air Pollutants: Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD):

The requirements for the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD are not included in the permit for the new VSC Air Heater No. 2 (B020500) since this unit does not meet the definition of "process heater" pursuant to 40 CFR 63.7575 since it is electric heated and does not generate combustion gases.

Compliance Assurance Monitoring (CAM):

Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

- (1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;
- (2) is subject to an emission limitation or standard for that pollutant; and
- (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis								
Emission Unit	Pollutant	Control Device Used	Emission Limitation	Uncontrolled PTE	Controlled PTE (tons/year)	Part 70 Major Source Threshold	CAM Applicable	Large Unit
				(ton/yr)	(ton/yr)	(ton/yr)	(Y/N)	(Y/N)
	PM	VSC Cyclone No. 2 (B020700)	326 IAC 6-3 326 IAC 2-2	127.20	6.18	100*	N	Ν
	PM10		326 IAC 2-2	31.80	6.18	100	N	N
	PM2.5		326 IAC 2-2	5.43	1.06	100	N	Ν
No. 2 (B020500)	SO2	N/A	N/A	N/A	N/A	100	N/A	N/A
	NOx	N/A	N/A	N/A	N/A	100	N/A	N/A
	VOC	N/A	N/A	N/A	N/A	100	N/A	N/A
	СО	N/A	N/A	N/A	N/A	100	N/A	N/A
	HAPs	N/A	N/A	N/A	N/A	25	N/A	N/A

* PM is not a Part 70 regulated pollutant. However, PM is used as a surrogate for PM10. Therefore, PM emissions are evaluated against the PM10 Part 70 major source threshold.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to VSC Air Heater No. 2, B020500.

State Rule Applicability Determination

326 IAC 2-2 (PSD)

PSD applicability is discussed under the Permit Level Determination - PSD section.

326 IAC 2-7-6(5) (Annual Compliance Certification)

The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certification that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

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

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the VSC Air Heater No. 2 shall not exceed 61.56 pounds per hour when operating at a process weight rate of 264 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

The VSC Air Heater No. 2 is able to comply with this limit without the use of control.

Compliance Determination, Monitoring and Testing Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

The Compliance Determination Requirements applicable to this modification are as follows:

(a) The compliance determination and monitoring requirements applicable to this proposed modification are as follows:

Emission Unit/Control	Operating Parameters	Range	Frequency
VSC Air Heater No. 2 / VSC Cyclone No. 2	Visible Emissions	Normal - Abnormal	Once per day

These monitoring conditions are necessary because the VSC Cyclone No. 2 must operate properly to ensure the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) are not applicable.

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

Testing Requirements					
Emission Control Frequency of					
Unit	Device	Pollutant	Timeframe for Testing	Testing	
VSC Air	VSC Cyclone	PM, PM ₁₀ ,	No later than 180 days	Every five (5)	
Heater No. 2	No. 2	PM _{2.5}	after initial startup.	years	

This testing is necessary to demonstrate compliance with PSD Minor Limits that render 326 IAC 2-2 (PSD) not applicable.

Proposed Changes

The following changes listed below are due to the proposed revision. These changes may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). Deleted language appears as strikethroughs and new language appears in **bold**:

Louis Dreyfus Agricult Claypool, IN Permit Reviewer: Tan	tural Industries, LLC nera Wessel	Page 12 of 17 TSD for Significant Source Modification No.: 085-35870-00102 TSD for Significant Permit Modification No.: 085-35910-00102			
Entire Permit -	The unit descriptions for B01 revised to specify which cycl	0000, B020000, B010500, and B010700 have been one control device controls the unit.			
Entire Permit -	The unit description for the n the permit.	ew VSC Air Heater No. 2 (B020500) has been added to			
Entire Permit -	The unit description for the n been added to the permit.	ew control device, VSC Cyclone No. 2 (B020700), has			
Condition D.2.1 -	The control description for th	e Jet Dryer/VSC has been revised to show more than			
Condition D.2.2 -	one cyclone. The Particulate Emissions Li has been included.	one cyclone. The Particulate Emissions Limitation [326 IAC 6-3-2] for the emission unit: B020500, has been included.			
Condition D.2.4(a) -	Condition has been revised t	o include the new VSC cyclone.			
Condition D.2.5 -	The testing requirements for added.	the new control device, VSC Cyclone No. 2, have been			
Condition D.2.6 -	The visible emissions require exhausting through stack S-6	ements for the new control device, VSC Cyclone No. 2, 5, have been added.			
Condition D.2.10 -	The visible emissions reporti Cyclone No. 2, exhausting th	ng requirements for the new control device, VSC rough stack S-6, have been added.			

Additional typographical errors have been corrected.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(14)]

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

Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?

B010000	VSC No. 1 *2006, **2012	132	VSC Cyclone No. 1	Stack S-1	Yes under NESHAP GGGG
B020000	VSC No. 2 *2006, **2012	132	VSC Cyclone No. 2	Stack	Yes under NESHAP GGGG
B010500	VSC Air Heater No. 1 *2006, **2012	264	VSC Cyclone No. 1	Stack S-1	Yes under NESHAP GGGG
B020500	VSC Air Heater No. 2 *2015	264	VSC Cyclone No. 2	Stack S-6	Yes under NESHAP GGGG
B010700	VSC Cyclone No. 1 *2006, **2010	42,000 cfm		Stack S-1	Yes under NESHAP GGGG
B020700	VSC Cyclone No. 2 *2015	42,000 cfm		Stack S-6	Yes under NESHAP GGGG

(C)

D.1.1 PSD Minor Limit for Particulate [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following PM, PM_{10} , and $PM_{2.5}$ limits:

(c) The PM, PM₁₀, and PM_{2.5} emissions from the following Process shall be less than the emission limits listed in the table below:

Process	Control	PM Limit (Ibs/hour)	PM ₁₀ Limit (Ibs/hour)	PM _{2.5} Limit (Ibs/hour)
Pod Grinder/Destoner	Pod Grinder/ Screener Baghouse AF-7	1.5	1.5	1.5

Compliance with the soybean usage limit in Condition D.1.1(a) in combination with the PM, PM_{10} , and $PM_{2.5}$ emission limits in Conditions D.1.1(b), D.1.1(c), D.2.1, D.3.1, D.5.1, -D.1.6D.6.1 and D.7.1 and with the potential to emit PM, PM_{10} , and $PM_{2.5}$ from all other emission units at the source, shall limit the PM, PM_{10} , and $PM_{2.5}$ emissions from the entire source to less **than** 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit I	Emissions Unit Description:						
(c)							
Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?		

B010000	VSC No. 1 *2006, **2012	132	VSC Cyclone No. 1	Stack S-1	Yes under NESHAP GGGG		
B020000	VSC No. 2 *2006, **2012	132	VSC Cyclone No. 2	Stack S-1S-6	Yes under NESHAP GGGG		
B010500	VSC Air Heater No. 1 *2006, **2012	264	VSC Cyclone No. 1	Stack S-1	Yes under NESHAP GGGG		
B020500	VSC Air Heater No. 2 *2015	264	VSC Cyclone No. 2	Stack S-6	Yes under NESHAP GGGG		
B010700	VSC Cyclone No. 1 *2006, **2010	42,000 cfm		Stack S-1	Yes under NESHAP GGGG		
B020700	VSC Cyclone No. 2 *2015	42,000 cfm		Stack S-6	Yes under NESHAP GGGG		

Note *Approved in the year indicated above for construction.

Note **Approved in the year indicated above for modification.

Note ***The Flaker aspiration baghouse has been determined to be integral to the process for this unit.

(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 2-7-5(1)]

D.2.1 PSD Minor Limit for Particulate [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with

the following PM, PM₁₀, and PM_{2.5} limits:

The PM, PM_{10} , and $PM_{2.5}$ emissions from the following Processes shall be less than the emission limits listed in the table below:

Process	Control	PM Limit (lbs/hour)	PM ₁₀ Limit (Ibs/hour)	PM _{2.5} Limit (Ibs/hour)
Jet Dryer/VSC	VSC cyclone s and Jet Dryer Baghouses AF-8 and AF-9	4.93	3.35	3.35
Hot Dehulling	Baghouse AF-5	2.56	2.56	2.56

Compliance with the above limits, in combination with the soybean usage limit in Condition D.1.1(a) and with the PM, PM_{10} , and $PM_{2.5}$ emission limits in Conditions D.1.1(b), D.1.1(c), D.3.1, D.5.1, and D.6.1, and D.7.1, and with the potential to emit PM, PM_{10} , and $PM_{2.5}$ from all other emission units at the source, shall limit the PM, PM_{10} , and $PM_{2.5}$ emissions from the entire source to less **than** 250 tons per twelve (12) consecutive month period and render the requirements of (326 IAC 2-2 Prevention of Significant Deterioration (PSD)) not applicable.

- D.2.2 Particulate Emissions Limitations [326 IAC 6-3-2]
 - Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the following processes shall not exceed the pound per hour limitations specified in the following table
 - (b) Pursuant to 326 IAC 6-3-2, the particulate emissions from each of the following processes shall not exceed the pound per hour limitations specified in the following table:

Emission unit ID	Emissions Units	¹ Baghouse ID	Maximum Process Weight (tons/hour) for each unit	326 IAC 6-3 Limit (lbs/hr) for each unit
B120000 and B030000	Jet Dryer No. 1 and No. 2	Jet Dryer Baghouses AF-8 and AF-9	132	54.11
B010500	VSC Air Heater No. 1	VSC Cyclone No. 1	264	61.56
B020500	VSC Air Heater No. 2	VSC Cyclone No. 2	264	61.56
B010000 and B020000 ***	Vertical Seed Conditioner (VSC) No. 1 and No. 2	VSC Cyclone s	132	54.11

Compliance Determination Requirements

D.2.4 Particulate Control

(a) In order to comply with Conditions D.2.1, baghouses AF-4, AF-5, AF-6, the VSC cyclones, and jet dryers baghouses AF-8 and AF-9 shall be in operation and control emissions from all emission units exhausting to stacks, AF-4, AF-5, AF-6, AF-8, AF-9, and S-1, and S-6, at all times when an emission unit that the baghouses or the cyclones control is in operation.

D.2.5 Testing Requirements [326 IAC 2-1.1-11]

- (a) No later than five (5) years after the most recent valid compliance demonstration but no later than 180 days after startup of the extraction plant new units as permitted by Significant Source Modification No. 085-31960-00102, the Permittee shall conduct PM, PM₁₀, and PM_{2.5} testing on baghouses AF-4, AF-5, AF-6, AF-8, and AF-9 and VSC cyclones (associated with the flaking system, dehulling system, meal grinding/conveying, and VSC system) to verify compliance with Condition D.2.1 and Condition D.2.2, utilizing methods as approved by the Commissioner.
- (b) No later than 180 days after the issuance date of Significant Source Modification No. 085-29971-00102 and Part 70 Operating Permit Renewal No. T085-29197-00102, the Permittee shall conduct PM, PM₁₀, and PM_{2.5} testing on baghouses AF-8 and AF-9 (associated with the jet drying) to verify compliance with Condition D.2.1 and Condition D.2.2, utilizing methods as approved by the Commissioner.
- (c) No later than 180 days after initial startup, the Permittee shall conduct PM, PM₁₀, and PM_{2.5} testing on VSC Cyclone No. 2 to verify compliance with Condition D.2.1 and Condition D.2.2(b), utilizing methods as approved by the Commissioner.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

D.2.6 Visible Emissions Notations [40 CFR 64]

(a) Visible emission notations of the stacks AF-4, AF-5, AF-6, and S-1, and S-6 exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

- D.2.10 Record Keeping Requirements
 - (a) To document the compliance status with Condition D.2.6, the Permittee shall maintain a daily record of visible emission notations of the stack exhaust from Stacks AF-4, AF-5, AF-6, and S-1, and S-6. 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).
- D.3.1 PSD Minor Limits for Particulate [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following PM, PM_{10} , and $PM_{2.5}$ limits:

Compliance with the above limits, in combination with the soybean usage limit in Condition D.1.1(a) and with the PM, PM_{10} , and $PM_{2.5}$ emission limits in Conditions D.1.1(b), D.1.1(c), D.2.1, D.5.1, D.6.1 and D.7.1 and with the potential to emit PM, PM_{10} , and $PM_{2.5}$ from all other emission units at the source, shall limit the PM, PM_{10} , and $PM_{2.5}$ emissions from the entire source to less **than** 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.4.1 PSD Minor Limits for VOC [326 IAC 2-2]
 - In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

Compliance with the purchased seed oil limit in Condition D.4.1(b), in combination with the above VOC emission limits in Condition D.4.1, the VOC emission limits in Condition D.3.2, the VOC emission limit in Condition D.5.2, the VOC emission limits in Condition D.7.2, and the potential to emit from other units at the source, shall limit the VOC emissions from the entire source to less **than** 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) not applicable.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 PSD Minor Limit for Particulate [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following PM, PM_{10} , and $PM_{2.5}$ limits:

The PM, PM_{10} , and $PM_{2.5}$ emissions from the main boiler shall be less than the emission limits listed in the table below:

Process	Control	PM Limit (Ibs/hour)	PM ₁₀ Limit (Ibs/hour)	PM _{2.5} Limit (Ibs/hour)
Main Boiler	None	3.14	5.19	5.19

Compliance with the above limits, in combination with the soybean usage limit in Condition D.1.1(a), in combination with the PM, PM_{10} , and $PM_{2.5}$ emission limits in Conditions D.1.1(b), D.1.1(c), D.2.1, D.3.1, D.6.1 and D.7.1, and with the potential to emit PM, PM_{10} , and $PM_{2.5}$ from all other emission units at the source, shall limit the PM, PM_{10} , and $PM_{2.5}$ emissions from the entire source to less **than** 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 PSD Minor Limit for Particulate [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

The PM, PM_{10} and $PM_{2.5}$ emissions from the following Processes shall be less than the emission limits listed in the table below:

Process	Control	PM Limit (Ibs/hour)	PM ₁₀ Limit (Ibs/hour)	PM _{2.5} Limit (Ibs/hour)
Meal Bin No. 1	Meal Bin Filter No. 1	0.93	0.93	0.93

Compliance with the above limits, in combination with the soybean usage limit in Condition D.1.1(a) and with the PM, PM_{10} and $PM_{2.5}$ emission limits in Conditions D.1.1(b), D.1.1(c), **D.2.1**, D.3.1, D.5.1, D.6.1 and D.7.1, and with the potential to emit PM, PM_{10} and $PM_{2.5}$ from other emission units at the source, shall limit the PM, PM_{10} and $PM_{2.5}$ emissions from the entire source to less **than** 250 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) not applicable.

SECTION E.8

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(c)

r	1	1			
Unit ID	Description	Capacity (tons/hr)	Control	Discharging to Stack	Affected Facility?

	·	•		•	•
B010000	VSC No. 1 *2006, **2012	132	VSC Cyclone No. 1	Stack S-1	Yes under NESHAP GGGG
B020000	VSC No. 2 *2006, **2012	132	VSC Cyclone No. 2	Stack S-1S-6	Yes under NESHAP GGGG
B010500	VSC Air Heater No. 1 *2006, **2012	264	VSC Cyclone No. 1	Stack S-1	Yes under NESHAP GGGG
B020500	VSC Air Heater No. 2 *2015	264	VSC Cyclone No. 2	Stack S-6	Yes under NESHAP GGGG
B010700	VSC Cyclone No. 1 *2006, **2010	42,000 cfm		Stack S-1	Yes under NESHAP GGGG
B020700	VSC Cyclone No. 2 *2015	42,000 cfm		Stack S-6	Yes under NESHAP GGGG
B120000	Jet Dryer No. 1 *2006, **2010 and 2012	132	Jet Dryer Baghouse AF-8	Stack S-1	Yes under NESHAP GGGG

Note *Approved in the year indicated above for construction.

Note **Approved in the year indicated above for modification.

Note ***The Flaker aspiration baghouse has been determined to be integral to the process for this unit.

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

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 085-35870-00102 and Significant Permit Modification No. 085-35910-00102. The staff recommends to the Commissioner that this Part 70 Significant Source Modification and Significant Permit Modification be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Tamera Wessel 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) 234-8530 or toll free at 1-800-451-6027 extension 4-8530.
- (b) A copy of the findings is available on the Internet at: <u>http://www.in.gov/ai/appfiles/idem-caats/</u>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <u>http://www.in.gov/idem/5881.htm</u>; and the Citizens' Guide to IDEM on the Internet at: <u>http://www.in.gov/idem/6900.htm</u>.

Appendix A: Emissions Calculations Source Summary Potential to Emit Before Control

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Stack ID / Control / Emission Units PM (tons/yr) PM ₁₀ (tons/yr) PM ₂₅ (tons/yr) SO ₂ (tons/yr) NO _x (tons/yr) VOC (tons/yr) CO (tons/yr) CO (tons/yr) Total HA (tons/yr) Sopbean Oil Extraction Plant - <td< th=""></td<>
Stack ID / Control / Emission Units (tons/yr) (tons/yr) <th< td=""></th<>
Soybean Oil Extraction Plant 3,571.19 1,718.97 293.92 -
Displant of Labulation function 3,571.19 1,718.97 293.92 - <t< td=""></t<>
Stack AF-1 (and uncaptured emissions) 1,318,23 471.73 244.17 -
Stacks MBF-1, MBF-2, MBF-3, MBF-4 and MBF-5 21.68 5.46 0.95 -
Piles #1 and #2 (no control) 192.37 107.22 18.29 -<
Stack AF-3 1,271.29 640.27 364.79 -
Stack AF-7 43.80 10.95 10.95 -
Stack S-1 and Stack S-6 624.41 156.10 50.65 -
Stack AF-5 8,732.13 2,185.46 2,122.69 - <t< td=""></t<>
Stack AF-4 62.65 83.54 83.54 -
Stack AF-6 9,112.98 2,399.61 2,230.59 - <t< td=""></t<>
Stack S-2 65.59.49 1.639.87 1.639.87 - <th< td=""></th<>
Bin Filter 3.47 0.56 0.21 -
Hull Bin Filter 0.84 0.21 0.04 -
Bean Storage Bin No. 2 thru 4, 6, 7, and 8 and Bean Storage Silo No. 1 and 5 30.40 7.66 1.34 - 3,827.7 -
Diatomaceous Earth (DE) Storage Bin 0.38 0.06 0.02 - - - - - - 3,827.7 Main Gas Vent (Soybean Oil Extractor System) - - 5,980.80 - 3,827.7
Main Gas Vent (Soybean Oil Extractor System) 5,980.80 3,827.7
IDesolventized Meal Drivers & Cooler
Meal Storage
Bound In Product & Byproduct Desolventized Meal (fugitive)
Plant Startup/Shutdown 10.75
General (equipment failure, leaks, etc.) 207.21
Plant Upsets 16.90
Combustion Sources 14.75 23.72 23.72 489.13 149.32 6.32 85.59 154,947 1.90
Temporary Mobile Boiler (B-S) 0.33 1.31 1.31 0.10 17.18 0.94 14.43 20,737 0.32
Total PTE from Soybean Oil Extraction Plant with Roads 31,576.57 9,415.94 7,087.84 489.23 166.50 6,190.26 100.02 175,685 4,306.4
Biodiesei Production Plant
Biodiesel Methanol Absorbers (worse case)' 154.60 154.60
Loading Racks ¹ 10.72 10.72
Biodiesel Storage Tanks ¹ 4.31 4.31
Glycerine Storage Tanks 0.00 0.00
Biodiesel Wastewater (fugitive) 3.37 3.37
Equipment Leaks (fugitive) ¹ 12.74 12.74
Diesel/#2 Fuel Oil Storage Tank 0.01 0.01
One (1) Soybean Oil Pre-Treat Tank 0.01 0.01
Six (6) Methanol Tanks 4.49 4.49
Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank
#3)
Purchased Soybean Oil Unloading 4.00 4.00
Two (2) Sodium Methylate Tanks 0.60 0.60
Five (5) Hexane tanks 2.01 2.01
Road Traffic at Source ² 16.18 3.24 0.79
Cooling Towers 4.34 4.34
Biodiesel Distillation 1.31 1.31
Hot Oil Heater 0.05 0.20 0.02 2.58 0.14 2.16 3,111 0.05
Glycerin Boiler 0.08 0.33 0.33 0.03 4.29 0.24 3.61 5,184 0.08
Natural Gas-Fired Glycerin Steam Boiler 0.01 0.03 0.03 2.58E-03 0.43 0.02 0.36 518 0.01
Glycerin Tanks 7.70E-06
Glycerin Refinery/Rail Loadout
Understein keinen von der Breiten Breiten Bereiten Bereit
10 da r 1 c a bioureser riant 20,66 8,13 5,69 0,04 7,30 199,58 6,13 8,813 199,22

Notes:

¹ The VOC emissions from these units are mainly methanol which is also a HAP. Assume all VOCs are HAPs in the worst case scenario.
 ² Fugitive road emissions are being counted for the soybean extraction plant because the operations are covered by the source category definition in NSPS DD (a pre-1980 NSPS). In addition, fugitive road emissions are being counted because they include roads at the biodiesel production plant which is one of 28 source categories.

Appendix A: Emissions Calculations Source Summary Limited Potential to Emit

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Limited	Potential To Emit	

Stack ID / Control / Emission Units	PM (tons/yr)	PM ₁₀ (tons/yr)	PM _{2.5} (tons/yr)	SO ₂ (tons/yr)	NO _x (tons/yr)	VOC (tons/yr)	CO (tons/yr)	GHGs as CO ₂ e (tons/yr)	Total HAPs (tons/yr)
Soybean Oil Extraction Plant									
Stack AF-2 (and uncaptured emissions)	21.65	12.77	8.38	-	-	-	-	-	-
Stack AF-1 (and uncaptured emissions)	23.91	9.08	8.83	-	-	-	-	-	-
Stacks MBF-1, MBF-2, MBF-3, MBF-4 and MBF-5	20.37	20.37	20.37	-	-	-	-	-	-
Piles #1 and #2 (no control)	7.32	4.08	0.70	-	-	-	-	-	-
Stack AF-3	5.52	5.52	5.52	-	-	-	-	-	-
Stack AF-7	6.57	6.57	6.57	-	-	-	-	-	-
Stack S-1 and Stack S-6	21.59	14.67	14.67	-	-	-	-	-	-
Stack AF-5	11.21	11.21	11.21	-	-	-	-	-	-
Stack AF-4	4.51	4.51	4.51	-	-	-	-	-	-
Stack AF-6	4.14	4.14	4.14	-	-	-	-	-	-
Stack S-2	47 04	31.89	31.89	-	-	-	-		-
Bin Filter	8 32	8 32	8 3 2	-					
Hull Bin Filter	0.84	0.02	0.04	-					
Bean Storage Bin No. 2 thru 4, 6, 7, and 8 and Bean Storage Silo No. 1 and 5	30.40	7.66	134	_	-	-	_		-
Diatomaceous Earth (DE) Storage Bin	0.38	0.06	0.02						
Main Gas Vent (Sovbean Oil Extractor System)	0.00	0.00	0.02	-		40.73			26.07
Desolventized Meal Drivers & Cooler						143.66	_		91 94
Meal Storage						fugitive			1 21
Bound In Product & Byproduct Desplyentized Meal (funitive)						fugitive	-	-	112.00
Plant Startun/Shutdown						fugitive	-	-	10.75
General (equipment failure, leaks, etc.)						fugitive	-	-	207.21
Bloot Upgete	-	-	-	-	-	fugitive	-	-	207.21
Compution Sources	14.74	22.74	22.74	249.04	140.11	7 75	0E 41	114 212	10.90
Temporary Mobile Boiler (B-S)	0.22	23.74	23.74	240.94	149.11	1.15	14.42	20 727	1.90
Total Limited PTE from Soubean Oil Extraction Plant with Poads	245.02	160.24	153 25	240.05	166.20	102.00	14.43	20,737	460.32
Total Emilieur TE nom boybean on Extraction Flant with Roads	243.02	103.34	132.33	243.03	100.23	135.03	33.04	134,343	403.51
Biodiesel Production Plant									
Biodiesel Production Plant		· .				1.83		L .	1.83
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹	-	-	-	-	-	1.83	-	-	1.83
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹	-	-	-	-	-	1.83 1.10	-	-	1.83 1.10
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹			- -	- -		1.83 1.10 4.31	-	-	1.83 1.10 4.31
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks		- - -	- - -	- - -		1.83 1.10 4.31 4.82E-03	- - -		1.83 1.10 4.31 4.82E-03
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive)		- - - -				1.83 1.10 4.31 4.82E-03 3.37			1.83 1.10 4.31 4.82E-03 3.37
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹		- - - - -	- - - - - -	- - - - - -	- - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80		- - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel#Z Fuel Oil Storage Tank			- - - - - - -	- - - - - - - -	- - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01			1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel#/#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank		- - - - - - - - -			- - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01			1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel/#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks		- - - - - - - - - - - -	- - - - - - - - -	- - - - - - - -	- - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07			1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel/#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks (Denummed Oil Tanks #1 and #2 and Crude Oil	- - - - - - - - - - - -	- - - - - - - - - - -	- - - - - - - - - - -	- - - - - - - - - - -	- - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07		- - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3)	- - - - - - - - - - - - -	- - - - - - - - - - - -	- - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.01 0.07 <= 1.0	- - - - - - - - -	- - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel/#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3)	- - - - - - - - - - - -	- - - - - - - - - - - -	- - - - - - - - - - -	- - - - - - - - - - -	- - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0	- - - - - - - - - -	- - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel#2 Fuel OI Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) Purchased Soybean Oil Unloading Ture (0) Soties Muth det Tanking	- - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 2.04	- - - - - - - - - - - - - - -	- - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 4.00
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) Purchased Soybean Oil Unloading Two (2) Sodium Methylate Tanks	- - - - - - - - - - - - -	- - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.04	- - - - - - - - - - - -	- - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel/#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Diree (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) Purchased Soybean Oil Unloading Two (2) Sodium Methylate Tanks Five (5) Hexane tanks	- - - - - - - - - - - - - -		- - - - - - - - - - - - - -	- - - - - - - - - - - - - -	- - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01	- - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) Purchased Soybean Oil Unloading Two (2) Sodium Methylate Tanks Five (5) Hexane tanks Road Traffic at Source ²	- - - - - - - - - - - - - - 16.18	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 -		- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 -
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) ¹ Equipment Leaks (fugitive) ¹ Diesel/#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) Purchased Soybean Oil Unloading Two (2) Sodium Methylate Tanks Five (5) Hexane tanks Road Traffic at Source ² Cooling Tuwers	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.07 <= 1.0 4.00 0.01 2.01 2.01	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.07 <= 1.0 4.00 0.01 2.01 2.01 -
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel/#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) Purchased Soybean Oil Unloading Two (2) Sodium Methylate Tanks Road Traffic at Source ² Cooling Towers Biodiesel Distillation	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -			1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 - - 1.31			1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 - - 1.31
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) Purchased Soybean Oil Unloading Two (2) Sodium Methylate Tanks Five (5) Hexane tanks Five (5) Hexane tanks Five (5) Hexane tanks Biodiesel Distillation Hot Oil Heater	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 - - 1.31 0.14	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 - - 1.31 0.05
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel#2 Fuel OII Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) Purchased Soybean Oil Unloading Two (2) Sodium Methylate Tanks Five (5) Hexane tanks Five (5) Hexane tanks Road Traffic at Source ² Cooling Towers Biodiesel Distillation Hot Oil Heater Glycerin Boiler	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 - 1.31 0.14 0.24	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 - 1.31 0.05 0.08
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel#2 Fuel OI Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) Purchased Soybean Oil Unloading Two (2) Sodium Methylate Tanks Five (5) Hexane tanks Road Traffic at Source ² Cooling Towers Biodiesel Distillation Hot Oil Heater Glycerin Boiler Natural Gas-Fired Glycerin Steam Boiler	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 - 1.31 0.14 0.24 0.02	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - 3,111 5,184 518	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 - 1.31 0.05 0.08 0.01
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Unloading Three (3) Soybean Oil Unloading Two (2) Sodium Methylate Tanks Five (5) Hexane tanks Five (5) Hexane tanks Road Traffic at Source ² Cooling Towers Biodiesel Distillation Hot Oil Heater Glycerin Boiler Natural Gas-Fired Glycerin Steam Boiler Glycerin Tanks	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.07 <= 1.0 4.00 0.01 - - 1.31 0.14 0.24 0.02 7.70E-06	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.07 <= 1.0 4.00 0.01 - - 1.31 0.05 0.08 0.01 -
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel/#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) Purchased Soybean Oil Unloading Two (2) Sodium Methylate Tanks Five (5) Hexane tanks Road Traffic at Source ² Cooling Towers Biodiesel Distillation Hot Oil Heater Glycerin Boiler Natural Gas-Fired Glycerin Steam Boiler Glycerin Tanks	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 - 1.31 0.14 0.24 0.02 7.70E-06 3.31E-04	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 - 1.31 0.05 0.08 0.01 - -
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) Purchased Soybean Oil Unloading Two (2) Sodium Methylate Tanks Five (5) Hexane tanks Road Traffic at Source ² Cooling Towers Biodiesel Distillation Hot Oil Heater Glycerin Boiler Natural Gas-Fired Glycerin Steam Boiler Glycerin Tanks Glycerin Refinery/ Rail Loadout Glycerin Refinery	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.62E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 - 1.31 0.14 0.24 0.02 7.70E-06 3.31E-04 0.0002	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.01 0.07 <= 1.0 4.00 0.01 2.01 - 1.31 0.05 0.08 0.01 - 0.002
Biodiesel Production Plant Biodiesel Methanol Absorbers (worse case) ¹ Loading Racks ¹ Biodiesel Storage Tanks ¹ Glycerine Storage Tanks Biodiesel Wastewater (fugitive) Equipment Leaks (fugitive) ¹ Diesel#2 Fuel Oil Storage Tank One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks One (1) Soybean Oil Pre-Treat Tank Six (6) Methanol Tanks Three (3) Soybean Oil Unloading Tank #3) Purchased Soybean Oil Unloading Two (2) Sodium Methylate Tanks Five (5) Hexane tanks Five (5) Hexane tanks Road Traffic at Source ² Cooling Towers Biodiesel Distillation Hot Oil Heater Glycerin Boiler Natural Gas-Fired Glycerin Steam Boiler Glycerin Tanks Glycerin Refinery/ Kail Loadout Glycerin Refinery Total Limited PTE from Biodiesel Production Plant	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.07 <= 1.0 4.00 0.01 - - - 1.31 0.14 0.24 0.02 7.70E-06 3.31E-04 0.0002 22.25	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	1.83 1.10 4.31 4.82E-03 3.37 2.80 0.01 0.07 <= 1.0 4.00 0.01 - - 1.31 0.05 0.08 0.01 - - 0.05 0.08 0.01 - - 0.05 0.08 0.01 - - 0.05 0.08 0.01 - - - 0.05 0.08 0.01 - - - - - - - - - - - - -

Notes:
 ¹ The VOC emissions from these units are mainly methanol which is also a HAP. Assume all VOCs are HAPs in the worst case scenario.
 ² Fugitive road emissions are being counted for the soybean extraction plant because the operations are covered by the source category definition in NSPS DD (a pre-1980 NSPS). In addition, fugitive road emissions are being counted because they include roads at the biodiesel production plant which is one of 28 source categories.

Appendix A: Emissions Calculations Modification Summary

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T 085 -29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

		Unlimited Potential to Emit of Modification (tons/yr)							
Stack ID / Control / Emission Units	PM (tons/yr)	PM ₁₀ (tons/yr)	PM _{2.5} (tons/yr)	SO ₂ (tons/yr)	NO _x (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Total HAPs (tons/yr)	Single Worst HAP
VSC Air Heater No. 2	254.39	63.60	10.87	0	0	0	0	0	-
TV Significant Source Modification Thresholds	25	25	25	25	25	25	100	25	10
PSD Significant Thresholds	250	250	250	250	250	250	250	NA	NA

		Limited Potential to Emit of Modification (tons/yr)							
Stack ID / Control / Emission Units	PM (tons/yr)	PM ₁₀ (tons/yr)	PM _{2.5} (tons/yr)	SO ₂ (tons/yr)	NO _x (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Total HAPs (tons/yr)	Single Worst HAP
VSC Air Heater No. 2	21.59	14.67	14.67	0	0	0	0	0	-
PSD Significant Thresholds	250	250	250	250	250	250	250	NA	NA

84 14.4

Appendix A: Emissions Calculations Portable Boiler - Natural Gas Combustion (B-S)

Company Name: Louis Drayfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-29197-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

HHV mmBtu Potential Throughput Heat Input Capacity MMBtu/hr MMCF/yr mmsc 40.0 343.5

	Pollutant									
Emission Factor in Ib/MMCE	PM* 1.9	PM10* 7.6	direct PM2.5* 7.6	SO2 0.6	NOx 100	VOC 5.5	Ī			
		1.0	1.0	0.0	**see below	0.0	L			
Potential Emission in tons/yr	0.33	1.3	1.3	0.10	17.2	0.9				

*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

Γ

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu MMCF = 1,000,000 Cubic Feet of Gas

MMCF = 1,000,000 Cubic relet 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 (MMBfu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBfu Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (Ib/MMCF)/2,000 lb/ton

HAPS Calculations

	HAPs - Organics								
Emission Factor in Ib/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Total - Organics			
Potential Emission in tons/yr	3.607E-04	2.061E-04	1.288E-02	3.092E-01	5.840E-04	3.232E-01			

	HAPs - Metals								
Emission Factor in Ib/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total - Metals			
Potential Emission in tons/yr	8.588E-05	1.889E-04	2.405E-04	6.527E-05	3.607E-04	9.413E-04			
					Total HAPs	3.242E-01			
Methodology is the same as above.					Worst HAP	3.092E-01			

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

Greenhouse Gas Calculations

	Greenhouse Gas						
Emission Factor in Ib/MMcf	CO2 120,000	CH4 2.3	N2O 2.2				
Potential Emission in tons/yr	20,612	0.4	0.4				
Summed Potential Emissions in tons/yr		20,613					
Global warming Potential	1	21	310				
CO2e Total in tons/yr		20,737					

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.

Coloal Warning 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 Glycerin Tanks - VOC Emissions Potential to Emit Before Control

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-3870-00102 Significant Permit Modification: 085-38910-00102 Operation Permit No.: T 085 -29197-00102 Permit No: T 085 -29197-00102 Permit Neviewer: Tamera Wessel Date: May 27, 2015

	Equipment		Tank Diameter		Pot'l VOC Working Loss	Pot'l VOC Standing Loss	Pot'l VOC Max	Pot'l VOC Max Emissions	
Unit ID	Description	Capacity	(ft)	Tank Height (ft)	(lbs/yr)	(lbs/yr)	Emissions (lbs/yr)	(tons/year)	Notes
Trivial Activity T-0360	Glycerin Yellow Tank	8,000 gallons	10	14	6.00E-04	0.00E+00	6.00E-04	3.00E-07	Assume 1 turnover per week (52 per year)
Trivial Activity T-0361	Glycerin Tank 1	50,000 gallons	14	44	3.60E-03	1.00E-04	3.70E-03	1.85E-06	Assume 1 turnover per week (52 per year)
Trivial Activity T-0362	Glycerin Tank 2	50,000 gallons	14	44	3.60E-03	1.00E-04	3.70E-03	1.85E-06	Assume 1 turnover per week (52 per year)
Trivial Activity T-0363	Glycerin Tank 3	50,000 gallons	14	44	3.60E-03	1.00E-04	3.70E-03	1.85E-06	Assume 1 turnover per week (52 per year)
Trivial Activity T-0364	Glycerin Tank 4	50,000 gallons	14	44	3.60E-03	1.00E-04	3.70E-03	1.85E-06	Assume 1 turnover per week (52 per year)
							Total	7.70E-06	tons/year

Appendix A: Emission Calculations Bean Storage Bins No. 4 and 8

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T 085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for Bean Storage Bin No. 4 and 8

PM Emission Factor PM10/PM2.5 Emission Factor	0.025	lb/ton lb/ton	Source:	SCC 3-02-005-40 SCC 3-02-005-40
Aspiration Rate	260.5 116,000	tons/hr cfm	58,000	cfm, each
% Control PM	N/A			
% Control PM10/PM2.5	N/A			

Hourly throughput is based on maximum transport system capacity.

Potential PM emissions

Bean Storage Bin No. 4 and 8					
		Uncontrolled t	otal	Contro	lled total
Max Hourly	=	6.51	lbs/hr	6.51	lbs/hr
Max Yearly	=	28.52	tons/yr	28.52	tons/yr
Potential PM10/PM2.5 emissions Bean Storage Bin No. 4 and 8					
ů.		Uncontrolled t	otal	Contro	lled total
Max Hourly	=	1.64	lbs/hr	1.64	lbs/hr
Max Yearly	=	7.19	tons/yr	7.19	tons/yr

$$\label{eq:methodology} \begin{split} & \text{Methodology} \\ & \text{Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (3/03) \\ & \text{Hourly Loading Rate (tons/hr) = [2,251,836 (tons/yr) + 30,000 (tons storage capacity for two bins)] / 8,760 (hr/yr) \\ & \text{The hourly loading rate assumes the two (2) new storage bins process all of the soybeans for the entire plant. \\ & \text{Uncontrolled Emissions (lb/hr) = Hourly Loading Rate (tons/hr) * Emission Factor (lb/ton) \\ & \text{Controlled Emissions (lb/hr) = Uncontrolled Emissions (lb/hr) * (Lorntor Efficiency) \\ & \text{Uncontrolled Emissions (ton/yr) = Uncontrolled Emissions (lb/hr) * 5,760 (hr/yr) / 2000 (lbs/ton) \\ & \text{Controlled Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Controlled Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Controlled Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Controlled Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Controlled Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Controlled Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Controlled Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Controlled Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Controlled Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Controlled Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Controlled Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Control Efficiency} = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Control Efficiency} = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Controlled Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency). \\ & \text{Controlled Emissions (ton/yr) = Un$$

Appendix A: Emissions Calculations Glycerin Boiler - Natural Gas Combustion

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-53870-00102 Significant Permit Modification: 085-53910-00102 Operation Permit No: T 085 -29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Heat Input Capacity MMBtu/hr

Potential Throughput ннν MMCF/yr mmBtu

	mmscf
1.0	1020

	Pollutant							
Emission Factor in Ib/MMCF	PM* 1.9	PM10* 7.6	direct PM2.5* 7.6	SO2 0.6	NOx 100 **see below	VOC 5.5	CO 84	
Potential Emission in tons/yr	0.01	0.03	0.03	2.58E-03	0.4	0.02	0.36	

*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

8.6

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu MMCF = 1,000,000 Cubic Feet of Gas

MMCF = 1,000,000 Cubic relet 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 (MMBfu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBfu Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (Ib/MMCF)/2,000 lb/ton

HAPS Calculations

		HAPs - Organics							
Emission Factor in Ib/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Total - Organics			
Potential Emission in tons/yr	9.018E-06	5.153E-06	3.221E-04	7.729E-03	1.460E-05	8.080E-03			
	HAPs - Metals								

Emission Factor in Ib/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total - Metals
Potential Emission in tons/yr	2.147E-06	4.724E-06	6.012E-06	1.632E-06	9.018E-06	2.353E-05
Methodology is the same as above.	•	•	•	•	Total HAPs Worst HAP	8.104E-03 7.729E-03

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

Greenhouse Gas Calculations

	Greenhouse Gas				
Emission Factor in Ib/MMcf	CO2 120,000	CH4 2.3	N2O 2.2		
Potential Emission in tons/yr	515	0.0	0.0		
Summed Potential Emissions in tons/yr	515				
Global warming Potential	1	21	310		
CO2e Total in tons/yr		518			

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.

Coloal Warning Potentials (GWP) from Table A-1 of 40 CFR Parl 98 Subpart A. Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (Ib/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 Glycerin Boiler - Natural Gas Combustion

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-53870-00102 Significant Permit Modification: 085-53910-00102 Operation Permit No: T 085 -29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Heat Input Capacity MMBtu/hr

Potential Throughput нну _____MMCF/yr mmBtu

	mmscf
10.0	1020

		Pollutant							
Emission Factor in Ib/MMCF	PM* 1.9	PM10* 7.6	direct PM2.5* 7.6	SO2 0.6	NOx 100 **see below	VOC 5.5	CO 84		
Potential Emission in tons/yr	0.08	0.3	0.3	0.03	4.3	0.2	3.6		

*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

85.9

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu MMCF = 1,000,000 Cubic Feet of Gas

MMCF = 1,000,000 Cubic relet 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 (MMBfu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBfu Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (Ib/MMCF)/2,000 lb/ton

HAPS Calculations

	HAPs - Organics							
Emission Factor in Ib/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Total - Organics		
Potential Emission in tons/yr	9.018E-05	5.153E-05	3.221E-03	7.729E-02	1.460E-04	8.080E-02		

	HAP'S - Metals						
Emission Factor in Ib/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total - Metals	
Potential Emission in tons/yr	2.147E-05	4.724E-05	6.012E-05	1.632E-05	9.018E-05	2.353E-04	
					Total HAPs	8.104E-02	
Methodology is the same as above.					Worst HAP	7.729E-02	

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

Greenhouse Gas Calculations

	Greenhouse Gas				
Emission Factor in Ib/MMcf	CO2 120,000	CH4 2.3	N2O 2.2		
Potential Emission in tons/yr	5,153	0.1	0.1		
Summed Potential Emissions in tons/yr	5,153				
Global warming Potential	1	21	310		
CO2e Total in tons/yr		5,184			

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.

Coloal Warning Potentials (GWP) from Table A-1 of 40 CFR Parl 98 Subpart A. Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (Ib/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 Glycerin Refinery

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T 085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

The biodiesel production process produces biodiesel and glycerin. All products are shipped offsite by truck or rail resulting loadout uncontrolled emissions. According to Ap-42, chapter 5.2 - Transportation and Marketing of Petroleum Liquids (6/08), the VOC emission factor from the truck and rail loading rack are:

L = 12.46 * (SPM/T)

where:

	s	P (psia)	M (lbs/mole lbs)	T (degree R)	L (lbs/kgal)
Glycerin	0.6	0.00005	92.1	582	0.00006
Glycerin Throughput 7.0 t			ton/hour		

	Max. Throughput (kgals/yr)	PTE of VOC (lbs/yr)	PTE of VOC (tons/yr)
Glycerin	11.570	0.66	0.0003

Note: Weight of one gallon of glycerin is equal to 10.6 lbs. All VOC is considered to be HAP.

Appendix A: Emissions Calculations Grain Dryer - Natural Gas Combustion

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-5910-00102 Operation Permit No: T 085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Heat Input Capacity MMBtu/hr

Potential Throughput HHV mmBtu mmscf

-	11111001	
6.0	1020	51.5

				Pollutant			
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	со
Emission Factor in Ib/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tor	0.05	0.2	0.2	0.02	2.6	0.1	2.2

*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 = 3

MMCF/yr

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 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MM Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

			HAPs -	Organics		
Emission Factor in Ib/MI	Benzene 2.1E-03	Dichlorobenz ene 1.2E-03	Formaldehy de 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Total - Organics
Potential Emission in tor	5.411E-05	3.092E-05	1.932E-03	4.638E-02	8.760E-05	4.848E-02

			HAPs	- Metals		
Emission Factor in Ib/MI	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total - Metals
Potential Emission in tor	1.288E-05	2.834E-05	3.607E-05	9.791E-06	5.411E-05	1.412E-04
					Total HAPs	4.862E-02

Methodology is the same as above.

Worst HAP 4.638E-02

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

Greenhouse Gas Calculations

	Gr	eenhouse Gas	
Emission Factor in Ib/MMcf	CO2 120,000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	3,092	0.1	0.1
Summed Potential Emissions in tons/yr		3,092	
Global warming Potential	1	21	310
CO2e Total in tons/yr		3,111	

Methodology

Memodology The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for Iow 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 (Ions/yr) = Throughput (IMMCF/yr) x Emission Factor (Ib/MMCF/2,000 Ib/on

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: Emission Calculations Flaking Roll No. 1 and No. 10

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T 085 -29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units C100000 and C010600 Flaking Roll No. 1 and No. 10

Controlled PM/PM10/PM2.5 Emission Factor	0.037	lb/ton	Source:	SCC 3-02-007-88
% Control Cyclone	90.00%			
Uncontrolled PM/PM10/PM2.5 Emission Factor	0.37	lb/ton		
Hourly Throughput Rate	22.9	tons/hr		
Annual Throughput Rate	200,604	tons/yr		
% Control Flaker Aspiration Baghouse	98.70%			
Potential PM/PM10/PM2.5 Emissions				
Flaking Roll No. 1 and No. 10				
3 1 1 1	Unco	ntrolled for each	unit	Controlled for each unit

			aon ann	0011010100	i loi cacii a
Max Hourly	=	8.47	lbs/hr	0.11	lbs/hr
Max Yearly	=	37.11	tons/yr	0.48	tons/yr
	т	otal Uncontro	olled	Total	Controlled
Total Hourly	=	16.95	lbs/hr	0.22	lbs/hr
Total Yearly	=	74.22	tons/yr	0.96	tons/yr

Methodology

Methodology Emission factor from AP 42 Table 9.11.1-1 Total Particulate Emission Factors for Soybean Milling (11/1995) *Values in Table 9.11.1-1 for flaking rolls include cyclone as control device. Therefore, IDEM has calculated the uncontrolled emission factors by removing the control efficiency for the cyclone (90% control efficiency). There is no emission factor for PM10 and PM2.5. Therefore, IDEM has assumed PM10 and PM2.5 = PM. Uncontrolled Emission Factor (Ib/ton) = Controlled Emission Factor (Ib/ton)(1 = 90% Control Efficiency)

Uncontrolled Emission Factor (lb/ton) = Controlled Emission Factor (lb/ton)/(1 - 90% Control Efficiency) Uncontrolled Potential Emissions (lb/thr) = Throughput (ton/hr) * Uncontrolled Emission factor (lb/ton) Uncontrolled Potential Emissions (lb/tr) = Throughput (ton/hr) * Uncontrolled Emission factor (lb/ton) * 6760 (hours/year) / 2000 (lbs/ton) Controlled Potential Emissions (lb/tr) = Throughput (ton/hr) * Uncontrolled Emission factor (lb/ton) * (1-Control Efficiency) Controlled Potential Emissions (ton/yr) = Throughput (ton/hr) * Uncontrolled Emission factor (lb/ton) * (1-Control Efficiency) Controlled Potential Emissions (ton/yr) = Throughput (ton/yr) * Uncontrolled Emission factor (lb/ton) / 2000 (lbs/ton)* (1-Control Efficiency). Total Uncontrolled/Controlled = Uncontrolled/Controlled for each unit * 2 The flaker aspiration baghouse is integral to the process, so the potential to emit will be determined after control.

Appendix A: Emissions Calculations 326 IAC 6-3-2 Compliance Units Less than 30 Tons per Hour Maximum Process Weight

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T 085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

¹Maximum ¹Uncontrolled PM PTE (lb/hr) ¹Controlled PM PTE (lb/hr) for Number of ocess Weigh 326 IAC 6-3 Limit Emission unit ID Emissions Units Baghouse ID Units (lb/hr) for each uni (tons/hr) for each unit each unit for each unit 17.0 17.0 Pellet Hulls Conveyor to Loadout AF-1 AF-3 1.04 0.0 27.36 full Collection Conveyor 1.04 17.0 17.0 Secondary Hull Collection Conveyor AF-3 1.04 0.01 27.36 1 E070300 4 Hour Hull Tank AF-3 0.43 0.003 N/A^2 Secondary Hull Collection L-Path 1.04 25.50 0.01 17.0 17.0 B440000 AF-3 27.36 E080000 Pellet Cooler AF-3 E050000, E050200, and E050100 ³Hull Hammer Mill, Hull Hammer Mill Feeder, and 3 AF-3 34.00 0.20 17.0 27.36 Hull Hammer Mill Plenum 1.04 1.04 0.01 17.0 17.0 Pelleted Hulls Leg AF-3 27.36 27.36 Pelleted Hulls Storage Conveyor AF-1 1 G050300 E050400 Hulls Addition Screw AF-3 1.04 17.0 27.36 C040000 and 2 AF-4 0.13 0.13 22.9 N/A² Flaking Rolls No. 4 and 7 C070000 C100000 and AF-4 2 ⁴Flaking Rolls No. 1 and 10 0.22 0.22 22.9 N/A³ C010600 Hull Overflow Tank Hull Bin Filter 0.19 0.19 17.0 1 N/A²

Notes:

¹ Process Weight Rates and PTEs are found on the PM summary page.

² The PM PTE from these units is less than 0.551 lbs/hr; therefore, they are not subject to 326 IAC 6-3-2.

³ The control devices shall be in operation and control emissions from these emission units, at all times they are in operation in order to comply with 326 IAC 6-3-2.

⁴ The control devices are integral and shall be in operation and control emissions from these emission units, at all times they are in operation in order to comply with 326 IAC 6-3-2.

Pursuant to 326 IAC 6-3-2, the particulate emissions limitations from the above table shall be 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}

Where:

E = Rate of emission in pounds per hour. P = Process weight rate in tons per hour.

Appendix A: Emissions Calculations 326 IAC 6-3-2 Compliance Units Greater than 30 Tons per Hour Maximum Process Weight

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T 085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Number of Units	Emission unit ID	Emissions Units	Baghouse ID	¹ Uncontrolled PM PTE (lb/hr) for each unit	¹ Controlled PM PTE (lb/hr) for each unit	¹ Maximum Process Weight (tons/hr) for each unit	326 IAC 6-3 Limit (Ib/hr) for each unit
2	G080000 and G180000	Truck and Rail Pelleted Hull Loadout Bins	AF-1	0.51	0.03	148	N/A ³
2	G130000 and G070000	² Rail Meal Loadout Bin and Truck Meal Loadout Bin	AF-1	7.50	0.41	300	63.00
5	G010000, G020000, G030000, G040000, and G050000	Meal Bin No. 1 thru 5 Vent Filters	MBF-1, MBF-2, MBF-3, MBF-4, and MBF-5	4.95	0.01	198	58.40
1	G220000	Rail Car Loadout (Pellets/Hulls)	AF-1	1.03	0.01	330.00	64.09
1	G020500	Meal Storage Feed Conveyor	AF-1	12.20	0.07	200.00	58.51
3	G070300, G170000 and G290000	Truck Meal Loadout Feed Conveyor, Rail Car Collection Conveyor and Truck Collection Conveyor	AF-1	54.90	0.31	300.00	63.00
1	G280000 and G270000	Truck Loader No.1	AF-1	169.29	0.95	330.00	64.09
2	G010100 and G010200	Meal Reclaim Conveyor and Meal Reclaim Leg	AF-1	24.40	0.14	200.00	58.51
1	A060000	Screener	AF-3	16.10	0.10	264	61.56
1	B011300	Bean Weigh Scale	AF-3	16.10	0.10	264	61.56
4	B011200, A160300, A060400 and B030800	Screener Feed Conveyor and Conditioned Bean Feed Conveyor	AF-3	16.10	0.10	264	61.56
2	B010100 and B020100	Whole Bean Aspiration No. 1 and No. 2	AF-3	16.10	0.10	264	61.56
1	B010300	Conditioner Bean Loop Path	AF-3	26.40	0.16	264	61.56
2	B120000 and B030000	Jet Dryer No. 1 and No. 2	Jet Dryer Cyclones No. 1A, 1B, 2A, and 2B	29.04	0.29	132	54.11
2	B010500 and B020500	VSC Air Heater No. 1 and No. 2	VSC Cyclones	29.04	1.41	264	61.56
2	B010000 and B020000	Vertical Seed Conditioner (VSC) No. 1 and No. 2	VSC Cyclones	13.20	0.64	132	54.11
4	B040000, B080100, B130000, and B170000	² Hulloosenator No. 1, No. 2, No. 3, and No. 4	AF-5	237.60	1.95	66	47.20
4	B050000, B090000, B140000, and B180000	Cascade Dryer No. 1, No. 2, No. 3 and No. 4	AF-5	14.52	0.12	66	47.20
4	B060000, B100000, B150000, and B190000	² Cracking Roll No.1, No. 2, No. 3 and No. 4	AF-5	237.60	1.95	66	47.20
4	B070000, B110000, B160000, and B200000	Cascade Conditioner No. 1, No. 2, No. 3 and No. 4	AF-5	6.60	0.05	66	47.20
1	A160000, A160500 and B420000	Day Tank (with Aspirator and Cyclone)	AF-5	6.60	0.05	264	61.56
2	C200100 and C010600	² Flaker Feed Loop Conveyor and Flake Collection Conveyor	AF-4	14.30	0.13	247	60.82
4	E020300, E020400, E010100, and E010300	Grinding Discharge Conveyor, Hammer Mill Mixing Conveyor, Meal L-Path Conveyor, and Meal Hammer Mill Feed Conveyor	AF-6	12.08	0.06	198	58.40
2	E230200 and E230000	² Meal Hammer Mill Feeder No. 5, Meal Hammer Mill No. 5	AF-6	503.20	2.52	74	48.30
1	G010300	Meal Leg	AF-6	12.08	0.06	198	58.40
1	G150000	Meal Conveyor to Loadout	AF-1	12.08	0.07	198	58.40
1	E230100	Meal Hammer Mill Bin No. 5	AF-6	1.85	0.01	74	48.30
4	D310000-1, D310000-2, D310000-3, and D310000- 4	² DC Decks No. 1, No. 2, No. 3, and No. 4	DC Deck Cyclones No. 1 through 4	374.40	7.11	208	58.93
2		Bean Storage Bins No. 4 and No. 8	None	6.51	6.51	600	71.16
1	Truck Dump No. 3	Truck Dump No. 3	AF-2	61.56	0.34	360	65.09
3	Rail Receiving Leg, Truck Dump No. 3 Receiving Conveyor & Truck Dump No. 3 Receiving Leg	Rail Receiving Leg, Truck Dump No. 3 Receiving Conveyor & Truck Dump No. 3 Receiving Leg	AF-2	21.96	0.12	360	65.09
4	Scalperator Leg, Scalperator Feed Conveyor, Scalperator Jack Leg, Scalperator	Scalperator Leg, Scalperator Feed Conveyor, Scalperator Jack Leg, Scalperator	AF-2	12.81	0.07	210	59.04

Notes:

¹ Process Weight Rates and PTEs are found on the PM summary page.

² The control devices shall be in operation and control emissions from these emission units, at all times they are in operation in order to comply with 326 IAC 6-3-2.

 $^3\,$ The PM PTE from these units is less than 0.551 lbs/hr; therefore, they are not subject to 326 IAC 6-3-2.

Pursuant to 326 IAC 6-3-2, the particulate emissions limitations from the above table shall be calculated using the following equation:

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

E = 55.0 P^{0.11} - 40

Where:

E = Rate of emission in pounds per hour. P = Process weight rate in tons per hour.

Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), when the process weight rate exceeds two hundred (200) tons per hour, the allowable emissions may exceed that shown in the table in 326 IAC 6-3-2(e) provided the concentration of particulate in the discharge gases to the atmosphere is less than one tenth (0.10) pound per one thousand (1,000) pounds of gases.



Appendix A: Emission Calculations PM Summary Stack AF-2

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significani Ozerne Modification: 085-3591-00102 Operation Permit Modification: 085-3591-00102 Operation Permit No: 1 085-24917-0102 Permit Reviewer: Tamera Wessel Date: Mpy 27, 2515

						11-12	mited Date		Emina	en Fantan (h dens)		Constant ER	fains au			Before Contr	ol				After C	ontrol		Emissions Based or	h Limited Soybeans	Processed	Emine	ines Record on Al	Limite	
Filter / Stack ID	Control / Stack Description	Emission unit ID	Number of Units	¹ Process	Notes	Onin	inited Rate	Limited Rate	EIIISS	on Faciois (b/ton)	Aspiration Rate (cfm)	Control En	iciency	F	PM		PM ₁₀	*PM2.5	P	м	1	PM ₁₀	[®] PM _{2.5}	PM	PM ₁₀	⁸ PM _{2.5}	EIIIGSI	JIIS BASED OIT AU	Linius	Emission Factor Source
						tons/hr	tons/yr	tons/yr	PM	PM ₁₀	PM _{2.5}		PM	PM10 /PM25	lb/hr	tons/yr	lb/hr	tons/yr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	РМ	PM10	PM _{2.5}	
		A030000 and A020000	2	Truck Dumps No. 1 and No. 2 (captured)	2, 12	600	5,256,000	2,401,836	0.1800	0.0590	0.0100	6,000	99.44%	99.44%	205.20	898.78	67.26	294.60	49.93	1.15	5.03	0.38	1.65	0.28	205.4	67.31	11.41				SCC 3-02-005-51
		Truck Dump No. 3 (with doors)	1	Truck Dump No. 3 (captured)	2,12	360	3,153,600	2,401,836	0.1800	0.0590	0.0100	6,000	99.44%	99.44%	61.56	269.63	20.18	88.38	14.98	0.34	1.51	0.11	0.49	0.08	205.4	67.31	11.41				SCC 3-02-005-51
		A030100, A020100, A040000, A050000,	6	Discharge Conveyors No. 1 and No. 2, Bean Receiving Legs No. 1 and No. 2, and East and		600	5,256,000	2,401,836	0.061	0.034	0.0058	5,000	99.44%	99.44%	219.60	961.85	122.40	536.11	91.45	1.23	5.39	0.69	3.00	0.51	73.3	40.83	6.97				SCC 3-02-005-30
11AF-2	Grain Receiving / Meal Loadout Baghouse AF-2, 28,000 acfm @ 0.005 orain/acf outlet or	Rail Receiving Leg, Truck Dump No. 3 Receiving Conveyor & Truck Dump No. 3 Receiving Leg	3	West Receiving Leg, Truck Dump No. 3 Receiving Conveyor & Truck Dump No. 3 Receiving Leg	NA	360	3,153,600	2,401,836	0.061	0.034	0.0058	2,500	99.44%	99.44%	65.88	288.55	36.72	160.83	27.44	0.37	1.62	0.21	0.90	0.15	73.3	40.83	6.97	1.64 lb/hr (7.18 tonr/vr)	1.64 lb/hr (7.18 teachar)	1.64 lb/hr (7.18 topr/st)	
	loading, and control efficiency 99.44% for PM/PM ₁₀ /PM _{2.5}	Scalperator Leg, Scalperator Feed Conveyor, Scalperator, Jack Leg, Scalperator	4	Scalperator Leg, Scalperator Feed Conveyor, Scalperator Jack Leg, Scalperator	NA	210	1,839,600	2,401,836	0.061	0.034	0.0058	2,500	99.44%	99.44%	51.24	224.43	28.56	125.09	21.34	0.29	1.26	0.16	0.70	0.12	73.3	40.83	6.97	(1.10 talayi)	(7.10 (0123))	(1.10 (0.02)))	
		A010000	1	Rail Dump and Rail Collection Conveyor (captured)	2, 12	600	5,256,000	2,401,836	0.032	0.0078	0.0013	3,000	99.44%	99.44%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00				SCC 3-02-005-53
		A150100 and A120100	2	Cross Bins No 1 thru 6 Day Bin Leg, Rail Scale Discharge Conveyor,		600	5,256,000	2,401,836	0.061	0.034	0.0058	1,000	99.44%	99.44%	73.20	320.62	40.80	178.70	30.48	0.41	1.80	0.23	1.00	0.17	73.3	40.83	6.97				SCC 3-02-005-30
		A151000, A121000, A152000, and A122000	6	Discharge Bin No 1 thru 6, West Bin Cross Conveyor 1-3, and East Bin Cross Conveyor 4- R		360	3,153,600	2,401,836	0.061	0.034	0.0058	2,500	99.44%	99.44%	131.76	577.11	73.44	321.67	54.87	0.74	3.23	0.41	1.80	0.31	73.3	40.83	6.97				SCC 3-02-005-30
			2	Truck Dumps No. 1 and No. 2 (uncaptured) Truck Dump No. 3 (uncaptured)	4, 12	600 360	5,256,000 3,153,600	2,401,836 2,401,836	0.0610	0.0340	0.0100	NA	0.00%	0.00%	3.66	16.03 14.19	2.04	8.94 4.65	2.63	3.66	16.03 14.19	2.04	8.94 4.65	2.63	3.663 10.808	2.042 3.543	0.60	3.66	2.04	0.60	SCC 3-02-005-51 and -52 SCC 3-02-005-51
			1	Rail Dump and Rail Collection Conveyor (uncaptured)	4, 12	600	5,256,000	2,401,836	0.0320	0.0078	0.0013	NA	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.00	0.00	0.00	0.00	SCC 3-02-005-53
				Stack AF-2 Total (tons/yr)											808.44	3,540.97	389.36	1,705.39	290.50	4.53	19.83	2.18	9.55	1.63	776.99	338.78	57.64	7.18	7.18	7.18	
	PM Emissions AF-2 & uncaptured PM (tons/yr)														815.34	3,571.19	392.46	1,718.97	293.92	11.43	50.05	5.28	23.14	5.04	791.47	344.36	58.84	21.65	12.77	8.38	
		G280000 and G270000	2	Truck Loader No.1 and No. 2 (captured)	2, 6, 15	330	2,890,800	2,401,836	0.270	0.068	0.068	3,000	99.44%	99.44%	169.29	741.49	42.32	185.37	185.37	0.95	4.15	0.24	1.04	1.04	308.0	77.01	77.01				SCC 3-02-007-91
		G220000	1	Rail Car Loadout (Pellets/Hulls) (captured)	2, 10, 15	330	2,890,800	2,401,836	0.0033	0.0008	0.0008	10,000	99.44%	99.44%	1.03	4.53	0.25	1.10	1.10	0.01	0.03	0.00	0.01	0.01	3.8	0.91	0.91				SCC-3-02-008-03
		G080000 and G180000	2	(captured)	2, 6, 15	148	1,296,480	N/A	0.0033	0.0008	0.0008	1,000	99.44%	99.44%	0.98	4.28	0.24	1.04	1.04	0.01	0.02	0.00	0.01	0.01	2.14	0.52	0.52				SCC-3-02-008-03
		G020500 G070300, G170000 and	1	Truck Meal Loadout Feed Conveyor, Rail Car		200	2,628,000	2 401 826	0.061	0.034	0.0058	1 500	00.44%	99.44%	54.90	240.46	30.60	134.03	22.96	0.07	1.30	0.04	0.75	0.13	73.3	40.83	6.07				SCC 3-02-005-30
		G290000 G160000	3	Collection Conveyor and Truck Collection Conveyor Pellet Hulls Conveyor to Loadout	15	17	148,920	2,401,636 N/A	0.061	0.034	0.0058	500	99.44%	99.44%	1.04	4.54	0.58	2.53	0.43	0.01	0.03	0.00	0.01	2.42E-03	4.54	2.53	0.43				SCC 3-02-005-30
	Meal Loadout Baghouse AF-1,	G010100 and G010200	2	Meal Reclaim Convevor and Meal Reclaim Leo	15	200	1,752,000	N/A	0.061	0.034	0.0058	1,000	99.44%	99.44%	24.40	106.87	13.60	59.57	10.16	0.14	0.60	0.08	0.33	0.06	53.44	29.78	5.08				SCC 3-02-005-30
AF-1	22,125 cfm @ 0.005 grain/acf outlet gr loading, and	G130000 and G070000	2	Rail Meal Loadout Bin (captured) and Truck Meal Loadout Bin (captured)	2, 6, 10,16, 15	300	2,628,000	1,914,061	0.025	0.0063	0.0011	1,000	99.44%	99.44%	14.25	62.42	3.56	15.60	2.65	0.080	0.35	0.020	0.09	0.01	22.7	5.68	0.97	0.95 lb/hr (4.16 tons/yr)	0.95 lb/hr (4.16 tons/yr)	0.95 lb/hr (4.16 tons/yr)	SCC 3-02-005-40
	control efficiency 99.44% for PM/PM10/PM2.5	G050300	1	Pelleted Hulls Storage Conveyor	15	17.0	148,920	N/A	0.061	0.034	0.0058	500	99.44%	99.44%	1.04	4.54	0.58	2.53	0.43	0.01	0.03	0.00	0.01	2.42E-03	4.54	2.53	0.43				SCC 3-02-005-30
		G150000	1	Meal Conveyor to Loadout	15	198	1,734,480	no limit	0.061	0.034	0.0058	500	99.44%	99.44%	12.08	52.90	6.73	29.49	5.03	0.07	0.30	0.04	0.17	0.03	N/A	N/A	N/A		L		SCC 3-02-005-30
			2	Truck Loader No. 1 and No. 2 (uncaptured) Pail Car Loadout (Palletr/Mulic) (uncaptured)	4, 15	330 330	2,890,800	2,401,836	0.2700	0.0675	0.0675	NA	0.00%	0.00%	8.91	39.03	2.23	9.76	9.76	8.91	39.03	2.23	9.76	9.76	16.212	4.053	4.05	16.21	4.05	4.05	SCC 3-02-007-91 SCC-3-02-008-03
			2	Truck and Rail Pelleted Hull Loadout Bins	4,15	148	1,296,480	N/A	0.0033	0.0008	0.0008	NA	0.00%	0.00%	0.05	0.21	0.01	0.05	0.05	0.05	0.21	0.01	0.05	0.05	2.14	0.52	0.52	2.14	0.52	0.52	SCC-3-02-008-03
			2	Rail Meal Loadout Bin (uncaptured) and Truck Meal Loadout Bin (uncaptured)	4, 15	300	2,628,000	1,914,061	0.025	0.0063	0.0011	NA	0.00%	0.00%	0.75	3.29	0.19	0.82	0.14	0.75	3.29	0.19	0.82	0.14	1.20	0.30	0.05	1.20	0.30	0.05	SCC 3-02-005-40
				Stack AF-1 Total (tons/yr)											291.20	1,275.47	105.26	461.04	234.16	1.63	7.14	0.59	2.58	1.31	525.85	189.59	97.40	4.16	4.16	4.16	
PM Emissions AF-1 & uncaptured PM 300.97 1,318.23 107.70 471.73 244.17 11.39 49.91 3.03 13.27 11.22 545.60 194.50 102.07 23.91 9.08 8.83																															
L																															
MBF-1, MBF-2, MBF-3, MRF-4 and	Meal bin filters, 1,000 acfm, and control efficiency 99.82% for PM/PM10/PM2 6	G010000, G020000, G030000, G040000 and G050000	1	Meal Bin No. 1 thru 5 Vent Filters	13	198	1,734,480	N/A	0.025	0.0063	0.0011	1,000	99.82%	99.82%	4.95	21.68	1.247	5.46	0.95	0.01	0.04	0.00	0.01	0.00	N/A	N/A	N/A	0.93 lbs/hr each, 4.07 tons/yr each	0.93 lbs/hr each, 4.07 tons/yr each	0.93 lbs/hr each, 4.07 tons/yr each	SCC 3-02-005-40
		Piles #1 and #2	2	Covered Seasonal Grain Storage Piles	14	360	3,153,600	240,000	0.061	0.034	0.0058	N/A	N/A	N/A	43.92	192.37	24.48	107.22	18.29	N/A	N/A	N/A	N/A	N/A	7.32	4.08	0.70	0.061 lb/ton (7.32 tons/vr)	0.034 lb/ton (4.08 tons/vr)	0.0058 lb/ton (0.70 tons/vt)	SCC 3-02-005-30
				Page 1 Subtotal (tons/yr)											1,160.23	5,081.79	524.64	2,297.93	556.37	15.92	69.74	5.21	22.82	12.94	1,344.39	542.95	161.61	73.25	46.29	38.28	

Notes: Emission factors based SCC Codes that start with 3-02-005 were taken from Table 9.9.1-1 in AP-42 section 9.9.1 (03/2003).

Emission factors based SCC Codes are start with 3-02-020 were state from Table 3.8-11.1 in AP-42 sectors 3.11 (19965). Emission factors based SCC Codes that start with 3-02-020 were state from Table 3.1.1 in AP-42 sectors 3.11 (19965). Emission factors based SCC Codes that start with 3-02-026 were state from Table 3.1.2 in AP-42 sectors 3.11 (02/020). Emission factors based SCC Codes that start with 3-02-036 were state from Table 3.1.3 in AP-42 sectors 3.11 (02/020).

Encode back SCC Code in and web 3-65-0% were later to 11:12:4 AP-42 action 11:12: (2005).

1) For other has some back SCC Code in and web 3-65-0% were later to 11:12: (2005).
1) For other has some back some back TC back in and web 1:15: 4 - AP-42 action 11:12: (2005).
1) For other has some back some back TC back in and web 1:15: 4 - AP-42 action 11:12: (2005).
1) For other has some back in and web 1:15: 4 - AP-42 action 11:12: (2005).
1) For other has some back in and web 1:15: 4 - AP-42 action 11:12: (2005).
1) For other has some back in and web 1:15: 4 - AP-42 action 11:12: (2005).
1) For other has some back in and web 1:15: 4 - AP-42 action 11:12: (2005).
1) For other has some back in and web 1:15: 4 - AP-42 action 11:12: (2005).
1) For other has some back in and web 1:15: 4 - AP-42 action 11:12: (2005).
1) For other has some back in and web 1:15: 4 - AP-42 action 11:11: (2005).
1) For other has and web 1:15: 4 - AP-42 action 11:11: (2005).
1) For other has and web 1:15: 4 - AP-42 action 11:11: (2005).
1) For other has and web 1:15: 4 - AP-42 action 11:11: (2005).
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1) For other has and web 1:15: 4 - AP-42 action 11:11: (2005).
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1) For other has and web 1:15: 4 - AP-42 action 11:11: (2005).
1) For other has and web 1:15: 4 - AP-42 action 11:11: (2005).
1) For other has and web 1:15: 4 - AP-42 action 11:11: (2005).
1) For other has and web 1:15: 4 - AP-42 action 11:11: (2005).
1) For other has and web 1:15: 4 - AP-42 action 11:11: (2005).
1) For other has

Appendix A: Emission Calculations

PM Summary Stacks AF-3, AF-7, and S-1

Company Name: Louis Dreytus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significan Vernet Modification: 085-3591-00102 Opparation Permit No: 105:24917-00102 Permit Reviewe: Tamera Wessel Date: Way 77, 2015

Films / Control / Store						Lini	mited Pate	⁹ l imited Date	Emier	ion Eactorr (lb/ton)		Control Ef	ficiency			Before Contr	ol			Afte	r Control		Emissions Based on	Limited Soybeans	Processed	Emir	rione Barad on A	II Limite	
Filter / Stack ID	Control / Stack Description	Emission unit ID	Number of Units	¹ Process	Notes	Gill	inited func	Limited Rate	Lind.		, and the second s	Aspiration Rate (cfm)	CONTOL	icitiity		PM		PM ₁₀	⁸ PM _{2.5}	PM		PM ₁₀	⁸ PM _{2.5}	PM	PM ₁₀	⁸ PM _{2.5}			or Lanna	Emission Factor Source
						tons/hr	tons/yr	tons/yr	РМ	PM _{to}	PM _{2.5}		PM	PM ₁₀	lb/hr	tons/yr	lb/hr	tons/yr	tons/yr	lb/hr tons	yr Ib	'hr tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	PM	PM10	PM2.5	
		A060000	1	Screener		264	2,312,640	2,251,836	0.061	0.034	0.0058	5,000	99.41%	99.41%	16.10	70.54	8.98	39.31	6.71	0.10 0.4	2 0.	05 0.23	0.04	68.68	38.28	6.53				SCC 3-02-005-30
		A170000	1	Screenings Tank		5.0	43,800	N/A	0.025	0.0063	0.0011	500	99.41%	99.41%	0.13	0.55	0.03	0.14	0.02	0.00 0.0	0 0.	00.00	0.00	0.55	0.14	0.02				SCC 3-02-005-40
		A170300	1	Screenings Recycle Leg		5.0	43,800	N/A	0.061	0.034	0.0058	500	99.41%	99.41%	0.31	1.34	0.17	0.74	0.13	0.00 0.0	1 0.	00.00	0.00	1.34	0.74	0.13				SCC 3-02-005-30
		B011300	1	Bean Weigh Scale	3	264	2,312,640	2,251,835	0.061	0.034	0.0058	500	99.41%	99.41%	16.10	70.54	8.98	39.31	6.71	0.10 0.4	2 0.	05 0.23	0.04	68.68	38.28	6.53				SCC 3-02-005-30
		B011200, A160300, A060400 and B030800	4	VSC Feed Leg, VSC Leg Feed Conveyor, Screener Feed Conveyor and Conditioned Bean Feed Conveyor		264	2,312,640	2,251,836	0.061	0.034	0.0058	500	99.41%	99.41%	64.42	282.14	35.90	157.26	26.83	0.38 1.6	6 0.	21 0.93	0.16	68.68	38.28	6.53				SCC 3-02-005-30
		B010100 and B020100	2	Whole Bean Aspiration No. 1 and No. 2		264	2,312,640	2,251,836	0.061	0.034	0.0058	2,000	99.41%	99.41%	32.21	141.07	17.95	78.63	13.41	0.19 0.8	3 0.	11 0.46	0.08	68.68	38.28	6.53				SCC 3-02-005-30
	Prep Exhaust Filter.	B030900	1	Hull Collection Conveyor		17.0	148,920	N/A	0.061	0.034	0.0058	500	99.41%	99.41%	1.04	4.54	0.58	2.53	0.43	0.01 0.0	3 0.	00 0.01	0.00	4.54	2.53	0.43				SCC 3-02-005-30
	Bachouse AE-3	E130000 and E150000	2	Hull Screener No. 1 and No. 2	10	9.6	84,096	N/A	0.061	0.034	0.0058	NA	99.41%	99.41%	1.17	5.13	0.65	2.86	0.49	0.01 0.0	3 0.	00 0.02	0.00	5.13	2.86	0.49	1.26 lb/br	1.26 lb/br	1.26 lb/br	SCC 3-02-005-30
AF-3	28,900 acfm 99.41%	B430000	1	Secondary Hull Collection Conveyor		17.0	148,920	N/A	0.061	0.034	0.0058	3,000	99.41%	99.41%	1.04	4.54	0.58	2.53	0.43	0.01 0.0	3 0.	00 0.01	0.00	4.54	2.53	0.43	(5.52 tons/vr)	(5.52 tons/vr)	(5.52 tons/vr)	SCC 3-02-005-30
	PM/PM _{to} control	E070300	1	4 Hour Hull Tank		17.0	148,920	N/A	0.025	0.0063	0.0011	1,500	99.41%	99.41%	0.43	1.86	0.11	0.47	0.08	0.00 0.0	1 0.	00 0.00	0.00	1.86	0.47	0.08	(0.02 10.00).)	(0.02.00.0)//	(0.02 00.00).)	SCC 3-02-005-40
		B440000	1	Secondary Hull Collection L-Path		17.0	148,920	N/A	0.061	0.034	0.0058	Not Provided	99.41%	99.41%	1.04	4.54	0.58	2.53	0.43	0.01 0.0	3 0.	00 0.01	0.00	4.54	2.53	0.43				SCC 3-02-005-30
		E080000	1	Pellet Cooler	5.7	17.0	148,920	N/A	1.5	0.75	0.75	6.500	99.41%	99.41%	25.50	111.69	12.75	55.85	55.85	0.15 0.6	6 0.	08 0.33	0.33	111.69	55.85	55.85				SCC 3-02-008-16
		E050000, E050200, and	3	Hull Hammer Mill, Hull Hammer Mill Feeder,	5.7	17.0	148.920	N/A	2	1.0	1.0	8 000	99.41%	99.41%	102.00	446.76	51.00	223.38	223.38	0.60 2.6	4 0.	30 1.32	1.32	446.76	223.38	223.38				SCC 3-02-007-86
		E050100		and Hull Hammer Mil Plenum			1 10 0 00		0.004			5,555													0.50					000 0 00 005 00
		G050100	1	Pelleted Hulis Lea		17.0	148,920	N/A	0.061	0.034	0.0058	1.000	99.41%	99.41%	1.04	4.04	0.58	2.53	0.43	0.01 0.0	3 0.	00 0.01	0.00	4.04	2.53	0.43				SCC 3-02-005-30
		E050400	1	Hulls Addition Screw		17.0	148,920	N/A	0.061	0.034	0.0058	Not Provided	99.41%	99.41%	1.04	4.54	0.58	2.53	0.43	0.01 0.0	3 0.	00 0.01	0.00	4.54	2.53	0.43				SCC 3-02-005-30
		B310000	1	Screenings Weight Belt		5.0	43,800	N/A	0.061	0.034	0.0058	500	99.41%	99.41%	0.31	1.34	0.17	0.74	0.13	0.00 0.0	1 0.	00.00	0.00	1.34	0.74	0.13				SCC 3-02-005-30
		B010300	1	Conditioner Bean Loop Path	6, 11	264	2,312,640	no limit	0.10	0.025	0.025	42,000	99.41%	99.41%	26.40	115.63	6.60	28.91	28.91	0.16 0.6	8 0.	04 0.17	0.17	N/A	N/A	N/A				SCC 3-02-007-87
				AF-3 Total											290.25	1,271.29	146.18	640.27	364.79	1.71 7.5	00.	86 3.78	2.15	866.09	449.96	308.35	5.52	5.52	5.52	
AF-7	Pod Grinder/Screener Baghouse, AF-7, 5000 acfm, 99.00% PM/PM ₁₀ control	B310200	1	Pod Grinder/Destoner	6	5.0	43,800	N/A	2.000	0.500	0.500	5,000	99.00%	99.00%	10.00	43.80	2.50	10.95	10.95	0.10 0.4	4 0.	03 0.11	0.11	43.80	10.95	10.95	1.5 lb/hr (6.57 tons/yr)	1.5 lb/hr (6.57 tons/yr)	1.5 lb/hr (6.57 tons/yt)	SCC 3-02-007-86
				AF-7 Total											10.00	43.80	2.50	10.95	10.95	0.10 0.4	4 0.	03 0.11	0.11	43.80	10.95	10.95	6.57	6.57	6.57	
	Lat Davas Baskawasa																													
S-1	99.00% PM/PM ₁₀ control.	B120000 and B030000	2	Jet Dryer No. 1 and No. 2	11	132	1,156,320	no limit	0.22	0.055	0.0094	36,000	99.00%	99.00%	58.08	254.39	14.52	63.60	10.87	0.58 2.5	4 0.	15 0.64	0.11	N/A	N/A	N/A				SCC 3-02-005-27
S-1, S-6	VSC Cyclones No. 1 ¹² & No. 2 95.14% PM control, 80.57%	B010500 and B020500	2	VSC Air Heater No. 1 and No. 2	11,13	264	2,312,640	no limit	0.22	0.055	0.0094	42,000	95.14%	80.57%	58.08	254.39	14.52	63.60	10.87	2.82 12.3	16 2	82 12.36	2.11	N/A	N/A	N/A	4.93 lb/hr (21.59 tons/yr)	3.35 lb/hr (14.67 tons/yr)	3.35 lb/hr (14.67 tons/yr)	SCC 3-02-005-27
S-1, S-6	PMIU control. Control efficiencies of the VSC Cyclones were estimated by the source.	B010000 and B020000	2	Vertical Seed Conditioner (VSC) No. 1 and No. 2	6,11	132	1,156,320	no limit	0.10	0.025	0.025	42,000	95.14%	80.57%	26.40	115.63	6.60	28.91	28.91	1.28 5.6	2 1.	28 5.62	5.62	N/A	N/A	N/A				SCC 3-02-007-87
S-1 and S-6 Total 142.56 624.41 35.64 156.10												50.65	4.69 20.5	3 4.	25 18.61	7.84	0.00	0.00	0.00	21.59	14.67	14.67								
				Page 2 Subtotal (tons/vr)											442.81	1,895.70	181.82	796.37	415.44	6.40 28.0	13 5.	11 22.39	9.99	866.09	449.96	308.35	33.68	26.76	26.76	

Netse: Emission factors based SCC Codes that start with 3-0-2005 were taken from Table 3.9.1.1 in AP-42 section 9.3.1 (0.32000). Emission factors based SCC Codes that start with 3-0-2007 were taken from Table 3.9.1.1 in AP-42 section 9.3.1 (1.111995). Emission factors based SCC Codes that start with 3-0-2008 were taken from Table 3.9.1.1 an AP-42 section 9.3.1 (0.2000).

Enclosed back Study Study. Use the text with solved are test assessment to the T1:52 of AP-42 stades T1:52 (pages)
T1 of Study the Source Monore Monore Monor

Appendix A: Emission Calculations

PM Summary Stacks AF-5, AF-4, and AF-6

Company Name: Louis Dreytus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significan Vernet Modification: 085-3591-00102 Opparation Permit No: 105:24917-00102 Permit Reviewe: Tamera Wessel Date: Way 77, 2015

						Lini	mited Pate	⁹ Limited Date	Emier	ion Eactors (lb)	(m)		Control Ef	ficiency			Before Contr	lar				After Co	ntrol		Emissions Based o	n Limited Soybeans	Processed		Limite		
Filter / Stack ID	Control / Stack Description	Emission unit ID	Number of Units	¹ Process	Notes	Gill	inted take	Linned Kate	Lings	on raciona (illi	At Ra	Aspiration Rate (cfm)	Control El	inclusively		PM		PM10	⁸ PM _{2.5}	8	PM	P	M10	[#] PM _{2.5}	PM	PM ₁₀	[®] PM _{2.5}		Linis		Emission Factor Source
						tons/hr	tons/yr	tons/yr	PM	PM ₁₀	PM _{2.5}		РМ	PM _{to}	lb/hr	tons/yr	lb/hr	tons/yr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	PM	PM ₁₀	PM _{2.5}	
		B040000, B080100, B130000, and B170000	4	Hulloosenator No. 1, No. 2, No. 3, and No. 4	6, 14, 15	66	578,160	no limit	3.6	0.90	0.90	NA	99.18%	99.18%	950.40	4162.75	237.60	1040.69	1040.69	7.79	34.13	1.95	8.53	8.53	N/A	N/A	N/A			i l	SCC 3-02-007-85
	Hot Debulling Filter	B050000, B090000, B140000, and B180000	4	Cascade Dryer No. 1, No. 2, No. 3, and No. 4	15	66	578,160	no limit	0.22	0.055	0.009	30,000	99.18%	99.18%	58.08	254.39	14.52	63.60	10.41	0.48	2.09	0.12	0.52	0.09	N/A	N/A	N/A				SCC 3-02-005-27
AF-5	Baghouse AF-5,	B060000, B100000, B150000, and B190000	4	Cracking Roll No. 1, No. 2, No. 3, and No. 4	6, 14, 15	66	578,160	no limit	3.6	0.90	0.90	NA	99.18%	99.18%	950.40	4162.75	237.60	1040.69	1040.69	7.79	34.13	1.95	8.53	8.53	N/A	N/A	N/A	2.56 lb/hr	2.56 lb/hr	2.56 lb/hr	SCC 3-02-007-85
	43,600 acrm, 99.18% PMPM ₁₀ Control.	B070000, B110000,	4	Cascade Conditioner No. 1, No. 2, No. 3, and	6, 15	66	578,160	no limit	0.10	0.025	0.025	42,600	99.18%	99.18%	26.40	115.63	6.60	28.91	28.91	0.22	0.95	0.05	0.24	0.24	N/A	N/A	N/A	(11.21 tons/yr)	(11.21 tons/yr)	(11.21 tons/yr)	SCC 3-02-007-87
		E130100, E150100, and	3	Secondary Aspirator No. 1 and No. 2, and	15	9.6	84,096	no limit	0.061	0.034	0.0058	Not	99.18%	99.18%	1.76	7.69	0.98	4.29	0.73	0.01	0.06	0.01	0.04	0.01	N/A	N/A	N/A				SCC 3-02-005-30
		A160100 A160000, A160500 and	1	Day Tank (with Aspirator and Cyclone)		264	2,312,640	2,251,836	0.025	0.0063	0.0011	6,000	99.18%	99.18%	6.60	28.91	1.66	7.28	1.27	0.05	0.24	0.01	0.06	0.01	28.1	7.09	1.24				SCC 3-02-005-40
		8420000		AE-5 Total		L				· · · · ·				1	1993.64	8732 13	498.96	2185.46	2122.69	16.35	71.60	4.09	17.92	17.41	28.15	7.09	1.24	11.21	11.21	11.21	
		C010000	1	Flaking Roll No. 1	13, 14, 15	22.9	200,604	no limit				NA	99.07%	99.07%																	
10AE-4	Flaker Asp. Filter,	C020000, C030000, C050000, C060000, C080000, and C090000	6	Flaking Rolls No. 2, 3, 5, 6, 8, and 9	15	22.9	200,604	no limit			P	Not Provided	99.07%	99.07%																	
¹⁰ AF-4	24,000 acrm , 99.07% control	C200100 and C010600	2	Flaker Feed Loop Conveyor and Flake Collection Conveyor	15	247	2,163,720	no limit	See Al	F-4 spreadshee loulation details	et for Is	24,000	99.07%	99.07%	14.30	62.65	19.07	83.54	83.54	0.13	0.56	0.17	0.75	0.75	N/A	N/A	N/A	1.03 lb/hr (4.51 tons/yr)	1.03 lb/hr (4.51 tons/yr)	1.03 lb/hr (4.51 tons/yr)	Stack Test
	PMPM ₁₀	C100000	1	Flaking Roll No. 10	11. 14. 15	22.9	200,604	no limit				NA	99.07%	99.07%																1 1	
		C0110000 and C0120000	2	Flaking Rolls No. 11 and 12	10, 15	22.9	200,604	no limit			P	Not Provided	99.07%	99.07%																	
		C040000 and C070000	2	Flaking Rolls No. 4 and 7	12, 14, 15	22.9	200,604	no limit				NA	99.07%	99.07%																	
		1		AF-4 Total	-										14.30	62.65	19.07	83.54	83.54	0.13	0.56	0.17	0.75	0.75	0.00	0.00	0.00	4.51	4.51	4.51	
		E020300, E020400, E010100, and E010300	4	Moing Conveyor, Meal L-Path Conveyor, and Meal Hammer Mill Feed Conveyor	15	198	1,734,480	no limit	0.061	0.034	0.0058	1,000	99.50%	99.50%	48.31	211.61	26.93	117.94	20.12	0.24	1.06	0.13	0.59	0.10	N/A	N/A	N/A				SCC 3-02-005-30
	Meal Grinding Filter, Banhouse AF-6	E020200, E030200, E040200, E020000, E020000, and E040000	6	Meal Hammer Mill Feeders No. 1, No. 2 and No. 3, Meal Hammer Mills No. 1, No. 2 and No.	5, 6, 15	74	648,240	no limit	3.400	0.850	0.850	3,000	99.50%	99.50%	1509.60	6612.05	377.40	1653.01	1653.01	7.55	33.06	1.89	8.27	8.27	N/A	N/A	N/A	0.945 lb/br	0.945 lb/br	0.945 lb/br	SCC 3-02-007-93
AF-6	18,000 acfm, 99.50%	E230200 and E230000	2	Meal Hammer Mil Feeder No. 5, Meal Hammer	5.6.15	74	648,240	no limit	3.400	0.850	0.850	3,000	99.50%	99.50%	503.20	2204.02	125.80	551.00	551.00	2.52	11.02	0.63	2.76	2.76	N/A	N/A	N/A	(4.14 tons/yr)	(4.14 tons/yr)	(4.14 tons/yr)	SCC 3-02-007-93
	PM/PM10 control	G010300	1	Mil No. 5 Meal Leg	15	198	1,734,480	no limit	0.061	0.034	0.0058	1,000	99.50%	99.50%	12.08	52.90	6.73	29.49	5.03	0.06	0.26	0.03	0.15	0.03	N/A	N/A	N/A			1 1	SCC 3-02-005-30
	1	E020100, E030100, and	3	Meal Hammer Mill Bins No. 1, No. 2 and No. 3	15	74	648,240	no limit	0.025	0.0063	0.0011	6,000	99.50%	99.50%	5.55	24.31	1.40	6.13	1.07	0.03	0.12	0.01	0.03	0.01	N/A	N/A	N/A		1	1 1	SCC 3-02-005-40
		E040100 E230100	1	Meal Hammer Mill Bin No. 5	15	74	648,240	no limit	0.025	0.0063	0.0011	6,000	99.50%	99.50%	1.85	8.10	0.47	2.04	0.36	0.01	0.04	0.00	0.01	0.00	N/A	N/A	N/A			I	SCC 3-02-005-40
				AF-6 Total											2080.59	9112.98	538.72	2359.61	2230.59	10.40	45.56	2.69	11.80	11.15	0.00	0.00	0.00	4.14	4.14	4.14	
	Arrs Usar Page 3 substal (fons/n) 4408.53 (139).77 1055.76 4528.61 4436.82 258.81												117.73	6.96	30.47	29.31	28.15	7.09	1.24	19.86	19.86	19.86									

Notes: Emission factors based SCC Codes that start with 3-02-005 were taken from Table 9.9.1.1 in AP-42 sectors 9.9.1 (0370003). Emission factors based SCC Codes that start with 3-02-007 were taken from Table 9.1.1.1 in AP-42 sectors 9.1.1 (1111966). Emission factors based SCC Codes that start with 3-02-008 were taken from Table 9.1.2 in AP-42 sectors 9.1.1 (2011966). Emission factors based SCC Codes that start with 3-02-008 were taken from Table 9.1.2 in AP-42 sectors 9.1.1 (201206).

Tension has based SCC Data Int an white 30-50% we waite has how Take 11:32:44 mA-42 action 11:32 (20030). 1) To dath the Source have control well TE to a strong have a data into the 11:32 action 11:32 (20030). 1) To dath the Source have control well TE to a strong have a data into the 11:32 (20030). 1) To dath the Source have control well TE to a strong have a data into the 11:32 (20030). 1) Calculate Source have control well TE to a strong have a data into the 11:32 (20030). 1) To action the Source have control well TE to a strong have a data into the 11:32 (20030). 1) Calculate Source have a data into the Source have a data into the 15 strong have control well TE to a strong have a data into the Source have a data into the Source have and the strong have a control well to a strong have a data into the Source have a low store have a low and the Source have a data into the Source

Appendix A: Emission Calculations PM Summary Stack S-2, Insignificant Activities, and Fugitives

Company Name: Louis Dreyfus Agricultural Industries LLC Address Cliv MZ Jie: 7344 State Rosa 15 South. Claypool, Indiana 46510 Significant Source Modification: 024/3507540102 Operation Permit No:: T065-2019740102 Permit Reviewer: Tamera Wessel

	Date:	May 27,	2015

Filter / Stack ID	Control / Stack	Emission unit ID	Number of Units	¹ Process	Notes	Unlin	mited Rate	Limited Rate	Emissi	on Factors (lb/ton)	Aspiration Rate (cfm)	Control Eff	ficiency		DM	Before Control	M.,	lou		-	After Cor	ntrol	lou	Emissions Based on	Limited Soybeans	Processed		Limits		Emission Factor Source
Charle 10	Description		or orma			- 1				014		reate (citil)				PM .	F	-10110	*PM _{2.5}			FI	N950	"PM _{2.5}	PM	PM ₁₀	*PM _{2.5}				
						tons/hr	tons/yr	tons/yr	PM	PM ₁₀	PM25		PM	PM ₁₀	lb/hr	tons/yr	lb/hr	tons/yr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	PM	PM ₁₀	PM25	
S-2	DTDC Stack, DC Deck Cyclones, 18,000 acfm, 99.18% PM control, and 98.66% PM10 control	D310000-1, D310000-2, D310000-3, and D310000-4	4	DC Decks No. 1, No. 2, No. 3, and No. 4	5, 6, 10	208	1,822,080	no limit	1.8	0.5	0.5	63,900	98.10%	97.89%	1497.60	6559.49	374.40	1639.87	1639.87	28.45	124.63	7.90	34.60	34.60	N/A	N/A	N/A	10.74 lb/hr (47.04 tons/yr)	7.28 lb/hr (31.89 tons/yr)	7.28 lb/hr (31.89 tons/yr)	SCC 3-02-007-89
				S-2 Total											1,497.60	6,559.49	374.40	1,639.87	1,639.87	28.45	124.63	7.90	34.60	34.60	0.00	0.00	0.00	47.04	31.89	31.89	
	Bin Filter		1	Kaolin Receiving Tank	5, 10, 11	40	7,000	no limit	0.99	0.16	0.06	750	99.50%	99.50%	39.60	3.47	6.40	0.56	0.21	0.20	0.02	0.03	0.00	0.00	N/A	N/A	N/A	1.9 lbs/hr (8.32 tons/vr)	1.9 lbs/hr (8.32 tons/vr)	1.9 lbs/hr (8.32 tons/vt)	SCC 3-05-038-13
	Hull Bin Filter		1	Hull Overflow Tank	10, 12	17	67,263	no limit	0.025	0.0063	0.0011	1,000	0.00%	0.00%	0.19	0.84	0.05	0.21	0.04	0.19	0.84	0.05	0.21	0.04	0.84	0.21	0.04	0.84	0.21	0.04	SCC 3-02-005-40
			1	Bean Storage Bin No. 2, 3, 4, 6, 7, and 8 and Bean Storage Silo No. 1 and 5	13	600	2,431,836	no limit	0.025	0.0063	0.0011	348,000	N/A	N/A	15.00	30.40	3.78	7.66	1.34	N/A	N/A	N/A	N/A	N/A	30.40	7.66	1.34	30.40	7.66	1.34	SCC 3-02-005-40
	Filter		1	Diatomaceous Earth (DE) Storage Bin	10, 14	0.0875	767	no limit	0.99	0.16	0.06	Not Provided	99.50%	99.50%	0.09	0.38	0.01	0.06	0.02	0.00	0.00	0.00	0.00	0.00	N/A	N/A	N/A	0.38	0.06	0.02	SCC 3-05-038-13
				Insignificant Activities Total											54.88	35.08	10.24	8.49	1.61	0.39	0.86	0.08	0.21	0.04	31.24	7.87	1.37	39,94	16.26	9.72	
	Roads Tower			Road Traffic Cooling Towers	9.10 10										3.69 0.99	16.18 4.34	0.74 0.99	3.24 4.34	0.79 4.34	3.69 0.99	16.18 4.34	0.74 0.99	3.24 4.34	0.79 4.34	N/A N/A	N/A N/A	N/A N/A	16.18 4.34	3.24 4.34	0.79 4.34	AP 42 Table 13.2.1
				Fugitives Total											4.69	20.52	1.73	7.58	5.14	4.69	20.52	1.73	7.58	5.14	NA	N/A	N/A	20.52	7.58	5.14	
				Page 4 Subtotal (tons/yr) including Fugitives											1,557.16	6,615.10	386.37	1,655.94	1,646.62	33.53	146.01	9.71	42.39	39.78	31.24	7.87	1.37	107.51	55.72	46.74	
				Pages 1 through 4 Total (tons/yr) including Fugitives											7,248.73	31,500.35	2,149.59	9,378.85	7,055.25	82.73	361.51	26.99	118.07	92.02	2,269.87	1,007.88	472.57	234.30	148.64	131.65	

Notes: Emission factors tased SCC Codes that start with 302,005 were taken from Table 8.9.1.1 in AP-42 section 8.9.1 (032000). Emission factors tased SCC Codes that start with 302,007 were taken from Table 9.1.1.1 (n AP-42 section 9.1.1 (11/1956). Emission factors tased SCC Codes that start with 302,008 were taken from Table 9.3.1.2 in AP-42 section 9.1.1 (11/1956). Emission factors tased SCC Codes that start with 302,008 were taken from Table 9.3.1.2 in AP-42 section 9.1.1 (12/1926).

Employ the local based SEC Codes in tear with 3-56-CS we set in tear we set in tear with 3-56-CS we set in tear we set in tear with 3-56-CS we set in tear we set i

Appendix A: Emission Calculations Truck Dumps No. 1 and No. 2 and Rail Dump

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T 085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units A030000 and A020000 Truck Dumps No. 1 and No. 2

PM Emission Factor PM10/PM2.5 Emission Factor	0.180 0.059	lb/ton lb/ton	Source: SCC 3-02-005-51 SCC 3-02-005-51
Hourly Loading Rate	600	tons/hr	
Limited Loading Rate	2,401,836	tons/yr	
Aspiration Rate	6000	cfm	
% Control PM	99.44%		
% Control PM10/PM2.5	99.44%		

Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emissions				
Truck Dumps No. 1 and No. 2 (captured)	Uncontrolle	ed for each unit	Controlle	d for each unit
Max Hourly	102.60	lbs/hr	0.57	lbs/hr
Max Yearly	449.39	tons/yr	2.52	tons/yr
Limited Yearly	205.36	tons/yr	1.15	tons/yr
Potential PM10/PM2.5 emissions				
Truck Dumps No. 1 and No. 2 (captured)	Uncontrolle	ed for each unit	Controlle	d for each unit
Max Hourly	33.63	lbs/hr	0.19	lbs/hr
Max Yearly	147.30	tons/yr	0.82	tons/yr
Limited Yearly	67.31	tons/yr	0.38	tons/yr
Potential PM emissions				
Truck Dumps No. 1 and No. 2 (uncaptured)	Uncontrolle	ed for each unit		
Max Hourly	5.40	lbs/hr		
Max Yearly	23.65	tons/yr		
Limited Yearly	10.81	tons/yr		
Potential PM10/PM2.5 emissions				
Truck Dumps No. 1 and No. 2 (uncaptured)	Uncontrolle	ed for each unit		
Max Hourly	1.77	lbs/hr		
Max Yearly	7.75	tons/yr		
Limited Yearly	3.54	tons/yr		
Nataa				

Notes: The emission factors are from AP 42, Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (3/03). The emission factors are from worst case which is straight truck although the source receives about 90% delivery by hopper trucks and about 10% delivery by straight trucks. Uncontrolled captured emissions were reduced to 95% due to assumption that 5% are uncaptured. Control efficiency for PM is 99.44% and for PM10 is 99.44% according to the renewal application.

Methodology: Uncontrolled Emissions (tons/yr) = Throughput (tons/yr) * Emission factor (lb/ton) ÷ 2000 lbs/ton Limited Emissions (tons/yr) = Limited Throughput (tons/yr) * Emission factor (lb/ton) ÷ 2000 lbs/ton Controlled Potential Emissions (tons/yr) = Throughput (tons/yr) * Emission factor (lb/ton) / 2000 lbs/ton * (1- Control Efficiency)

Appendix A: Emission Calculations Discharge Conveyors, Bean Receiving Legs, and Bin Feed Conveyors

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-5870-00102 Significant Permit Modification: 085-53910-00102 Operation Permit No: T 085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Source: SCC 3-02-005-30 SCC 3-02-005-30

PTE for emission units A030100, A020100, A040000, A050000, A130100 and A100100 Discharge Conveyors No. 1 and No. 2, Bean Receiving Legs No. 1 and No. 2, and East and West Bin Feed Conveyors

PM Emission Factor	0.061	lb/ton	
PM10/PM2 5 Emission Eactor	0.034	lb/ton	
Hourly Loading Pate	600.0	tons/br	
Limited Loading Rate	1 696 200	tono/m	
Assisted Loading Rate	1,000,300	toris/yr	
Aspiration Rate	5000	ctm	
% Control PM	99.44%		
% Control PM10/PM2 5	99 44%		

Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emissions Discharge Conveyors No. 1 and No. 2, Bean Receivir	ng Legs No. 1 a	nd No. 2, and East and Wes	at Bin Feed Conveyo	ors
	Uncontrolle	d for each unit	Controlled	for each unit
Max Hourly	36.60	lbs/hr	0.20	lbs/hr
Max Yearly	160.31	tons/yr	0.90	tons/yr
Limited Yearly	51.43	tons/yr	0.29	tons/yr

Potential PM10/PM2.5 emissions

Discharge Conveyors No. 1 and No. 2, Bean Receiving Legs No. 1 and No. 2, and East and West Bin Feed Conveyors

iveyors No. 1 and No. 2, Bear	n Receiving Legs No. 1 ar	id No. 2, and East and	d West Bin Feed Con	veyors
	Uncontrollec	for each unit	Contro	lled for each unit
Max Hourly	20.40	lbs/hr	0.11	lbs/hr
Max Yearly	89.35	tons/yr	0.50	tons/yr
Limited Yearly	28.67	tons/yr	0.16	tons/yr

Notes:

Notes: Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (3/03) Control efficiency for PM is 99.44% and for PM10 is 99.44% according to the renewal application.

Methodology: Uncontrolled Emissions (ton/yr) = Throughput (ton/yr)* Emission factor (lb/ton) / 2000 (lbs/ton) Limited Emissions (ton/yr) = Limited throughput (ton/yr)* Emission factor (lb/ton) / 2000 (lbs/ton) Controlled Potential Emissions (ton/yr) = Throughput (ton/yr) * Emission factor (lb/ton) / 2000 (lbs/ton)* (1-Control Efficiency).

Appendix A: Emission Calculations Cross Bins, Day Bin Leg, Rail Collection and Discharge Conveyors, Discharge Bins, and Bin Cross Conveyors

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-29197-00102 Operation Permit No.: 1085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission unit A150100 and A120100 Cross Bins No 1 thru 6

PM Emission Factor	0.061	lb/ton	Source: S	SCC 3-02-005-30
PM10 /PM2.5Emission Factor	0.034	lb/ton	S	SCC 3-02-005-30
Hourly Loading Rate	600	tons/hr	N	Notes:
Limited Loading Rate	1,686,300	tons/yr	* T	This source utilizes oil suppression
Aspiration Rate	1000	cfm		
% Control PM	99.44%			
% Control PM10/PM2.5	99.44%			

Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emissions	Uncontrolled for early	ach unit	Controlled	for each unit
Max Hourly	26.60 lba/b	r	0.20	lbo/br
wax Hoully	30.00 105/1	1	0.20	105/11
Max Yearly	160.31 tons	yr	0.90	tons/yr
Limited Yearly	51.43 tons	yr	0.29	tons/yr
Potential PM10/PM2.5 emissions				
Cross Bins No 1 thru 6	Uncontrolled for ea	ach unit	Controlled	for each unit
Max Hourly	20.40 lbs/h	r	0.11	lbs/hr
Max Yearly	89.35 tons	yr	0.50	tons/yr
Limited Yearly	28.67 tons	yr	0.16	tons/yr

PTE for emission units A153000, A010100, A151000, A121000, A152000 and A122000 Day Bin Leg, Rail Scale Discharge Conveyor, Discharge Bin No 1 thru 6, West Bin Cross Conveyor 1-3, and East Bin Cross Conveyor 4-6

PM Emission Factor	0.061	lb/ton	Source: SCC 3-02-005-30
PM10/PM2.5 Emission Factor	0.034	lb/ton	SCC 3-02-005-30
Hourly Loading Rate	360	tons/hr	* This source utilizes oil suppression
Limited Loading Rate	1,686,300	tons/yr	
Aspiration Rate	2,500	cfm	
% Control PM	99.44%		
% Control PM10/PM2.5	99.44%		

Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emissions D

Day Bin Leg, Rail Scale Discharge Conveyor, D	Uncontrolle	d for each unit	Controllec	for each unit	-0
Max Hourly	21.96	lbs/hr	0.12	lbs/hr	
Max Yearly	96.18	tons/yr	0.54	tons/yr	
Limited Yearly	51.43	tons/yr	0.29	tons/yr	
Potential PM10/PM2.5 emissions					

Day Bin Leg, Rail Scale Discharge Conveyor, Discharge Bin No 1 thru 6, West Bin Cross Conveyor 1-3, and East Bin Cross Conveyor 4-6

	Uncontrolled	d for each unit	Controlled for each unit		
Max Hourly	12.24	lbs/hr	0.07	lbs/hr	
Max Yearly	53.61	tons/yr	0.30	tons/yr	
Limited Yearly	28.67	tons/yr	0.16	tons/yr	

Notes:

Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (3/03) Control efficiency for PM is 99.44% and for PM10 is 99.44% according to the renewal application.

Methodology:

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

Appendix A: Emission Calculations Truck Loader No.1 and No. 2 (captured)

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-25919-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units G280000 and G270000 Truck Loader No. 1 and No. 2 (captured)

PM Emission Factor PM10/PM2.5 Emission Factor Hourly Loading Rate Aspiration Rate Limited Loading Rate & Control PM % Control PM10/PM2.5	0.2700 0.0675 330 3000 1,686,300 99.44% 99.44%	lb/ton lb/ton tons/hr cfm tons/yr	Source: SCC 3-02-007-91 SCC 3-02-007-91
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Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emissions

Truck Loadout No	. 1 and No. 2 (captured)				
		Unco	ontrolled for each unit	Controlled f	or each unit
	Max Hourly	84.65	lbs/hr	0.47	lbs/hr
	Max Yearly	370.75	tons/yr	2.08	tons/yr
	Limited Yearly	216.27	tons/yr	1.21	tons/yr
Potential PM10/PI	M2.5 emissions				
Truck Loadout No	. 1 and No. 2 (captured)				
		Unco	ontrolled for each unit	Controlled f	or each unit
	Max Hourly	21.16	lbs/hr	0.12	lbs/hr
	Max Yearly	92.69	tons/yr	0.52	tons/yr
	Limited Yearly	54.07	tons/yr	0.30	tons/yr
Potential PM emis	sions from				
Truck Loadout No	. 1 and No. 2 (uncaptured)				
		Unco	ontrolled for each unit		
	Max Hourly	4.46	lbs/hr		
	Max Yearly	19.51	tons/yr		
	Limited Yearly	11.38	tons/yr		
Potential PM10/PI	M2.5 emissions				
Truck Loadout No	. 1 and No. 2 (uncaptured)				
		Unco	ontrolled for each unit		
	Max Hourly	1.11	lbs/hr		
	Max Yearly	4.88	tons/yr		
	Limited Yearly	2.85	tons/yr		
Notes	AL 11				

60% of the Pellets/Hulls are shipped via rail. Emission factors are from AP 42 Table 9.11.1-1. Total Particulate Emission Factors for Soybean Milling (11-95) Capture efficiency at receiving/loadout are 59%. Therefore 5% of the emissions from receiving/loadout are fugitive emissions. Control efficiency for PM is 99.44% and for PM10 is 99.44% according to the renewal application.

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

Appendix A: Emission Calculations Rail Car Loadout (Pellets/Hulls)

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units G220000 Rail Car Loadout (Pellets/Hulls)

PM Emission Factor	0.0033	lb/ton	Source:	SCC-3-02-008-03
PM10/PM2.5 Emission Factor	0.0008	lb/ton		SCC-3-02-008-03
Hourly Loading Rate	330	tons/hr		
Aspiration Rate	10000	cfm		
Limited Loading Rate	1,686,300	tons/yr		
% Control PM	99.44%			
% Control PM10/PM2.5	99.44%			

Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PN	l emissions				
Rail Car Loa	dout (Pellets/Hulls) (captured)	Un	controlled for each unit	Controlled	for each unit
	Max Hourly	1.03	lbs/hr	0.01	lbs/hr
	Max Yearly	4.53	tons/yr	0.03	tons/yr
	Limited Yearly	2.64	tons/yr	0.01	tons/yr
Potential PM	10/PM2.5 emissions				
Rail Car Loa	dout (Pellets/Hulls) (captured)	Un	controlled for each unit	Controlled	for each unit
	Max Hourly	0.25	lbs/hr	0.00	lbs/hr
	Max Yearly	1.10	tons/yr	0.01	tons/yr
	Limited Yearly	0.64	tons/yr	0.00	tons/yr
Potential PM	emissions				
Rail Car Loa	dout (Pellets/Hulls) (uncaptured)	Un	controlled for each unit		
	Max Hourly	0.05	lbs/hr		
	Max Yearly	0.24	tons/yr		
	Limited Yearly	0.14	tons/yr		
Potential PM	110/PM2.5 emissions				
Rail Car Loa	dout (Pellets/Hulls) (uncaptured)	Un	controlled for each unit		
	Max Hourly	0.01	lbs/hr		
	Max Yearly	0.06	tons/yr		
	Limited Yearly	0.03	tons/yr		

Appendix A: Emission Calculations Truck and Rail Meal Loadout Bins

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission unit G130000 and G070000 Rail Meal Loadout Bin and Truck Meal Loadout Bin

PM Emission Eactor	0.0250	lb/ton	Source: SCC 3-02-005-40	
	0.0250	10/1011	30010e. 300 3-02-003-40	
PM10 Emission Factor	0.0063	lb/ton	SCC 3-02-005-40	
PM2.5 Emission Factor	0.0011	lb/ton	SCC 3-02-005-40	
Maximum Loading Rate	300	tons/hr		
Limited Loading Rate	1,914,061	tons/yr		
Outlet Grain Loading	0.005	gr/acf	% Control PM 99.44%	
Aspiration Rate	1000	cfm	% Control PM10/PM2.5 99.44%	

Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emis Rail Meal Loadout	sions Bin (captured) and Truck Meal Loa	adout Bin (d	captured)		
		Unco	ontrolled for each unit	Controlled for	or each unit
	Maximum Potential	7.13	lbs/hr	0.04	lbs/hr
	Maximum Potential	31.21	tons/yr	0.17	tons/yr
	Limited Potential	22.73	tons/yr	0.13	tons/yr
Potential PM10 en	nissions				
Rail Meal Loadout	Bin (captured) and Truck Meal Loa	adout Bin (d	captured)		
		Unco	ontrolled for each unit	Controlled for	or each unit
	Maximum Potential	1.78	lbs/hr	0.010	lbs/hr
	Maximum Potential	7.80	tons/yr	0.044	tons/yr
	Limited Potential	5.68	tons/yr	0.032	tons/yr
Potential PM2.5 er	missions				
Rail Meal Loadout	Bin (captured) and Truck Meal Loa	adout Bin (o	captured)		
	· · · ·	Unco	ontrolled for each unit	Controlled for	or each unit
	Maximum Potential	0.30	lbs/hr	0.30	lbs/hr
	Maximum Potential	1.33	tons/vr	0.0074	tons/vr
	Limited Potential	0.97	tons/yr	0.0054	tons/yr
Potential PM emis	sions				
Rail Meal Loadout	Bin (uncentured) and Truck Meel I	oadout Bir	(uncantured)		
	Maximum Potential	0.38	lbs/hr		
	Maximum Potential	1 64	tops/vr		
	Limited Potential	1.20	tons/yr		
Determined DMMA					
Potential Pivi10 en	hissions		(
Rail Meal Loadout	Bin (uncaptured) and Truck Meai L	LOAdout Bir	(uncaptured)		
	Maximum Potential	0.09	IDS/Nr		
	Maximum Potential	0.41	tons/yr		
	Limited Potential	0.30	tons/yr		
Potential PM2.5 er	nissions				
Rail Meal Loadout	Bin (uncaptured) and Truck Meal L	.oadout Bir	n (uncaptured)		
	Maximum Potential	0.02	lbs/hr		
	Maximum Potential	0.07	tons/yr		
	Limited Potential	0.05	tons/yr		
Limited Emissions					
Rail Meal Loadout	Bin (captured) and Truck Meal Loa	adout Bin (o	captured)		
	Limited Controlled	1.430	lb/hr		
	Limited Controlled	6.26	tons/yr		

Notes 40% of the Pellets/Hulls are shipped via rail. Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (3/03) Capture efficiency at receiving/loadout is 95%. Therefore 5% of the emissions from receiving/loadout are fugitive emissions. Control efficiency for PM is 99.44% and for PM10 is 99.44% according to the renewal application.

Methodology

Methodology Uncontrolled Emissions (tons/yr) = Throughput (tons/yr) * Emission factor (lb/ton) ÷ 2000 lbs/ton Controlled Potential Emissions (tons/yr) = Throughput (tons/yr) * Emission factor (lb/ton) ÷ 2000 lbs/ton * (1- Control Efficiency) Limited Potential (tons/yr) = Limited Throughput (tons/yr) * Emission Factor (lb/ton) ÷ 2000 lbs/ton

Appendix A: Emission Calculations Truck and Rail Pelleted Hull Loadout Bins, Meal Storage Feed Conveyor, Truck Meal Loadout Feed Conveyor, and Truck Collection Conveyor

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units G080000 and G180000 Truck and Rail Pelleted Hull Loadout Bins

PM Emission Factor	0.003	lb/ton	Source: SCC-3-02-008-03
PM10/PM2.5 Emission Factor	0.001	lb/ton	SCC-3-02-008-03
Hourly Loading Rate	148.0	tons/hr	
Aspiration Rate	1000	cfm	
Limited Loading Rate	1,686,300	tons/yr	
% Control PM	99.44%		
% Control PM10/PM2.5	99.44%		

Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emiss	sions					
Truck and Rail Pell	eted Hull Loadout Bins		Uncontrolled for each unit		Controlled for	r each unit
	Max Hourly	=	0.49	lbs/hr	0.00	lbs/hr
	Max Yearly	=	2.14	tons/yr	0.01	tons/yr
	Limited Yearly	=	2.78	tons/yr	0.02	tons/yr
Potential PM10/PM	2.5 emissions					
Truck and Rail Pell	eted Hull Loadout Bins		Uncontrolled for each unit		Controlled for	r each unit
	Max Hourly	=	0.12	lbs/hr	0.00	lbs/hr
	Max Yearly	=	0.52	tons/yr	0.00	tons/yr
	Limited Yearly	=	0.67	tons/yr	0.00	tons/yr
PTE for emission Meal Storage Feed	unit G020500 d Conveyor					
PM Emission Facto)r	0.061	lb/ton	Source:	SCC 3-02-005-30	
PM10/PM2.5 Emiss	sion Factor	0.034	lb/ton		SCC 3-02-005-30	
Hourly Loading Rat	e	200	tons/hr			
Aspiration Rate		500	cfm			
Limited Loading Ra	ite	1,686,300	tons/yr			
% Control PM		99.44%				
% Control PM10/PM	W2.5	99.44%				

Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM	emissions						
Meal Storage Feed Conveyor		U	ncontrolled for each u	nit	Controlled for each unit		
	Max Hourly	=	12.20	lbs/hr	0.07	lbs/hr	
	Max Yearly	=	53.44	tons/yr	0.30	tons/yr	
	Limited Yearly	=	51.43	tons/yr	0.29	tons/yr	
Potential PM1	10/PM2.5 emissions						
Meal Storage	Feed Conveyor	U	ncontrolled for each u	nit	Controlle	d for each unit	
	Max Hourly	=	6.80	lbs/hr	0.04	lbs/hr	
	Max Yearly	=	29.78	tons/yr	0.17	tons/yr	
	Limited Yearly	=	28.67	tons/yr	0.16	tons/yr	

PTE for emission units G070300, G170000 and G290000 Truck Meal Loadout Feed Conveyor, and Truck Collection Conveyor

DM Emission Easter	0.001	Ib /tea	Causaa CCC 2 02 005 20
PIM Emission Factor	0.061	ID/ION	Source: SCC 3-02-005-30
PM10/PM2.5 Emission Factor	0.034	lb/ton	SCC 3-02-005-30
Hourly Loading Rate	300	tons/hr	
Aspiration Rate	1500	cfm	
Limited Loading Rate	1,686,300	tons/yr	
% Control PM	99.44%		
% Control PM10/PM2.5	99.44%		

Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emissions Truck Meal Loadout Feed Conveyor, and Truck Collection Conveyor

The first field could be conveyer, and t	U	, ncontrolled for each u	nit	Controlle	d for each unit
Max Hourly	=	18.30	lbs/hr	0.10	lbs/hr
Max Yearly	=	80.15	tons/yr	0.45	tons/yr
Limited Yearly	=	51.43	tons/yr	0.29	tons/yr
Potential PM10/PM2.5 emissions Truck Meal Loadout Feed Conveyor, and T	ruck Collection Conveyo	r			

ai Luaduul Feed Culiveyui, alid Tiuci	Conection Conveyo	4					
	U	Uncontrolled for each unit			Controlled for each unit		
Max Hourly	=	10.20	lbs/hr	0.06	lbs/hr		
Max Yearly	=	44.68	tons/yr	0.25	tons/yr		
Limited Yearly	=	28.67	tons/yr	0.16	tons/yr		

Methodology

Methodology Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (3/03) Potential Emissions (ton/yr) = Throughput (ton/yr) * Emission factor (lb/ton) / 2000 (lbs/ton) Controlled Potential Emissions (ton/yr) = Throughput (ton/yr) * Emission factor (lb/ton) / 2000 (lbs/ton) * (1-Control Efficiency). Limited Emissions (ton/yr) = Limited throughput (ton/yr) * Emission factor (lb/ton) / 2000 (lbs/ton) * (1-Control Efficiency). Control efficiency for PM is 99.44% and for PM10 is 99.44% according to the renewal application.

Appendix A: Emission Calculations Pellet Hulls Conveyor to Loadout, Meal Reclaim Conveyor and Meal Reclaim Leg

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission unit G160000 Pellet Hulls Conveyor to Loadout

PM Emission Factor	0.061	lb/ton	Source: SCC 3-02-005-30
PM10/PM2.5 Emission Factor	0.034	lb/ton	SCC 3-02-005-30
Hourly Loading Rate	17.0	tons/hr	
Aspiration Rate	500	cfm	
Limited Loading Rate	1,686,300	tons/yr	
% Control PM	99.44%		
% Control PM10/PM2.5	99.44%		
Hourly throughput is based on maximum capacity	of transfer syst	tem.	

Potential PM emissions

Pellet Hulls Conveyor to Loadout		Uncontrolled for each unit		Controlled for each unit
Max Hourly	=	1.04	lbs/hr	0.01 lbs/hr
Max Yearly	=	4.54	tons/yr	0.03 tons/yr
Potential PM10/PM2.5 emissions				
Pellet Hulls Conveyor to Loadout		Uncontrolled for each unit		Controlled for each unit
Max Hourly	=	0.58	lbs/hr	0.00 lbs/hr
Max Yearly	=	2.53	tons/yr	0.01 tons/yr

PTE for emission units G010100 and G010200 Meal Reclaim Conveyor and Meal Reclaim Leg

PM Emission Factor	0.061	lb/ton	Source: SCC 3-02-005-30
PM10/PM2.5 Emission Factor	0.034	lb/ton	SCC 3-02-005-30
Hourly Loading Rate	200	tons/hr	
Aspiration Rate	1000	cfm	
Limited Loading Rate	1,686,300	tons/yr	
% Control PM	99.44%		
% Control PM10/PM2.5	99,44%		

Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emissions

Meal Reclaim Conveyor and Meal Reclaim Leg		Uncontrolled for each unit		Controlled	for each unit
Max Hourly	=	12.20	lbs/hr	0.07	lbs/hr
Max Yearly	=	53.44	tons/yr	0.30	tons/yr
Limited Yearly	=	51.43	tons/yr	0.29	tons/yr
Potential PM10/PM2.5 emissions					
Meal Reclaim Conveyor and Meal Reclaim Leg					
Max Hourly		Uncontrolled for each unit		Controlled	for each unit
Max Yearly	=	6.80	lbs/hr	0.04	lbs/hr
Limited Yearly	=	29.78	tons/yr	0.17	tons/yr
Limited Yearly	=	28.67	tons/yr	0.16	tons/yr

Notes: Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.44% and for PM10 is 99.44% according to Operating Permit Renewal No. T085-29197-00102.

Methodology: Uncontrolled Emissions (tons/yr) = Throughput (tons/yr) * Emission factor (lb/ton) ÷ 2000 lbs/ton Controlled Potential Emissions (tons/yr) = Throughput (tons/yr) * Emission factor (lb/ton) ÷ 2000 lbs/ton * (1 - Control Efficiency) Limited Emissions (tons/yr) = Limited Throughput (tons/yr)* Emission factor (lb/ton) ÷ 2000 lbs/ton

Appendix A: Emission Calculations Meal Bin No. 1 thru 5 Vent Filters

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-29197-00102 Operation Permit No.: 1085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units G010000, G020000, G030000, G040000, G050000 ¹Meal Bin No. 1 thru 5 Vent Filters

BM Emission Easter	#DEEI	lb/ton	Source: #	DEEL
FINI ETTISSIOTI FACIOI	#REF!	ID/IUII	Source. #	NEF!
PM10/PM2.5 Emission Factor	#REF!	lb/ton	#	REF!
Hourly Loading Rate	#REF!	tons/hr		
Aspiration Rate	#REF!	cfm		
% Control PM	#REF!			
% Control PM10/PM2.5	#REF!			

Hourly throughput is based on maximum capacity of transfer system.

Potential PM emissions					
Meal Bin No. 1 thru 5 Vent Filters	S	Uncontrolled for each unit	t	Controlled	for each unit
Max Hourly	=	#REF!	lbs/hr	#REF!	lbs/hr
Max Yearly	=	#REF!	tons/yr	#REF!	tons/yr
Potential PM10/PM2.5 emissions	5				
Meal Bin No. 1 thru 5 Vent Filters	S	Uncontrolled for each uni	t	Controlled	for each unit
Max Hourly	=	#REF!	lbs/hr	#REF!	lbs/hr
Max Yearly	=	#REF!	tons/yr	#REF!	tons/yr

Notes:

¹ There are five meal bins. However, the plant is only physically capable of loading one meal bin at a time. Therefore, the PTE for these units is calculated at a rate of 198 tons/hr for all five meal bins combined.
 Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)).
 Control efficiency for PM is 99.82% and for PM10 is 99.82% according to Operating Permit Renewal No. T085-29197-00102.

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

PTE for emission unit G050300 Pelleted Hulls Storage Conveyor

PM Emission Facto PM10/PM2.5 Emiss Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM	r ion Factor e 12.5	0.061 0.034 17 500 99.44% 99.44%	lb/ton Source: SCC 3-02-005-40 lb/ton SCC 3-02-005-40 tons/hr cfm)
Potential PM emiss	ons					
Pelleted Hulls Stora	ge Conveyor		Uncontrolled for each unit		Controlled f	or each unit
	Max Hourly	=	1.04	lbs/hr	0.01	lbs/hr
	Max Yearly	=	4.54	tons/yr	0.03	tons/yr
Potential PM10/PM	2.5 emissions					
Pelleted Hulls Stora	ge Conveyor		Uncontrolled for each unit		Controlled f	or each unit
	Max Hourly	=	0.58	lbs/hr	3.24E-03	lbs/hr
	Max Yearly	=	2.53	tons/yr	0.01	tons/yr
PTE for emission Meal Conveyor to L	units G150000 oadout					
PM Emission Facto	r	0.061	lb/ton	Source	SCC 3-02-005-27	7
PM10/PM2.5 Emiss	ion Factor	0.034	lb/ton		SCC 3-02-005-27	7
Hourly Loading Rate	e	198	tons/hr			
Aspiration Rate		500	cfm			
% Control PM		99.44%				
% Control PM10/PM	12.5	99.44%				
Potential PM emiss	ons					
Meal Conveyor to L	oadout		Uncontrolled for each unit		Controlled f	or each unit
	Max Hourly	=	12.08	lbs/hr	0.07	lbs/hr
	Max Yearly	=	52.90	tons/yr	0.30	tons/yr
Potential PM10/PM	2.5 emissions					
Meal Conveyor to L	oadout		Uncontrolled for each unit		Controlled f	or each unit
	Max Hourly	=	6.73	lbs/hr	0.04	lbs/hr
	Max Yearly	=	29.49	tons/yr	0.17	tons/yr

Appendix A: Emission Calculations Storage Piles #1 and #2

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for Piles #1 and #2 Covered Seasonal Grain Storage Piles

PM Emission Factor	0.061	lb/ton	Source: SCC 3-02-005-30
PM10/PM2.5 Emission	0.034	lb/ton	SCC 3-02-005-30
Hourly Loading Rate	360	tons/hr	
Limited Rate	8,000,000	bushels per year	

Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to 085-24676-00102, issued on April 28, 2008.

Potential PM emissions

Uno	controlled for ea	ich unit
=	21.96	lbs/hr
=	96.18	tons/yr
=	7.32	tons/yr
Uno	controlled for ea	ich unit
=	12.24	lbs/hr
=	53.61	tons/yr
=	4.08	tons/yr
	Und = = Und = = =	Uncontrolled for ea = 21.96 = 96.18 = 7.32 Uncontrolled for ea = 12.24 = 53.61 = 4.08

Notes:

Emission factors are from AP 42, Table 9.9.1-1, Particulate Emission Factors for Grain Elevators (3/03). Conveyors used with storage piles #1 and #2 have already been accounted for. See PM Summary tab for complete list of emission units and particulate emissions.

Methodology: Uncontrolled Emissions (tons/yr) = Throughput (tons/yr) * Emission factor (lb/ton) ÷ 2000 lb/ton Limited Emissions (tons/yr) = Limited Throughput (bushels/yr) * 60 lbs/bushel ÷ 2,000 lb/ton * Emission factor (lb/ton) ÷ 2000 lb/ton Controlled Potential Emissions (tons/yr) = Throughput (tons/yr) * Emission factor (lb/ton) ÷ 2000 lb/ton * (1 - Control Efficiency)
Appendix A: Emission Calculations Screener and Screenings Tank

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission unit A060000 Screener

PM Emission Factor	0.061	lb/ton	Source: SCC 3-02-005-30
PM10/PM2.5 Emission Factor	0.034	lb/ton	SCC 3-02-005-30
Hourly Loading Rate	264	tons/hr	
Limited Loading Rate	1,686,300	tons/yr	
Aspiration Rate	4400	cfm	
% Control PM	99.41%		
% Control PM10/PM2.5	99.41%		

Hourly throughput is based on maximum capacity of transfer system, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emissions						
Screener		Ur	ncontrolled for each	unit	Controlled	for each unit
	Max Hourly	=	16.10	lbs/hr	0.10	lbs/hr
	Max Yearly	=	70.54	tons/yr	0.42	tons/yr
	Limited Yearly	=	51.43	tons/yr	0.30	tons/yr
Potential PM10/PM2.5 emi	issions					
Screener		Ur	ncontrolled for each	unit	Controlled	for each unit
	Max Hourly	=	8.98	lbs/hr	0.05	lbs/hr
	Max Yearly	=	39.31	tons/yr	0.23	tons/yr
	Limited Yearly	=	28.67	tons/yr	0.17	tons/yr
PTE for emission unit A1	70000					
Screenings Tank						
PM Emission Factor		0.025	lb/ton	Source:	SCC 3-02-005-4	40
PM10/PM2.5 Emission Fac	ctor	0.0063	lb/ton		SCC 3-02-005-4	40
Hourly Loading Rate		5.0	tons/hr		Loadings are ba	used on assumption of 2.5% of
Aspiration Rate		500	cfm		raw beans will b	e lost
% Control PM		99.41%				
% Control PM10/PM2.5		99.41%				
Potential PM emissions						
Screenings Tank		Ur	ncontrolled for each	unit	Controlled	for each unit
	Max Hourly	=	0.13	lbs/hr	0.00	lbs/hr
	Max Yearly	=	0.55	tons/yr	0.00	tons/yr
Potential PM10/PM2.5 emi	issions					
Screenings Tank		Ur	ncontrolled for each	unit	Controlled	for each unit
-	Max Hourly	=	0.03	lbs/hr	0.00	lbs/hr
	Max Yearly	=	0.14	tons/yr	0.00	tons/yr

Notes:

Notes: Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.41% and for PM10 is 99.41% according to Operating Permit Renewal No. T085-29197-00102.

Methodology:

Appendix A: Emission Calculations Screenings Recycle Leg and Bean Weigh Scale

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission unit A170300 Screenings Recycle Leg

PM Emission Factor PM10/PM2.5 Emission Fact Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	or	0.061 0.0340 5.0 500 99.41% 99.41%	lb/ton lb/ton tons/hr cfm	Source:	SCC 3-02-005-30 SCC 3-02-005-30 Loadings are base raw beans will be	ed on assumption of 2.5% of lost	
Potential PM emissions							
Screenings Recycle Leg		Un	controlled for each	unit	Controlled for	or each unit	
	Max Hourly	=	0.31	lbs/hr	0.00	lbs/hr	
	Max Yearly	=	1.34	tons/yr	0.01	tons/yr	
Potential PM10/PM2.5 emis	sions						
Screenings Recycle Leg		Uncontrolled for each unit			Controlled for each unit		
	Max Hourly	=	0.17	lbs/hr	0.00	lbs/hr	
	Max Yearly	=	0.74	tons/yr	0.00	tons/yr	
PTE for emission unit B01 Bean Weigh Scale	1300						
PM Emission Factor		0.061	lb/ton	Source:	SCC 3-02-005-30		
PM10/PM2.5 Emission Fact	or	0.0340	lb/ton		SCC 3-02-005-30		
Hourly Loading Rate		264	tons/hr	•	This source utilize	es oil suppression	
Aspiration Rate		500	cfm				
% Control PM		99.41%					
% Control PM10/PM2.5		99.41%					

Hourly throughput is based on maximum design capacity of milling operations, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emissions						
Bean Weigh Scale		Unc	ontrolled for each	unit	Controlled	for each unit
	Max Hourly	=	16.10	lbs/hr	0.10	lbs/hr
	Max Yearly	=	70.54	tons/yr	0.42	tons/yr
Potential PM10/PM2.5 e	emissions					
Bean Weigh Scale		Unc	ontrolled for each	unit	Controlled	for each unit
	Max Hourly	=	8.98	lbs/hr	0.05	lbs/hr
	Max Yearly	=	39.31	tons/yr	0.23	tons/yr

Notes: Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.41% and for PM10 is 99.41% according to Operating Permit Renewal No. T085-29197-00102.

Notes:

Appendix A: Emission Calculations VSC Feed Leg, VSC Leg Feed Conveyor, Screener Feed Conveyor, Conditioned Bean Feed Conveyor, and Whole Bean Aspiration No. 1 & No. 2

Company Name: Louis Drayfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel

Date: May 27, 2015

PTE for emission units B011200, A160300, A060400, and B030800 VSC Feed Leg, VSC Leg Feed Conveyor, Screener Feed Conveyor and Conditioned Bean Feed Conveyor

PM Emission Factor	0.061	lb/ton	Source: SCC 3-02-005-30
PM10/PM2.5 Emission Factor	0.034	lb/ton	SCC 3-02-005-30
Hourly Loading Rate	264	tons/hr	* This source utilizes oil suppression
Aspiration Rate	500	cfm	
% Control PM	99.41%		
% Control PM10/PM2.5	99.41%		

Hourly throughput is based on maximum design capacity of milling operations, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emissions

SC Feed Leg, VSC Leg Feed Conveyor, Sci	reener Feed Conveyor	and Conditione	d Bean Feed Co	nveyor	
	Uncor	trolled for each	unit	Controlled	for each unit
Max Hourly	=	16.10	lbs/hr	0.10	lbs/hr
Max Yearly	=	70.54	tons/yr	0.42	tons/yr

Potential PM10/PM2.5 emissions VS

10110/110/1102.3 011330113					
C Feed Leg, VSC Leg Feed Conveyor, Screene	er Feed Convey	or and Conditione	d Bean Feed Co	nveyor	
	Unc	ontrolled for each	unit	Controlled	for each unit
Max Hourly	=	8.98	lbs/hr	0.05	lbs/hr
Max Yearly	=	39.31	tons/yr	0.23	tons/yr

PTE for emission units B010100 and B020100 Whole Bean Aspiration No. 1 and No. 2

PM Emission Factor	0.061	lb/ton	Source: SCC 3-02-005-30
PM10/PM2.5 Emission Factor	0.034	lb/ton	SCC 3-02-005-30
Hourly Loading Rate	264	tons/hr	* This source utilizes oil suppression
Aspiration Rate	2000	cfm	
% Control PM	99.41%		
% Control PM10/PM2.5	99.41%		

Hourly throughput is based on maximum design capacity of milling operations, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emissions						
Whole Bean Aspiration No.	1 and No. 2					
		Unc	ontrolled for each	unit	Controllec	for each unit
	Max Hourly	=	16.10	lbs/hr	0.10	lbs/hr
	Max Yearly	=	70.54	tons/yr	0.42	tons/yr
Potential PM10/PM2.5 emis	ssions					
Whole Bean Aspiration No.	1 and No. 2					
		Unc	Uncontrolled for each unit			for each unit
	Max Hourly	=	8.98	lbs/hr	0.05	lbs/hr
	Max Yearly	=	39.31	tons/yr	0.23	tons/yr

Notes:

Notes. Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.41% and for PM10 is 99.41% according to Operating Permit Renewal No. T085-29197-00102.

Methodology:

Appendix A: Emission Calculations Hull Collection Conveyor and Hull Screener No. 1 and No. 2

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission unit B030900 Hull Collection Conveyor

PM Emission Factor PM10/PM2.5 Emission Factor Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	or	0.061 0.034 17.0 500 99.41% 99.41%	lb/ton lb/ton tons/hr cfm	Source:	SCC 3-02-005-30 SCC 3-02-005-30 This source utilize	s oil suppression.	
Potential PM emissions							
Hull Collection Conveyor		Uncontrolled for each unit			Controlled for each unit		
	Max Hourly	=	1.037	lbs/hr	0.006	lbs/hr	
	Max Yearly	=	4.542	tons/yr	0.027	tons/yr	
Potential PM10/PM2.5 emis	sions						
Hull Collection Conveyor		Ur	controlled for each u	nit	Controlled for each unit		
,	Max Hourly	=	0.578	lbs/hr	0.003	lbs/hr	
	Max Yearly	=	2.532	tons/yr	0.015	tons/yr	
PTE for emission units E1	30000 and E150000						

Hull Screener No. 1 and No. 2

PM Emission Factor	0.061	lb/ton	Source:	SCC 3-02-005-30
PM10/PM2.5 Emission Factor	0.034	lb/ton		SCC 3-02-005-30
Hourly Loading Rate	9.6	tons/hr	*	The hull screeners are aspirated through the
Aspiration Rate	NA	cfm		Secondary Aspiration.
% Control PM	99.41%			
% Control PM10/PM2.5	99.41%			

Hourly throughput is based on assumption that 5% of the raw beans are hulls.

Potential PM emissions Hull Screener No. 1 and No. 2 Max Hourly = Max Yearly = Uncontrolled for each unit 0.59 lbs/hr Controlled for each unit 0.00 lbs/hr 0.59 2.56 0.00 tons/yr tons/yr Potential PM10/PM2.5 emissions Potential PM10/PM2.5 emissions Hull Screener No. 1 and No. 2 Max Hourly = 0.33 II Max Yearly = 1.43 to Controlled for each unit lbs/hr 0.00 lbs/hr tons/yr tons/vr

Notes:

Notes: Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.41% and for PM10 is 99.41% according to Operating Permit Renewal No. T085-29197-00102.

Methodology:

Appendix A: Emission Calculations Secondary Hull Collection Conveyor and 4 Hour Hull Tank

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission unit B430000 Secondary Hull Collection Conveyor

PM Emission Factor PM10/PM2.5 Emission Fact Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	or	0.061 0.034 17.0 3000 99.41% 99.41%	lb/ton lb/ton tons/hr cfm	Source:	SCC 3-02-005-30 SCC 3-02-005-30	
Potential PM emissions Secondary Hull Collection C	onveyor					
		Unc	ontrolled for each unit	t	Controlled for	each unit
	Max Hourly Max Yearly	=	1.037 4.542	lbs/hr tons/yr	0.006 0.027	lbs/hr tons/yr
Potential PM10/PM2.5 emis Secondary Hull Collection C	sions onveyor					
		Unc	ontrolled for each unit	t	Controlled for	each unit
	Max Hourly	=	0.578	lbs/hr	0.003	lbs/hr
	Max Yearly	=	2.532	tons/yr	0.015	tons/yr
PTE for emission unit E07 4 Hour Hull Tank	0300					
PM Emission Factor PM10/PM2.5 Emission Fact Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	or	0.025 0.0063 17.0 1500 99.41% 99.41%	lb/ton lb/ton tons/hr cfm	Source:	SCC 3-02-005-40 SCC 3-02-005-40	
Potential PM emissions						
4 Hour Hull Tank						
		Unc	ontrolled for each unit	t	Controlled for	each unit
	Max Hourly	=	0.425	lbs/hr	0.003	lbs/hr
	Max Yearly	=	1.862	tons/yr	0.011	tons/yr
Potential PM10/PM2.5 emis	sions					
		Unc	ontrolled for each unit	t	Controlled for	each unit
	Max Hourly	=	0.107	lbs/hr	0.001	lbs/hr
	Max Yearly	=	0.469	tons/yr	0.003	tons/yr

Notes: Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.41% and for PM10 is 99.41% according to Operating Permit Renewal No. T085-29197-00102.

Appendix A: Emission Calculations Secondary Hull Collection L-Path and Pellet Cooler

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35810-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission unit B440000 Secondary Hull Collection L-Path

PM Emission Factor PM10/PM2.5 Emission Fact Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	tor	0.061 0.034 17.0 Not Provided 99.41% 99.41%	lb/ton lb/ton tons/hr cfm	Source:	SCC 3-02-005-30 SCC 3-02-005-30	
Potential PM emissions Secondary Hull Collection L	-Path					
		Und	controlled for each u	nit	Controlled fo	r each unit
	Max Hourly	=	1.037	lbs/hr	0.006	lbs/hr
	Max Yearly	=	4.542	tons/yr	0.027	tons/yr
Potential PM10/PM2.5 emis Secondary Hull Collection L	ssions -Path					
		Unc	ontrolled for each u	nit	Controlled fo	r each unit
	Max Hourly	=	0.578	lbs/hr	0.003	lbs/hr
	Max Yearly	=	2.532	tons/yr	0.015	tons/yr
PTE for emission unit E08 Pellet Cooler	30000					
PM Emission Factor		1.5	lb/ton	Source:	SCC 3-02-008-16	
PM10/PM2.5 Emission Fact	tor	0.75	lb/ton		SCC 3-02-008-16	
Hourly Loading Rate		17.0	tons/hr	*	Emission Factor w	as adjusted to uncontrolled
Aspiration Rate		6500	cfm		based on assumpt	ion that cyclones provide 90%
% Control PM		99.41%			control.	
% Control PM10/PM2.5		99.41%				
Potential PM emissions Pellet Cooler						
		Unc	controlled for each u	nit	Controlled fo	r each unit
	Max Hourly	=	25.500	lbs/hr	0.150	lbs/hr
	Max Yearly	=	111.690	tons/yr	0.659	tons/yr
Potential PM10/PM2.5 emis	ssions					
r ellet Goolei		Unc	controlled for each u	nit	Controlled fo	r each unit
	Max Hourly	=	12.750	lbs/hr	0.075	lbs/hr
	Max Yearly	=	55.845	tons/yr	0.329	tons/yr

Notes: Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.41% and for PM10 is 99.41% according to Operating Permit Renewal No. T085-29197-00102.

Appendix A: Emission Calculations Hull Hammer Mill, Hull Hammer Mill Feeder, Hull Hammer Mill Plenum, and Pelleted Hulls Leg

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units E050000, E050200, and E050100 Hull Hammer Mill, Hull Hammer Mill Feeder, and Hull Hammer Mill Plenum

PM Emission Factor	2.0	lb/ton	Source: SCC 3-02-007-86
PM10/PM2.5 Emission Factor	1.0	lb/ton	SCC 3-02-007-86
Hourly Loading Rate	17.0	tons/hr	* Emission Factor was adjusted to uncontrolled
Aspiration Rate	8000	cfm	based on assumption that cyclones provide 90%
% Control PM	99.41%		control.
% Control PM10/PM2.5	99.41%		

Potential PM emissions omer Mill Feeder, and Hull Hammer Mill Ple

Huli Hammer Mili, Huli Ham	mer Milli Feeder, and Hu	Unc Unc	n Pienum ontrolled for each un	it	Controlled for	each unit
	Max Hourly	=	34.000 lbs/hr			lbs/hr
	Max Yearly	=	148.920	tons/yr	0.879	tons/yr
Potential PM10/PM2.5 emis	sions					
Hull Hammer Mill, Hull Ham	mer Mill Feeder, and Hu	II Hammer Mi	ill Plenum			
		Unc	ontrolled for each un	it	Controlled for each unit	
	Max Hourly	=	17.000	lbs/hr	0.100	lbs/hr
	Max Yearly	=	74.460	tons/yr	0.439	tons/yr
PTE for emission unit G05 Pelleted Hulls Leg	50100					
PM Emission Factor PM10/PM2.5 Emission Fact Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	or	0.061 0.034 17.0 1000 99.41% 99.41%	lb/ton lb/ton tons/hr cfm	Source: SCC SCC	3-02-005-30 3-02-005-30	
Potential PM emissions Pelleted Hulls Leg	Max Hourly Max Yearly	Unc = =	ontrolled for each un 1.037 4.542	it Ibs/hr tons/yr	Controlled for 0.006 0.027	each unit lbs/hr tons/yr
Potential PM10/PM2.5 emis Pelleted Hulls Leg	sions	Unc	ontrolled for each un	it	Controlled for	each unit
	Max Hourly	=	0.578	lbs/hr	0.003	lbs/hr
	Max Yearly	=	2.532	tons/yr	0.015	tons/yr

Notes: Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.41% and for PM10 is 99.41% according to Operating Permit Renewal No. T085-29197-00102.

Appendix A: Emission Calculations Pelleted Hulls Storage Conveyor, Screenings Weight Belt and Conditioner Bean Loop Path

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35810-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission unit E050400 Hulls Addition Screw

PM Emission Factor PM10/PM2.5 Emission Fact Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	or	0.061 0.034 17.0 Not Provided 99.41% 99.41%	lb/ton lb/ton tons/hr cfm	Source:	SCC 3-02-005-30 SCC 3-02-005-30	
Potential PM emissions Hulls Addition Screw		Un	controlled for each ur	it	Controlled for	each unit
	Max Hourly Max Yearly	=	1.037 4.542	lbs/hr tons/yr	0.006 0.027	lbs/hr tons/yr
Potential PM10/PM2.5 emis Hulls Addition Screw	sions					
		Un	controlled for each ur	nit	Controlled for	each unit
	Max Hourly Max Yearly	=	0.578 2.532	lbs/hr tons/yr	0.003 0.015	lbs/hr tons/yr
PTE for emission unit B31 Screenings Weight Belt	0000					
PM Emission Factor PM10/PM2.5 Emission Factor Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	or	0.061 0.034 5.0 500 99.41% 99.41%	lb/ton lb/ton tons/hr cfm	Source:	SCC 3-02-007-86 SCC 3-02-007-86	
Potential PM emissions Screenings Weight Belt						
		Uni	controlled for each ur	nit	Controlled for	each unit
	Max Hourly Max Yearly	=	0.305 1.336	lbs/hr tons/yr	0.002 0.008	lbs/hr tons/yr
Potential PM10/PM2.5 emis Screenings Weight Belt	sions					
	M	Uni	controlled for each ur	nt H - A -	Controlled for	each unit
	Max Yearly	=	0.745	tons/yr	0.004	tons/yr
PTE for emission unit B01 Conditioner Bean Loop Pa	0300 ith					
PM Emission Factor PM10/PM2.5 Emission Factor Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	or	0.10 0.025 264 42,000 99.41% 99.41%	lb/ton lb/ton tons/hr cfm	Source:	SCC 3-02-007-87 SCC 3-02-007-87	
Potential PM emissions Conditioner Bean Loop Path		Un	controlled for each ur	iit	Controlled for	each unit
	Max Hourly Max Yearly	= =	26.400 115.632	lbs/hr tons/yr	0.156 0.682	lbs/hr tons/yr
Potential PM10/PM2.5 emis	sions	Un	controlled for each ur	it	Controlled for	each unit
2 2	Max Hourly	=	6.600	lbs/hr	0.039	lbs/hr
	Max Yearly	=	28.908	tons/yr	0.171	tons/yr

Notes:

Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.41% and for PM10 is 99.41% according to Operating Permit Renewal No. T085-29197-00102.

Appendix A: Emission Calculations Pod Grinder/Destoner

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission unit B310200 Pod Grinder/Destoner

PM Emission Factor PM10/PM2.5 Emission Fac Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	tor	2.00 0.50 5.0 5000 99.00% 99.00%	lb/ton lb/ton tons/hr cfm	Source:	SCC 3-02-007-8 SCC 3-02-007-8	96 96
Potential PM emissions						
Pod Grinder/Destoner						
		Unco	ntrolled for eacl	h unit	Controlled	for each unit
	Max Hourly	=	10.000	lbs/hr	0.100	lbs/hr
	Max Yearly	=	43.800	tons/yr	0.438	tons/yr
Potential PM10/PM2.5 emi Pod Grinder/Destoner	ssions					
		Unco	ntrolled for eacl	h unit	Controlled	for each unit
	Max Hourly	=	2,500	lbs/hr	0.025	lbs/hr
	Max Yearly	=	10.950	tons/yr	0.110	tons/yr

Methodology Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (3/03) Uncontrolled Emissions (ton/yr) = Throughput (ton/yr)* Emission factor (lb/ton) / 2000 (lbs/ton) Controlled Potential Emissions (ton/yr) = Throughput (ton/yr) * Emission factor (lb/ton) / 2000 (lbs/ton)* (1-Control Efficiency). Control efficiency for PM is 99.00% and for PM10 is 99.00% according to the renewal application.

Appendix A: Emission Calculations Jet Dryer No. 1 and No. 2

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units B120000 and B030000 Jet Dryer No. 1 and No. 2

PM Emission Factor	0.22	lb/ton	Source: SCC 3-02-005-27
PM10/PM2.5 Emission Factor	0.055	lb/ton	SCC 3-02-005-27
Hourly Loading Rate	132	tons/hr	
Aspiration Rate	36,000	cfm	
% Control PM	99.00%		
% Control PM10/PM2.5	99.00%		

Hourly throughput is based on maximum design capacity of milling operations.

Potential PM emissions						
Jet Dryer No. 1 and No. 2	Uncontrolled for each unit			Controlled for each unit		
Max Hourly	=	29.04	lbs/hr	0.29	lbs/hr	
Max Yearly	=	127.20	tons/yr	1.27	tons/yr	
Potential PM10/PM2.5 emissions						
Jet Dryer No. 1 and No. 2						
	Uncontrolled for each unit			Controlled for each unit		
Max Hourly	=	7.26	lbs/hr	0.07	lbs/hr	
Max Yearly	=	31.80	tons/yr	0.32	tons/yr	

Notes:

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

Control efficiency for PM is 99.00% and for PM10 is 99.00% according to Operating Permit Renewal No. T085-29197-00102.

Methodology:

Appendix A: Emission Calculations VSC Air Heaters No. 1 and No. 2

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

VSC Air Heaters No. 1 and No. 2				
PM Emission Factor	0.22	lb/ton	Source: SCC	3-02-005-27
PM10/PM2.5 Emission Factor	0.055	lb/ton	SCC	3-02-005-27
*Hourly Loading Rate	264	tons/hr		
Aspiration Rate	42,000	cfm		
% Control PM	95.14%			
% Control PM10/PM2.5	80.57%			

* Maximum rated througput capacity of each heater is 264 tons/hr. However, hourly throughput is based on maximum design capacity of milling operations.

Potential PM emissions VSC Air Heaters No. 1 and No. 2

PTE for emission unit B010500

	Unco	ntrolled for ea	Controlled for each unit		
Max Hourly	=	58.08	lbs/hr	2.82	lbs/hr
Max Yearly	=	254.39	tons/yr	12.36	tons/yr
Potential PM10/PM2.5 emissions VSC Air Heaters No. 1 and No. 2					
	Unco	ntrolled for ea	ich unit	Controlled	for each unit
Max Hourly	=	14.52	lbs/hr	2.82	lbs/hr
Max Yearly	=	63.60	tons/yr	12.36	tons/yr

Notes:

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

Control efficiency for PM is 99.00% and for PM10 is 99.00% according to Operating Permit Renewal No. T085-29197-00102.

Methodology:

Appendix A: Emission Calculations Vertical Seed Conditioner (VSC) No. 1 and No. 2

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units B010000 and B020000 Vertical Seed Conditioner (VSC) No. 1 and No. 2

PM Emission Factor	0.10	lb/ton	Source:	SCC 3-02-007-87	
PM10/PM2.5 Emission Factor	0.025	lb/ton		SCC 3-02-007-87	
Hourly Loading Rate	132	tons/hr			
Aspiration Rate	42,000	cfm			
% Control PM	95.14%				
% Control PM10/PM2.5	80.57%				
Potential PM emissions					
Vertical Seed Conditioner (VSC) No. 1 and No. 2					
	Uncor	ntrolled for ea	ch unit	Controlled for	r each unit
Max Hourly	=	13.200	lbs/hr	0.642	lbs/hr
Max Yearly	=	57.816	tons/yr	2.810	tons/yr
Potential PM10/PM2.5 emissions					
Vertical Seed Conditioner (VSC) No. 1 and No. 2					
	Uncor	ntrolled for ea	ch unit	Controlled for	r each unit
Max Hourly	=	3.300	lbs/hr	0.641	lbs/hr
Max Yearly	=	14.454	tons/yr	2.808	tons/yr

Notes:

Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 95.14% and for PM10 is 80.57% according to Operating Permit Renewal No. T085-29197-00102.

Methodology:

Uncontrolled Emissions (tons/yr) = Throughput (tons/yr)* Emission factor (lb/ton) ÷ 2000 lbs/ton

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

Appendix A: Emission Calculations Hulloosenators No. 1, No. 2, No. 3, and No. 4 and Cascade Drvers No. 1, No. 2, No. 3 and No. 4 Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015 PTE for emission units B040000, B080100, B130000, and B170000 Hulloosenator No. 1, No. 2, No. 3, and No. 4 Source: SCC 3-02-007-85 SCC 3-02-007-85 Note: Source is aspirated via the Cascade Dryers PM Emission Factor 3.60 lb/ton PM10/PM2.5 Emission Factor Hourly Loading Rate lb/ton tons/hr 0.90 66 NA Aspiration Rate cfm % Control PM % Control PM10/PM2.5 99.18% 99.18% Hourly throughput is based on maximum design capacity of milling operations. Potential PM emissions Hulloosenator No. 1, No. 2, No. 3, and No. 4 Uncontrolled for each unit Controlled for each unit Max Hourly = 237.60 lbs/hr 1040.69 tons/yr 1 95 lhe/hr 8.53 Max Yearly tons/yr Potential PM10/PM2.5 emissions Hulloosenator No. 1, No. 2, No. 3, and No. 4 Uncontrolled for each unit Controlled for each unit с. = = 59.40 lbs/hr 260.17 tons/yr 0.49 2.13 Max Hourly lbs/hr Max Yearly tons/vr PTE for emission units B050000, B090000, B140000, and B180000 Cascade Dryer No. 1, No. 2, No. 3, and No. 4 0.22 lb/ton 0.055 lb/ton PM Emission Factor Source: SCC 3-02-005-27 PM10/PM2.5 Emission Factor SCC 3-02-005-27 66 tons/hr 30,000 cfm Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5 99 18% 99.18% Potential PM emissions Cascade Dryer No. 1, No. 2, No. 3, and No. 4 Uncontrolled for each unit Controlled for each unit Max Hourly Max Yearly = 14.520 63.598 lbs/hr tons/yr 0 1 1 9 lbs/br 0.522 tons/yr

Potential PM10/PM2.5 emissions Cascade Dryer No. 1, No. 2, No. 3, and No. 4

	Uncontrolled for each unit			Controlled for each unit		
Max Hourly	=	3.630	lbs/hr	0.030	lbs/hr	
Max Yearly	=	15.899	tons/yr	0.130	tons/yr	

Notes:

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

Control efficiency for PM is 99.18% and for PM10 is 99.18% according to Operating Permit Renewal No. T085-29197-00102.

Methodology:

Appendix A: Emission Calculations Cracking Rolls No.1, No. 2, No. 3 and No. 4 and Cascade Conditioners No. 1, No. 2, No. 3 and No. 4

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units B060000, B100000, B150000, and B190000 Cracking Roll No. 1, No. 2, No. 3, and No. 4 $\,$

PM Emission Factor PM10/PM2.5 Emission Factor Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	9 9	3.60 0.90 66 NA 9.18% 9.18%	lb/ton lb/ton tons/hr cfm	Source: Note:	SCC 3-02-007-8 SCC 3-02-007-8 This source is as Cascade Condition	5 5 pirated via the oners	
Potential PM emissions							
Cracking Roll No. 1, No. 2, No.	3. and No. 4						
3 · · · · · ·		Uncontro	olled for each	unit	Controlled	Controlled for each unit	
Max	Hourly	=	237.600	lbs/hr	1.948	lbs/hr	
Max	Yearly	=	1040.688	tons/yr	8.534	tons/yr	
Potential PM10/PM2.5 emission	าร						
Cracking Roll No. 1, No. 2, No.	3, and No. 4						
		Uncontro	olled for each	i unit	Controlled	for each unit	
Max	Hourly	=	59.400	lbs/hr	0.487	lbs/hr	
Max	Yearly	=	260.172	tons/yr	2.133	tons/yr	
PTE for emission units B0700 Cascade Conditioner No. 1, N	000, B110000 lo. 2, No. 3, a), B16000 and No. 4), and B2000	000			

PM Emission Factor PM10/PM2.5 Emission Fa Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	ictor	0.100 0.025 66 42,600 99.18% 99.18%	lb/ton lb/ton tons/hr cfm	Source:	SCC :	3-02-007-87 3-02-007-87	
Potential PM emissions							
Cascade Conditioner No.	1, No. 2, No. 3, a	ind No. 4					
		Uncontrolled for each unit Controlled				Controlled f	or each unit
	Max Hourly	=	6.600	lbs/hr		0.054	lbs/hr
	Max Yearly	=	28.908	tons/yr		0.237	tons/yr
Potential PM10/PM2.5 em	issions						
Cascade Conditioner No.	1, No. 2, No. 3, a	nd No. 4					
		Uncontrolled for each unit Controlled for ea					or each unit
	Max Hourly	=	1.650	lbs/hr		0.014	lbs/hr
	Max Yearly	=	7.227	tons/yr		0.059	tons/yr

Notes: Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.18% and for PM10 is 99.18% according to Operating Permit Renewal No. T085-29197-00102.

Methodology:

Appendix A: Emission Calculations Secondary Aspirator No 1 and No. 2, Feed Day Tank Conveyor, and Day Bin Vent

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35810-00102 Operation Permit No: 1065-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units E130100, E150100, and A160100

Secondary Aspirator No	5. 1 and No. 2,	and Feed Da	y rank Co	nveyor		
PM Emission Factor PM10/PM2.5 Emission Fi Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	actor	0.061 0.034 9.6 Not Provided 99.18% 99.18%	lb/ton lb/ton tons/hr cfm	Source:	SCC 3-02-005-3 SCC 3-02-005-3	30 30
Potential PM emissions						
Secondary Aspirator No.	1 and No. 2, ar	nd Feed Day T	ank Conve	eyor		
		Uncontr	olled for ea	ach unit	Controlled	d for each unit
	Max Hourly	=	0.586	lbs/hr	0.005	lbs/hr
	Max Yearly	=	2.565	tons/yr	0.021	tons/yr
Potential PM10/PM2.5 er	nissions					
Secondary Aspirator No.	1 and No. 2, ar	nd Feed Day T	ank Conve	eyor		
		Uncontr	olled for ea	ach unit	Controlled	d for each unit
	Max Hourly	=	0.326	lbs/hr	0.003	lbs/hr
	Max Yearly	=	1.430	tons/yr	0.012	tons/yr
PTE for emission units Day Tank (with Aspirate	A160000, A16 or and Cyclon	0500 and B42 e)	:0000			
PM Emission Factor		0.025	lb/ton	Source:	SCC 3-02-005-4	40
PM10/PM2.5 Emission Factor	actor	0.0063	lb/ton		SCC 3-02-005-4	40
Hourly Loading Rate		264	tons/hr	*	This source utili	zes oil suppression.
Aspiration Rate		6,000	cfm			
% Control PM		99.18%				
% Control PM10/PM2.5		99.18%				

Hourly throughput is based on maximum design capacity of milling operations, limited throughput is based on the limited amount of soybeans processed pursuant to T085-21297-00102 issued on January 24, 2006.

Potential PM emissions

Day Bin Vent								
		Uncon	Uncontrolled for each unit			Controlled for each unit		
	Max Hourly	=	6.60	lbs/hr	0.05	lbs/hr		
	Max Yearly	=	28.91	tons/yr	0.24	tons/yr		
Potential PM10/PM2. Dav Bin Vent	5 emissions							
		Uncon	Uncontrolled for each unit			Controlled for each unit		
	Max Hourly	=	1.66	lbs/hr	0.01	lbs/hr		
	Max Yearly	=	7.28	tons/yr	0.06	tons/yr		

Notes:

Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.18% and for PM10 is 99.18% according to Operating Permit Renewal No. T085-29197-00102.

Appendix A: Emission Calculations Flaking Rolls No. 1 through No. 12 and Conveyors

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units C010000, C020000, C030000, C040000, C050000, C060000, C070000, C080000, C090000, C100000, C0110000, C0120000, C0200100, and C010600 Flaking Rolls No. 1 through No. 12 and Conveyors

Stack Test done on April 15	-17, 20	008:							
Air Flow Rate =		16,592	dry standar	d cubic feet/	minute				
PM Outlet Grain Loading =		0.0009	grain/dry st	andard cubic	c feet				
PM ₁₀ Outlet Grain Loading	=	0.0012	grain/dry st	andard cubic	c feet				
PM/PM ₁₀ Control Efficiency	=	99.07%							
Controlled PTE									
Hourly PM Emissions		0.13	lb/hr		Hourly PM ₁₀	/PM _{2.5} Emissi	ions	0.17	lb/hr
Yearly PM Emissions		0.56	tons/yr		Yearly PM ₁₀	/PM _{2.5} Emissi	ions	0.75	tons/yr
Uncontrolled PTE (Origina	al Cap	acity)							
Hourly PM Emissions		13.76	lb/hr	b/hr		PM2.5 Emissi	ions	18.35	lb/hr
Yearly PM Emissions		60.28	tons/yr		Yearly PM ₁₀	/PM _{2.5} Emissi	ions	80.38	tons/yr
Original Capacity									
	8	units *	22.	9 tons/hr *	8760	hr/yr =	1,604,832	tons/yr	
	4	units *	20.	3 tons/hr *	8760	hr/yr =	711,312	tons/yr	_
						TOTAL	2,316,144	tons/yr	
Current Capacity (085-319	79-00 1	02)							
	10	units *	22.90	tons/hr *	8760	hr/yr =	2,006,040	tons/yr	
	2	units *	20.30	tons/hr *	8760	hr/yr =	355,656	tons/yr	_
						TOTAL	2,361,696	tons/yr	
Uncontrolled PTE (After In	ncreas	e in Capa	city)						
Hourly PM Emissions		14.03	lb/hr		Hourly PM ₁₀	/PM _{2.5} Emissi	ions	18.71	lb/hr
Yearly PM Emissions		61.47	tons/yr		Yearly PM ₁₀	/PM _{2.5} Emissi	ions	81.96	tons/yr
Increase in Capacity (085-	32885-	-00102)							
	12	units *	22.90	tons/hr *	8760	hr/yr =	2,407,248	tons/yr	_
						TOTAL	2,407,248	tons/yr	
Uncontrolled PTE (After In	ncreas	e in Capa	city)						
Hourly PM Emissions		14.30	lb/hr		Hourly PM ₁₀	/PM _{2.5} Emissi	ions	19.07	lb/hr
Yearly PM Emissions		62.65	tons/yr		Yearly PM ₁₀	/PM _{2.5} Emissi	ions	83.54	tons/yr

Notes: The stack test result was based on the following capacities: 186 tons/hr (4/15/2008), 185.8 tons/hr (4/16/2008), and 193.8 tons/hr (4/17/2008).

 Methodology:

 Controlled PTE (lb/hr) = Grain Loading (gr/acf) * Air Flow Rate (acf/min) * 60 min/hr ÷ 7000 grains/lb

 Controlled PTE (lb/hr) = DTE (lb/hr) * 8760 hrs/yr ÷ 2000 lb/ton

 Uncontrolled PTE Before Increase (lb/hr) = Controlled PTE (lb/hr) + (1 - Control Efficiency)

 Uncontrolled PTE Before increase (lb/hr) = Controlled PTE (lb/hr) + (1 - Control Efficiency)

 Uncontrolled PTE After Increase (lb/hr) = Uncontrolled PTE Before Increase (lb/hr) * Increase in Capacity ÷ Original Capacity

 Uncontrolled PTE After Increase (lb/hr) = Uncontrolled PTE Before Increase (lb/hr) * Increase in Capacity ÷ Original Capacity

 Uncontrolled PTE After Increase (lb/hr) = Uncontrolled PTE Before Increase (lb/hr) * Increase in Capacity ÷ Original Capacity

Appendix A: Emission Calculations Hammer Mill Mixing Conveyor, Meal L-Path Conveyor, Meal Hammer Mill Feed Conveyor, Meal Hammer Mill Feeders No. 1, No. 2, No. 3, and No. 5, and Meal Hammer Mills No. 1, No. 2, No. 3, and No. 5

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units E020300, E020400, E010100, and E010300 Grinding Discharge Conveyor, Hammer Mill Mixing Conveyor, Meal L-Path Conveyor, and Meal Hammer Mill Feed Conveyor

PM Emission Factor	0.061	lb/ton	Source: SCC 3-02-005-30
PM10/PM2.5 Emission Factor	0.034	lb/ton	SCC 3-02-005-30
Hourly Loading Rate	198	tons/hr	
Aspiration Rate	1000	cfm	
% Control PM	99.50%		
% Control PM10/PM2.5	99.50%		

Hourly throughput is based on maximum design capacity of extraction process.

Potential PM emissions

0

irinding Discharge Conveyor, Hammer Mill Mixing	Conveyor,	Meal L-Pa	ath Conveyor, an	d Meal Hamn	ner Mill Feed Conveyor
	Uncontroll	ed for eacl	h unit	Controlled for	or each unit
Max Hourly	=	12.08	lbs/hr	0.06	lbs/hr
Max Yearly	=	52.90	tons/yr	0.26	tons/yr

Potential PM10/PM2.5 emissions G

inding Discharge Conveyor,	Hammer Mill Mixi	ng Conveyor,	Meal L-Path (Conveyor,	and Meal H	Hammer Mill	Feed (Conveyo
		Uncontroll	ed for each un	it	Control	lled for each	unit	

Max Hourly	=	6.73	lbs/hr	0.03	lbs/hr
Max Yearly	=	29.49	tons/yr	0.15	tons/yr

PTE for emission units E020200, E030200, E040200, E230200, E020000, E030000, E040000, and E230000 Meal Hammer Mill Feeders No. 1, No. 2 and No. 3, Meal Hammer Mills No. 1, No. 2 and No. 3 Meal Hammer Mill Feeder No. 5, Meal Hammer Mill No. 5

PM Emission Factor PM10/PM2.5 Emission Factor Hourly Loading Rate Aspiration Rate % Control PM % Control PM	3.4 0.9 74 3000 99.50%	lb/ton lb/ton tons/hr cfm	Source: SCC 3-02-007-93 SCC 3-02-007-93 * Emission Factor was adjusted to uncontrolled based on assumption that cyclones provide 90% control
% Control PM10/PM2.5	99.50%		

Potential PM emissions

Potential PM emissions Meal Hammer Mill Feeders No. 1, No. 2 and No. 3, Meal Hammer Mills No. 1, No. 2 and No. 3 Meal Hammer Mill Feeder No. 5, Meal Hammer Mills No. 5 Lincontrolled for each unit Controlled for each unit

	Unco	ntrolled for ea	Controlle	Controlled for each un	
Max Hourly	=	251.600	lbs/hr	1.258	lbs/hr
Max Yearly	=	1102.008	tons/yr	5.510	tons/yr
Potential PM10/PM2.5 emissions					
Meal Hammer Mill Feeders No. 1, No. 2 and No.	o. 3, Meal	Hammer Mills	No. 1, No. 2	and No. 3	
Meal Hammer Mill Feeder No. 5, Meal Hammer	r Mill No. §	5			

	Uncontro	olled for eac	ch unit	Controlled for each unit		
Max Hourly	=	62.900	lbs/hr	0.315	lbs/hr	
Max Yearly	=	275.502	tons/yr	1.378	tons/yr	

Notes:

Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.50% and for PM10 is 99.50% according to Operating Permit Renewal No. T085-29197-00102.

Appendix A: Emission Calculations Meal Leg, Meal Conveyor to Loadout, and Meal Hammer Mill Bins No. 1, No. 2, No. 3, and No. 5

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units G010300 Meal Leg

mour Log						
PM Emission Fa PM10/PM2.5 Er Hourly Loading Aspiration Rate % Control PM % Control PM10	actor nission Factor Rate)/PM2.5	0.061 0.034 198 1,000 99.50% 99.50%	lb/ton lb/ton tons/hr cfm	Source:	SCC 3-02-005-30 SCC 3-02-005-30	
Potential PM en Meal Leg	nissions					
		Uncont	trolled for ea	ch unit	Controlled f	for each unit
	Max Hourly	=	12.078	lbs/hr	0.060	lbs/hr
	Max Yearly	=	52.902	tons/yr	0.265	tons/yr
Potential PM10/ Meal Leg	PM2.5 emissions					
		Uncont	trolled for ea	ch unit	Controlled f	for each unit
	Max Hourly	=	6.732	lbs/hr	0.034	lbs/hr
	Max Yearly	=	29.486	tons/yr	0.147	tons/yr
PTE for emissi Meal Hammer I Meal Hammer I	on units E020100, E030100, E Mill Bins No. 1, No. 2 and No. 3 Mill Bin No. 5	040100, an 3	id E230100			
PM Emission Fa PM10/PM2.5 Er Hourly Loading Aspiration Rate % Control PM % Control PM10	actor nission Factor Rate)/PM2.5	0.025 0.0063 74 6,000 99.50% 99.50%	lb/ton lb/ton tons/hr cfm	Source:	SCC 3-02-005-40 SCC 3-02-005-40	
Potential PM en Meal Hammer M Meal Hammer M	nissions /iill Bins No. 1, No. 2 and No. 3 /iill Bin No. 5					
		Uncont	trolled for ea	ch unit	Controlled f	for each unit
	Max Hourly	=	1.850	lbs/hr	0.009	lbs/hr
	Max Yearly	=	8.103	tons/yr	0.041	tons/yr
Potential PM10/ Meal Hammer M Meal Hammer M	PM2.5 emissions /ill Bins No. 1, No. 2 and No. 3 /ill Bin No. 5	Lincon	trolled for an	ch unit	Controlled	ior oach unit
	Max Hourly	-	0 466	lbe/br	0.002	lbs/br
	Max Yoorly	_	2.042	tops/ur	0.010	topolur

Notes: Emission factors are from AP-42, Table 9.9.1-1 (Particulate Emission Factors for Grain Elevators (3/03)). Control efficiency for PM is 99.50% and for PM10 is 99.50% according to Operating Permit Renewal No. T085-29197-00102.

Appendix A: Emission Calculations DC Decks No. 1, No. 2, No. 3, and No. 4

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for emission units D310000-1, D310000-2, D310000-3, and D310000-4 DC Decks No. 1, No. 2, No. 3, and No. 4

PM Emission Factor	1.80	lb/ton	Source:	SCC 3-02-007-89
PM10/PM2.5 Emission Factor	0.450	lb/ton		SCC 3-02-007-89
Hourly Loading Rate Aspiration Rate % Control PM % Control PM10/PM2.5	208 63,900 98.10% 97.89%	tons/hr cfm		Emission Factor was adjusted to uncontrolled based on assumption that cyclones provide 90% control

Hourly throughput is based on maximum extraction process design - weight of oil extracted.

Potential PM emission DC Decks No. 1, No. 2	ns 2, No. 3, and No. 4	Uncor	ntrolled for eac	h unit	Controlle	d for each unit
	Max Hourly	=	374.40	lbs/hr	7.11	lbs/hr
	Max Yearly	=	1639.87	tons/yr	31.16	tons/yr
Potential PM10/PM2.5	5 emissions					
DC Decks No. 1, No. 2	2, No. 3, and No. 4					
		Uncontrolled for each unit			Controlle	d for each unit
	Max Hourly	=	93.60	lbs/hr	1.97	lbs/hr
	Max Yearly	=	409.97	tons/yr	8.65	tons/yr

Methodology Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (3/03). Potential Emissions (ton/yr) = Throughput (ton/yr)* Emission factor (lb/ton) / 2000 (lbs/ton) Controlled Potential Emissions (ton/yr) = Throughput (ton/yr)* Emission factor (lb/ton) / 2000 (lbs/ton)* (1-Control Efficiency) Control efficiency for PM is 99.41% and for PM10 is 99.41% according to the renewal application.

Appendix A: Emission Calculations Diatomaceous Earth (DE) Storage Bin, Bean Storage Bins No. 2 thru 4, 6, 7, and 8 and Bean Storage Silos No. 1 thru 2

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-29197-00102 Operation Permit No.: 1085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for

Diatomaceous Earth (DE) Storage Bin

PM Emission Factor	0.990	lb/ton	Source:	SCC 3-05-038-13
PM10/PM2.5 Emission Factor	0.160	lb/ton		SCC 3-05-038-13
Hourly Loading Rate	0.088	tons/hr		
Aspiration Rate	Not Provided	cfm		
% Control PM	99.50%			
% Control PM10/PM2.5	99.50%			

Hourly throughput is based on maximum transport system capacity.

Potential PM emissions

Pistonia Pintonicolorio						
Diatomaceous Earth (DE) Storage Bin		Uncontrolle	h	Controlled		
Max Hourly	=	0.09	lbs/hr	0.00	lbs/hr	
Max Yearly	=	0.38	tons/yr	0.00	tons/yr	
Potential PM10/PM2.5 emissions						
Diatomaceous Earth (DE) Storage Bin		Uncontrolle	d	Con	trolled	

		COIL	Controlled		
Max Hourly	=	0.01	lbs/hr	0.00	lbs/hr
Max Yearly	=	0.06	tons/yr	0.00	tons/yr

PTE for Bean Storage Bin No. 2, 3, 4, 6, 7, and 8 and Bean Storage Silo No. 1 and 5

PM Emission Factor	0.025	lb/ton	Source:	SCC 3-02-005-40
PM10/PM2.5 Emission Factor	0.006	lb/ton		SCC 3-02-005-40
Hourly Loading Rate	277.6	tons/hr		
Aspiration Rate	348,000	cfm		
% Control PM	N/A			
% Control PM10/PM2 5	N/A			

Hourly throughput is based on maximum transport system capacity. This source utilizes oil suppression. Mineral oil has a control efficiency of 60 to 80%. A control efficiency of 60% is assumed for mineral oil for a conservative estimate.

Potential PM emissions Bean Storage Bin No. 2, 3, 4, 6, 7, and 8 and Bean Storage Silo No. 1 and 5 Uncontrolled

na bean otora	ige ono 140. 1			
	Uncontrolle	Controlled		
=	6.94	lbs/hr	6.94	lbs/hr
=	30.40	tons/yr	30.40	tons/yr
nd Bean Stora	ge Silo No. 1	and 5		
Uncontrolled			Cont	trolled
=	1.75	lbs/hr	1.75	lbs/hr
=	7.66	tons/yr	7.66	tons/yr
	= = nd Bean Stora = =	= 6.94 = 30.40 nd Bean Storage Silo No. 1 Uncontrolle = 1.75 = 7.66	Uncontrolled = 6.94 lbs/hr = 30.40 tons/yr nd Bean Storage Silo No. 1 and 5 Uncontrolled = 1.75 lbs/hr = 7.66 tons/yr	Uncontrolled Cont = 6.94 lbs/hr 6.94 = 30.40 tons/yr 30.40 nd Bean Storage Silo No. 1 and 5 Uncontrolled Cont = 1.75 lbs/hr 1.75 = 7.66 tons/yr 7.66

Methodology

Methodology Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (3/03) Uncontrolled Emissions (ton/yr) = Throughput (ton/yr)* Emission factor (lb/ton) / 2000 (lbs/ton) Controlled Potential Emissions (ton/yr) = Throughput (ton/yr) * Emission factor (lb/ton) / 2000 (lbs/ton)* (1-Control Efficiency). Control efficiency for PM is 99.41% and for PM10 is 99.41% according to the renewal application.

Appendix A; Emission Calculations Kaolin Receiving Tank and Hull Overflow Tank

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-3870-00102 Significant Permit Modification: 085-29197-00102 Operation Permit No:: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

PTE for Kaolin Receiving Tank

-			
PM Emission Factor	0.99	lb/ton	Source: SCC 3-05-038-13
PM10/PM2.5 Emission Factor	0.16	lb/ton	SCC 3-05-038-13
Hourly Loading Rate	40	tons/hr	* Controlled based on assumption that filters provide
Aspiration Rate	750	cfm	90.5% control
% Control PM	99.50%		
% Control PM10/PM2.5	99.50%		

Hourly throughput based estimation of truck transfer rate.

Potential PM emissions Kaolin Receiving Tank

Rabin Receiving rank		Uncontrolled		Contro	lled
Max Hourly	=	39.60	lbs/hr	0.20	lbs/hr
Max Yearly	=	173.45	tons/yr	0.87	tons/yr
Potential PM10/PM2.5 emissions					
Kaolin Receiving Tank					
		Uncontrolled		Contro	lled
Max Hourly	=	6.40	lbs/hr	0.03	lbs/hr
Max Yearly	=	28.03	tons/yr	0.14	tons/yr
PTE for					
Hull Overflow Tank					
PM Emission Factor	0.025	lb/ton	Source:	SCC 3-02-005-40	
PM10/PM2.5 Emission Factor	0.0063	lb/ton		SCC 3-02-005-40	
Hourly Loading Rate	7.7	tons/hr			
Aspiration Rate	1,000	cfm			
% Control PM	0.00%				
% Control PM10/PM2.5	0.00%				

Hourly throughput based estimation of truck transfer rate.

Potential PM emissions					
PTE for Hull Overflow Tank					
		Uncontrolled	i	Con	trolled
Max Hourly	=	0.19	lbs/hr	0.19	lbs/hr
Max Yearly	=	0.84	tons/yr	0.84	tons/yr
Potential PM10/PM2.5 emissions					
PIE for Hull Overflow Tank		Unanatanlla		0	ام دا ا مد
		Uncontrolled	1	Con	trolled
Max Hourly	=	0.05	lbs/hr	0.05	lbs/hr
Max Yearly	=	0.21	tons/yr	0.21	tons/yr

Methodology Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (3/03) Uncontrolled Emissions (ton/yr) = Throughput (ton/yr)* Emission factor (lb/ton) / 2000 (lbs/ton)* Controlled Potential Emissions (ton/yr) = Throughput (ton/yr) * Emission factor (lb/ton) / 2000 (lbs/ton)* (1-Control Efficiency). Control efficiency for PM is 99.41% and for PM10 is 99.41% according to the renewal application.

Appendix A: Emissions Calculations Hexane (VOC) emissions from Mineral Oil Absorber, Dryers, and Cooler

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-3870-00102 Significant Permit Modification: 085-38910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Hexane is lost from the extraction and desolventizing operations in soybean extraction and in refining plants. These include:

Point sources
a) Vent Gas During Normal Operations (includes vent gas from extractor, soya oil distillation, and hexane tanks)
b) Desolventized Meal Dryer & Cooler Exhaust
Fugitive emissions
c) Meal Storage
f) Plant Startup/Shutdown
g) General - equipment failure, leaks, etc.
h) Plant Upsets
Point in order offund

- Bound in product/by-product d) Desolventized Meal

a) Main Gas Vent (Soybean Oll Extraction System) (controls soybean oil extractor, evaporators, water evaporators, one desolventizer/toaster, and main vent condenser) PTE for units D010000, D020000, and D060000

	Given:	3000 225 8760 98.60%	ppm outlet from cubic feet per m hours per year o control efficienc	vent inute flowrate operating rate y					
	3000 6.76E-04	ppm * Ib/cf *	86.17 225	lb/lbmol ÷ cfm *	3.82E+08 60	cf ppm/lbmol = min/hr =	6.76E-04 9.13	lb/cf lb/hr	
from Normal Operations:	Controlled Emissions (tons/yr) = Uncontrolled Emissions (tons/yr) =	9.13 39.87	lb/hr * tons/yr ÷	8736 (1 -	hr/yr ÷ 98.60%	2000	lb/ton =	39.87 2,848.14	tons/yr tons/yr
from Upset Operations:	Controlled Emissions (tons/yr) = Uncontrolled Emissions (tons/yr) =	1,765 21.18	lb/hr ¹ * tons/yr ÷	24 (1 -	hr/yr ÷ 98.60%	2000	lb/ton =	21.18 1,512.86	tons/yr tons/yr
					Origir Increased	nal Total Uncontrolle Origi Increa: Total Uncontrolled	ed Emissions = inal Capacity = sed Capacity = d Emissions =	4,361.00 192.5 264 5,980.80	tons/yr tons/hr tons/hr tons/yr

Mineral Oil Absorber System Normal O	peration Limits = (0.048 lb/ton of soy	bean proces	sed (2,251,83	6 tons), 9.3 lbs/hr VO	с	
	326 IAC 8-1-6	VOC Limits	54.04	tons/yr	40.73	tons/yr	
	326 IAC 2-2	VOC Limits			40.73	tons/yr	
Mineral Oil Absorber System (Stack S-4) Stack	Test (4/18/08) =				11.21	tons/yr	

b) Desolventized Meal Dryers & Cooler PTE for units DC Deck No. 1, DC Deck No. 2, DC Deck No. 3, and DC Deck No. 4

MW billmont Rel to Atr Spec Grav 2.25 fr 2.25 at 80°F b/cut.	Basis:		DC Deck Cyclor	e No. 1 through	No. 4 (18,00	0 scfm each)	72,000 S	CFM		
Air 28.96 1.000 0.076 Nomal Operating Conditions Original Emissions Increased Emissions Increased Emissions Capacity of Soybean OI Extractor 195 bonhr 195 bonhr 200 pm Heane in meal 200 bonhr 200 pm Heane in meal Desolventized flakes to dryer 149 bonhr 149 bonhr 77.4 wf % of beans 200 tonhr 77.8 wf % of beans 200 tonhr 77.8 wf % of beans Desolventized flakes from dryers 149 bonhr 77.4 wf % of beans 200 tonhr 77.8 wf % of beans 200 tonhr 20.8 bonhr 20.8 bonhr 20.8 bonhr 20.8 bonhr 20.8 bonhr 20.8	Hexane	MW lb/lbmol 86.17	Spec Grav Rel to Air 2.975	at 70°F Ib/cu.ft. 0.226	at 80°F lb/cu.ft. 0.222	at 90.8°F Ib/cu.ft. 0.218	average temperatu	re of soy oil temperature from stack	test	
Nemal Operating Conditions Drighal Emissions Increased Emissions 1000000000000000000000000000000000000	Air	28.96	1.000	0.076						
Capacity of Scybean Oil Extractor 1922 Stomshr 264 tonshr Desolventized flakes to dryer 156 ton/hr 81.0 wt % of beans im meal 18 wt. % H20 200 ton/hr 78.8 wt % of beans Desolventized flakes to dryer 148 ton/hr 77.4 wt % of beans 200 ton/hr 75.8 wt % of beans 200 ton/hr Desolventized flakes from dryers 14 wt. % H20 200 ton/hr 75.8 wt % of beans 200 ton/hr 75.8 wt % of beans Eatimated VOC Emissions from dryers: 25.3 tbs/hr Hexane 14 wt. % H20 13 stom hexane 36.1 tbs/hr Hexane Desolventized flakes from cooler 148 ton/hr 77.8 wt % of beans 198 ton/hr 75.0 wt % of beans Desolventized flakes from cooler 148 ton/hr 75.8 wt % of beans 198 ton/hr 75.0 wt % of beans Desolventized flakes from cooler 148 ton/hr 75.8 wt % of beans 198 ton/hr 75.0 wt % of beans Emissions for dryers/coler for normal operation: 32.8 tbs/hr Hexane 13 wt. % H20 100 'nom Hexane in air 83.9 thyr 148.0 n/hr 13 stom % of beans 198 ton/hr 75.0 wt % of beans Desolventized flakes to dryer 156 ton/hr 28.10 wt % of beans 208 ton/hr 76.8 wt % o	Normal Operating Cond	litions	-	- I Facilitations				In success of Facility in success		
Desolventized flakes to dryer 156 ton/r 18 wt. % H20 81.0 wt % of beans 62.4 libs/h Hexane in meal 62.4 libs/h Hexane 208 ton/hr 18 wt. % H20 78.8 wt % of beans 200 'ppm Hexane in meal 62.4 libs/h Hexane Desolventized flakes from dryers 149 ton/hr 14 wt. % H20 77.4 wt % of beans 37.1 libs/h Hexane 200 ton/hr 19 'ppm Hexane in meal 37.1 libs/h Hexane 200 ton/hr 18 wt. % H20 78.8 wt % of beans 113 'ppm Hexane in meal 37.1 libs/h Hexane Desolventized flakes from cooler 148 ton/hr 13 wt. % H20 77.4 wt % of beans 37.1 libs/h Hexane 198 ton/hr 100 'ppm Hexane in meal 37.1 libs/h Hexane 198 ton/hr 100 'ppm Hexane in meal 39.6 libs/h Hexane 100 'ppm Hexane in meal 39.6 libs/h Hexane Desolventized flakes from cooler 148 ton/hr 13 wt. % H20 208 libs/h Hexane 198 ton/hr 100 'ppm Hexane in meal 39.6 libs/h Hexane 100 'ppm Hexane in meal 39.6 libs/h Hexane 100 'ppm Hexane in meal 39.6 libs/h Hexane Emissions for dryers/cooler for normal operation: (same stack) 22.8 libs/h Hexane 22.8 libs/h Hexane 24.6 libs/h Hexane Desolventized flakes to dryer 156 ton/hr 18 wt. % H20 81.0 wt % of beans 208 ton/hr 75.8 wt % of beans 208 ton/hr 26.8 wf % of beans 208 ton/hr Desolventized flakes from cooler 148 ton/hr 18 wt. % H20 76.8 wt % of beans 208 ton/hr 75.8 wt % of beans 208 ton/hr 75.8 wt % of beans 208 ton/hr Desolventized fla	Capacity of Soybean Oi	I Extractor	192.5 t	ons/hr				264 tons/hr		
18 wt. % H20 200 'ppm Hexane in meal 18 wt. % H20 200 'ppm Hexane in meal 024 lbs/hr Hexane 624 lbs/hr Hexane 832 lbs/hr Hexane Desolventized flakes from dryers 14 wt. % H20 113 'ppm Hexane in meal 14 wt. % H20 113 'ppm Hexane in meal 14 wt. % H20 025 obvertized flakes from cooler 14 wt. % H20 113 'ppm Hexane in meal 026 obvertized flakes from cooler 14 wt. % H20 113 'ppm Hexane in meal 026 obvertized flakes from cooler 14 wt. % H20 100 'ppm Hexane in meal 13 wt. % H20 100 'ppm Hexane in meal 13 wt. % H20 026 lbs/hr Hexane 13 wt. % H20 100 'ppm Hexane in meal 296 lbs/hr Hexane 13 wt. % H20 100 'ppm Hexane in meal 296 lbs/hr Hexane 13 wt. % H20 100 'ppm Hexane in meal 396 lbs/hr Hexane 13 wt. % H20 100 'ppm Hexane in meal 296 lbs/hr Hexane 32.6 lbs/hr Hexane 36.6 lbs/hr Hexane Emissions for dryers/cooler for normal operation: 32.8 lbs/hr Hexane 36.6 lbs/hr Hexane 10 ppm Hexane in air 37.5 lbs/hr Hexane 36.6 lbs/hr Hexane Basis: 10 events per year with an average duration of 3 hours 00 pm Hexane in meal Capacity of Soybean Oil Extractor 192.5 tors/hr 208 tors/hr 198 wt. % H20	Desolventized flakes to	dryer	156 1	on/hr	81.0	wt % of beans		208 ton/hr	78.8	3 wt % of beans
Desolventized flakes from dryers 149 ton/hr 14 wt., % H20 77,4 wt % of beans 119 'ppm Hexane in meal 37,1 lbs/hr Hexane 200 ton/hr 14 wt., % H20 75,8 wt % of beans 13 vt., % H20 Desolventized flakes from cooler 148 ton/hr 13 wt., % H20 76,9 wt % of beans 13 wt., % H20 198 ton/hr 100 'ppm Hexane in meal 32,6 lbs/hr Hexane 198 ton/hr 13 wt., % H20 75,0 wt % of beans 100 'ppm Hexane in meal 39,6 lbs/hr Hexane Estimated VOC Emissions from cooler: 7,5 lbs/hr Hexane 198 ton/hr 28,6 lbs/hr Hexane 198 ton/hr 13 wt., % H20 70,0 wt % of beans 100 'ppm Hexane in meal 39,6 lbs/hr Hexane Emissions for dryers/cooler for normal operation: (same stack) 22,8 lbs/hr Hexane 198 ton/hr 143,17 tons/yr 43,6 lbs/hr Hexane Desolventized flakes to dryer 192,5 tons/hr 21,0 wt % of beans 18 wt., % H20 22,0 ton/hr 2500 ppm Hexane in meal 24,6 lbs/hr Hexane 198 ton/hr 190,31 tons/yr Desolventized flakes from cooler 148 ton/hr 13 wt., % H20 2500 ppm Hexane in meal 2500 ppm Hexane in meal 260 ton/hr 264 tons/hr 78,8 wt % to beans 2500 ppm Hexane in meal 2500 ppm Hexane in meal 260 ton/hr 2500 ppm Hexane in meal 260 ton/hr 18 wt., % H20 2500 ppm Hexane in meal 2500 ppm Hexane in meal 260 ton/hr 18 wt., % H20 2500 ppm Hexane in meal 260 ton/hr 18 wt. % H20 2500 ppm Hexane in meal 260 ton/hr 18 wt. % H20 2500 ppm Hexane in meal 260 ton/hr 18 wt. %			18 \	wt % H20	200 62.4	¹ ppm Hexane in Ibs/hr Hexane	meal	18 wt % H20	200 83.2	^{) 1} ppm Hexane in meal 2 Ibs/hr Hexane
14 wt. % H20 119 'ppm Hexane in meal 37.1 lbs/hr Hexane 14 wt. % H20 113 'ppm Hexane in meal 47.1 lbs/hr Hexane Desolventized flakes from cooler 1.48 ton/hr 76.9 wt % of beans 198 ton/hr 75.0 wt % of beans Desolventized flakes from cooler 1.48 ton/hr 76.9 wt % of beans 198 ton/hr 75.0 wt % of beans Estimated VOC Emissions from cooler: 7.5 lbs/hr Hexane 13 wt. % H20 100 'ppm Hexane in meal 29.6 lbs/hr Hexane 13 wt. % H20 100 'ppm Hexane in meal 30.6 lbs/hr Hexane Emissions for dryers/cooler for normal operation: (same stack) 34.9 'ppm Hexane in air 8730 hr/yr 190.3 lbs/hr Hexane 46.4 'ppm Hexane in air 8730 hr/yr Upset Operating Conditions Increased functions 18 wt. % H20 290 bpm Hexane in meal 775 lbs/hr Hexane 208 ton/hr Desolventized flakes to dryer 156 ton/hr 18 wt. % H20 250 ppm Hexane in meal 780 lbs/hr Hexane 18 wt. % H20 290 ppm Hexane in meal 780 lbs/hr Hexane Desolventized flakes from cooler 148 ton/hr 18 wt. % H20 250 ppm Hexane in meal 780 lbs/hr Hexane 18 wt. % H20 2500 ppm Hexane in meal 780 lbs/hr Hexane Desolventized flakes from cooler 148 ton/hr 18 wt. % H20 250 ppm Hexane in meal 780 lbs/hr Hexane 18 wt. % H20 2500 ppm Hexane in meal 780 lbs/hr Hexane <	Desolventized flakes fro	m dryers	149 1	on/hr	77.4	wt % of beans		200 ton/hr	75.8	3 wt % of beans
37.1 lbs/hr Hexane 47.1 lbs/hr Hexane Besolventized flakes from cooler 148 ton/hr 13 wt. % H20 100 'pom Hexane in meal 28 lbs/hr Hexane 13 wt. % H20 29 lbs/hr Hexane 13 wt. % H20 29 lbs/hr Hexane 13 wt. % H20 29 lbs/hr Hexane 13 wt. % H20 20 lbs/hr Hexane 46 lbs/hr Hexane 6 lbs/hr Hexane 46 lbs/hr Hexane (same stack) 0'pom Hexane in air 8730 hr/yr 10 vents per year with an average duration of 3 hours Original Emissions Original Emissions Capacity of Soybean Oil Extractor 195 lbs/hr Hexane 18 wt. % H20 2500 ppm Hexane in meal 18 wt. % H20 2500 ppm Hexane in meal 18 wt. % H20 2600 ppm Hexane in meal 18 wt. % H20 260 ppm Hexane in meal 18 wt. % H20 260 ppm Hexane in meal 18 wt. % H20 260 ppm Hexane in meal 18 wt. % H20 260 ppm Hexane in meal 18 wt. % H20 260 ppm Hexane in meal 18 wt. % H20 26			14 \	wt % H20	119	¹ ppm Hexane in	neal	14 wt % H20	113	³ ¹ ppm Hexane in meal
Desolventized flakes from cooler 148 ton/hr 13 wt.,% H20 76.9 wt% of beans 100 "pom Hexane in meal 20.6 lisb/r Hexane 198 ton/hr 13 wt.,% H20 75.0 wt% of beans 100 "pom Hexane in meal 30.6 lisb/r Hexane Estimated VOC Emissions from cooler: 7.5 lisb/r Hexane 13 wt.,% H20 100 "pom Hexane in meal 30.6 lisb/r Hexane Emissions for dryers/cooler for normal operation: (same stack) 3.2.8 lisb/r Hexane 43.6 lisb/r Hexane Basis: 10 events per year with an average duration of 3 hours Desolventized flakes to dryer 156 ton/hr 18 wt.,% H20 81.0 wt% of beans 264 tons/hr 100 "pom Hexane in meal 8730 hr/yr Desolventized flakes to dryer 156 ton/hr 18 wt.,% H20 81.0 wt% of beans 2500 ppm Hexane in meal 18 wt.,% H20 208 ton/hr 2500 ppm Hexane in meal 18 wt.,% H20 76.9 wt% of beans 264 tons/hr Desolventized flakes from cooler 148 ton/hr 18 wt.,% H20 76.9 wt% of beans 250 ppm Hexane in meal 18 wt.,% H20 198 ton/hr 250 ppm Hexane in meal 18 wt.,% H20 208 ton/hr 250 ppm Hexane in areal 198 ton/hr 75.0 wt% of beans 264 tons/hr Desolventized flakes from cooler 148 ton/hr 18 wt.,% H20 76.9 wt% of beans 255 ppm Hexane in meal 18 tib/hr Hexane 198 ton/hr 18 wt.,% H20 75.0 wt% of beans 250 ppm Hexane in areal 13 wt.,% H20 265 ppm Hexane in areal 248 lib/hr Hexane Emissions for upset operation: 595 lib/hr Hexane 633 ppm Hexane in air 30 hr/yr 8.93 tons/yr	E	stimated VO	C Emissions from	dryers:	37.1 25.3	lbs/hr Hexane lbs/hr Hexane			47.1 36.1	I Ibs/hr Hexane I Ibs/hr Hexane
13 wt. % H20 100 'pom Hexane in meal 13 wt. % H20 100 'pom Hexane in meal 296 lbs/hr Hexane 296 lbs/hr Hexane 396 lbs/hr Hexane Estimated VOC Emissions from cooler: 7.5 lbs/hr Hexane 396 lbs/hr Hexane (same stack) 32.8 lbs/hr Hexane 43.6 lbs/hr Hexane (same stack) 32.8 lbs/hr Hexane 46.4 'pom Hexane in air 8730 hr/yr 143.17 tons/yr 190.31 tons/yr Upset Operating Conditions 0rignal Emissions Increased Emissions Capacity of Soybean Oil Extractor 192.5 tons/hr 264 tons/hr Desolventized flakes to dryer 156 ton/hr 81.0 wt % of beans 208 ton/hr 78.8 wt % of beans 18 wt. % H20 2500 ppm Hexane in meal 13 wt. % H20 2500 ppm Hexane in meal 13 wt. % H20 2500 ppm Hexane in meal 18 wt. % H20 2500 ppm Hexane in meal 18 wt. % H20 2500 ppm Hexane in meal 13 wt. % H20 2500 ppm Hexane in meal 18 wt. % H20 250 ppm Hexane in meal 13 wt. % H20 2500 ppm Hexane in areal 248 tos/hr 75.0 wt % of beans 198 ton/hr 75.0 wt % of beans 198 ton/hr 75.0 wt % of beans 198 ton/hr 25.0 mpm Hexane in areal	Desolventized flakes fro	m cooler	148 1	on/hr	76.9	wt % of beans		198 ton/hr	75.0) wt % of beans
Estimated VOC Emissions from cooler: 29.6 lbs/hr Hexane 39.6 lbs/hr Hexane Emissions for dryers/cooler for normal operation: 32.8 lbs/hr Hexane 43.6 lbs/hr Hexane (same stack) 34.9 'pom Hexane in air 46.4 'pom Hexane in air 8730 hr/yr 8730 hr/yr 8730 hr/yr Hastis: 10 events per year with an average duration of 3 hours Increased Emissions Capacity of Soybean Oil Extractor 192.5 tons/hr 264 tons/hr Desolventized flakes to dryer 156 ton/hr 81.0 wt % of beans 208 ton/hr 78.8 wt % of beans 18 wt. % H20 2500 ppm Hexane in meal 18 wt. % H20 2500 ppm Hexane 1040 lbs/hr Hexane Desolventized flakes from cooler 148 ton/hr 76.9 wt % of beans 198 ton/hr 75.0 wt % of beans 13 wt. % H20 2505 ppm Hexane in meal 13 wt. % H20 2505 ppm Hexane 248 lbs/hr Hexane Emissions for upset operation: 595 lbs/hr Hexane 198 ton/hr 75.0 wt % of beans 248 lbs/hr Hexane Emissions for upset operation: 595 lbs/hr Hexane 13 wt. % H20 252 ppm Hexane in air 30 hr/yr 8.33 tons/yr 11.8 yt. % H20 252 ppm Hexane in air 30 hr/yr 83 ppm			13 \	wt % H20	100	¹ ppm Hexane in	meal	13 wt % H20	100	¹ ppm Hexane in meal
Emissions for dryers/cooler for normal operation: (same stack) 32.8 lbs/hr Hexane 34.9 'ppm Hexane in air 8730 hr/yr 143.17 tons/yr 190.31 tons/yr 10.31 tons/yr 13.31 tons/yr 13.32 tons/	E	stimated VO	C Emissions from	cooler:	29.6 7.5	lbs/hr Hexane			39.6	5 lbs/hr Hexane 5 lbs/hr Hexane
Emissions for dryers/cooler for normal operation: 32.8 lbs/hr Hexane 43.6 lbs/hr Hexane (same stack) 34.9 lpgm Hexane in air 87.0 hr/yr 143.17 tons/yr 190.31 tons/yr Upset Operating Conditions 0riginal Emissions Basis: 10 events per year with an average duration of 3 hours Original Emissions Original Emissions Capacity of Soybean Oil Extractor 192.5 tons/hr Desolventized flakes to dryer 156 ton/hr 18 wt. % H20 2500 ppm Hexane in meal 18 wt. % H20 2500 ppm Hexane in meal 18 wt. % H20 2550 ppm Hexane in meal 18 wt. % H20 625 ppm Hexane in meal 18 wt. % H20 625 ppm Hexane in meal 18 wt. % H20 625 ppm Hexane in meal 18 wt. % H20 625 ppm Hexane in meal 195 lbs/hr Hexane 13 wt. % H20 625 ppm Hexane in air 30 hr/yr 8/3 ppm Hexane in air 8/3 ppm Hexane in air 30 hr/yr 8/3 ppm Hexane in air 30 hr/yr 8/3 tons/yr 118 wt. % H20 22.10 tons/yr 208 lbs/hr Hexane 793 lbs/hr Hexane 633 ppm Hexane in air										
(same stack) 34-3 ppm Hexane in air Br30 hr/yr 40-4 ppm Hexane in air Br30 hr/yr Upset Operating Conditions Basis: 10 events per year with an average duration of 3 hours Original Emissions Increased Emissions Capacity of Soybean Oil Extractor 192.5 tons/hr 208 ton/hr Desolventized flakes to dryer 156 ton/hr 81.0 wt % of beans 18 wt., % H20 2500 ppm Hexane in meal 18 wt., % H20 2500 ppm Hexane 18 wt., % H20 2500 ppm Hexane in meal 18 wt., % H20 2500 ppm Hexane 198 ton/hr Desolventized flakes from cooler 148 ton/hr 76.9 wt % of beans 13 wt., % H20 625 ppm Hexane 13 wt., % H20 265 tos/hr Hexane 13 wt., % H20 2500 ppm Hexane in meal 13 wt., % H20 625 ppm Hexane in meal 13 wt., % H20 248 lbs/hr Hexane 198 ton/hr 75.0 wt % of beans 198 ton/hr 75.0 wt % of beans 198 ton/hr 13 wt., % H20 625 ppm Hexane in air 30 hr/yr 30 hr/yr 30 hr/yr 30 hr/yr 8.93 tons/yr 11.89 ton/syr 11.89 ton/syr Weal Dryers & Cooler from Normal Operations Limits = 0.03 gab/ton of soybean processed (2,251,836 tons), 32.81 bs/hr VOC 13.86 tons/yr 180 Dryers & Cooler from Normal Operations Limits = 0.03 gab/ton of soybean processed (2,251,836 to	Emissions for dryers/co	oler for norm	al operation:		32.8	Ibs/hr Hexane			43.6	6 Ibs/hr Hexane
143.17 tons/yr 190.31 tons/yr Upset Operating Conditions Basis: 10 events per year with an average duration of 3 hours Original Emissions Capacity of Soybean Oil Extractor Original Emissions 192.5 tons/hr Increased Emissions 264 tons/hr Desolventized flakes to dryer 156 ton/hr 18 wt. % H20 81.0 wt % of beans 2500 ppm Hexane in meal 780 lbs/hr Hexane 208 ton/hr 18 wt. % H20 76.8 wt % of beans 260 ton/hr Desolventized flakes from cooler 148 ton/hr 13 wt. % H20 76.9 wt % of beans 625 ppm Hexane in meal 185 lbs/hr Hexane 198 ton/hr 13 wt. % H20 75.0 wt % of beans 625 ppm Hexane in meal 185 lbs/hr Hexane Emissions for upset operation: 595 lbs/hr Hexane 198 ton/hr 633 ppm Hexane in air 30 hr/yr 8.93 tons/yr 199 ton/hr 433 ppm Hexane in air 30 hr/yr Meal Dryers & Cooler from Normal Operations Limits = 0.03 gab/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC <u>326 IAC 8-16 200 Limits 189.15 203.2 bons/yr </u>	(5	ame stack)			8730	'ppm Hexane in a hr/vr	air		40.4	 ppm Hexane in air hr/vr
Upset Operating Conditions Basis: 10 events per year with an average duration of 3 hours Original Emissions Capacity of Soybean Oil Extractor Increased Emissions 264 tons/hr Desolventized flakes to dryer 156 ton/hr 18 wt% H20 81.0 wt % of beans 2500 ppm Hexane in meal 780 lbs/hr Hexane 208 ton/hr 18 wt% H20 78.8 wt % of beans 2500 ppm Hexane in meal 1040 lbs/hr Hexane Desolventized flakes from cooler 148 ton/hr 13 wt% H20 76.9 wt % of beans 625 ppm Hexane in meal 13 wt% H20 198 ton/hr 625 ppm Hexane in meal 13 wt% H20 2500 ppm Hexane in meal 248 lbs/hr Hexane Emissions for upset operation: 595 lbs/hr Hexane 198 ton/hr 13 wt% H20 75.0 wt % of beans 625 ppm Hexane in areal 13 wt% H20 225 ppm Hexane in areal 248 lbs/hr Hexane Emissions for upset operation: 595 lbs/hr Hexane 633 ppm Hexane in air 30 hr/yr 8.93 tons/yr 793 lbs/hr Hexane 843 ppm Hexane in air 30 hr/yr 8.93 tons/yr 843 ppm Hexane in air 30 hr/yr 8.93 tons/yr Meal Dryers & Cooler from Normal Operations Limits = 0.03 gal/hon of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC <u>326 lAC 8-16 VOC Limits 189.15 tons/yr 143.66 tons/yr</u> 23.8 lbs/hr VOC 103.26 lAC 8-16 VOC Limits 189.15 tons/yr					143.17	tons/yr			190.31	tons/yr
Basis: 10 events per year with an average duration of 3 hours Original Emissions Capacity of Soybean Oil Extractor Increased Emissions 264 tons/hr Desolventized flakes to dryer 156 ton/hr 18 wt. % H20 81.0 wt % of beans 2500 ppm Hexane in meal 18 wt. % H20 208 ton/hr 2500 ppm Hexane in meal 18 wt. % H20 78.8 wt % of beans 2500 ppm Hexane in meal 18 wt. % H20 Desolventized flakes to dryer 148 ton/hr 13 wt. % H20 76.9 wt % of beans 625 ppm Hexane in meal 18 wt. % H20 198 ton/hr 625 ppm Hexane in meal 13 wt. % H20 2500 ppm Hexane in meal 13 wt. % H20 Desolventized flakes from cooler 148 ton/hr 13 wt. % H20 76.9 wt % of beans 625 ppm Hexane in meal 18 tols/hr Hexane 198 ton/hr 75.0 wt % of beans 625 ppm Hexane in meal 13 wt. % H20 226 ppm Hexane in meal 13 wt. % H20 226 ppm Hexane in meal 13 wt. % H20 228 ppm Hexane in and 30 hr/yr Ermissions for upset operation: 595 lbs/hr Hexane 633 ppm Hexane in air 30 hr/yr 793 lbs/hr Hexane 843 ppm Hexane in air 30 hr/yr 843 ppm Hexane in air 30 hr/yr 843 ppm Hexane in air 30 hr/yr 8.93 tons/yr 11.89 tons/yr 202.20 tons/yr Meal Dryers & Cooler from Normal Operations Limits = 0.03 gab/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC <u>326 IAC 8-16 VOC Limits 189.15 tons/yr 143.66 tons/yr 143.66 tons/yr </u>	Upset Operating Condit	ions								
Capacity of Soybean Oli Extractor 192.5 tons/hr 264 tons/hr Desolventized flakes to dryer 156 ton/hr 81.0 wt % of beans 208 ton/hr 78.8 wt % of beans Desolventized flakes to dryer 156 ton/hr 81.0 wt % of beans 208 ton/hr 78.8 wt % of beans Desolventized flakes from cooler 148 ton/hr 76.9 wt % of beans 198 ton/hr 75.0 wt % of beans Desolventized flakes from cooler 148 ton/hr 76.9 wt % of beans 198 ton/hr 75.0 wt % of beans Emissions for upset operation: 595 lbs/hr Hexane 198 ton/hr 75.0 wt % of beans 248 lbs/hr Hexane Emissions for upset operation: 595 lbs/hr Hexane 793 lbs/hr Hexane 733 lbs/hr Hexane Main Lucontrolled Emissions (tons/yr) = 152.10 tons/yr 30 hr/yr 30 hr/yr Also Depretations Limits = 0.03 gab/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC 222.20 tons/yr Meal Dryers & Cooler (form Normal Operations Limits = 0.03 gab/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC 232 ki/c 8-1-6 208 LOR 3-12 209 LOR 3-12 103.96 tons/yr 143.66 tons/yr	Basis: 10 events pe	r year with a	n average duratio	n of 3 hours						
Desolventized flakes to dryer 156 ton/hr 18 wt. % H20 81.0 wt % of beans 2500 ppm Hexane in meal 780 lbs/hr Hexane 208 ton/hr 18 wt. % H20 78.8 wt % of beans 2500 ppm Hexane in meal 1040 lbs/hr Hexane Desolventized flakes from cooler 148 ton/hr 13 wt. % H20 76.9 wt % of beans 625 ppm Hexane in meal 13 wt. % H20 198 ton/hr 625 ppm Hexane in meal 13 wt. % H20 75.0 wt % of beans 625 ppm Hexane in meal 13 wt. % H20 Emissions for upset operation: 595 lbs/hr Hexane 633 ppm Hexane in air 30 hr/yr 733 lbs/hr Hexane 843 ppm Hexane in air 30 hr/yr 733 lbs/hr Hexane 843 ppm Hexane in air 30 hr/yr Total Uncontrolled Emissions (tons/yr) = 152.10 tons/yr 203 gab/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC 1326 IAC 8-16 202.20 tons/yr Meal Dryers & Cooler (form Normal Operations Limits = 0.03 gab/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC 143.66 143.66 tons/yr	Capacity of Sovhean Oi	Extractor	Origi 192.5.1	nal Emissions				Increased Emissions 264 tons/br		
Desolventized flakes to dryer 156 ton/hr 18 wt., % H20 81.0 wt % of beans 2500 ppm Hexane in meal 208 ton/hr 18 wt., % H20 78.8 wt % of beans 2500 ppm Hexane in meal 18 wt., % H20 2500 ppm Hexane in meal 18 wt., % H20 2500 ppm Hexane in meal 18 wt., % H20 2500 ppm Hexane in meal 18 wt., % H20 2500 ppm Hexane in meal 18 wt., % H20 2500 ppm Hexane in meal 18 wt., % H20 2500 ppm Hexane in meal 1040 lbs/hr 75.0 wt % of beans Desolventized flakes from cooler 148 ton/hr 13 wt., % H20 76.9 wt % of beans 198 ton/hr 75.0 wt % of beans 228 ton/hr 75.0 wt % of beans Emissions for upset operation: 595 lbs/hr Hexane 595 lbs/hr Hexane 793 lbs/hr Hexane 248 lbs/hr Hexane Emissions for upset operation: 595 lbs/hr Hexane 793 lbs/hr Hexane 793 lbs/hr Hexane S0 hr/yr 8.93 tons/yr 11.89 ton/syr 843 ppm Hexane in air 30 hr/yr 8.93 tons/yr 15.210 tons/yr 152.10 tons/yr 20.20 tons/yr Meal Dryers & Cooler from Normal Operations Limits 0.03 gab/ton of soybean processed (2.251,836 tons), 32.8 lbs/hr VOC 3.26 IAC 8-1-6 VOC Limits 103.26 itons/yr 103.26 itons/yr		Extraotor	102.0					201 101011		
Desolventized flakes from cooler 148 ton/hr 76.9 st/k of beans 198 ton/hr 75.0 tot/k Hexane Desolventized flakes from cooler 148 ton/hr 76.9 st/k of beans 198 ton/hr 75.0 tot/k Hexane Emissions for upset operation: 595 lbs/hr Hexane 13 wt., % H20 625 ppm Hexane in meal 13 wt., % H20 625 ppm Hexane in meal Emissions for upset operation: 595 lbs/hr Hexane 793 lbs/hr Hexane 793 lbs/hr Hexane Code upset operation: 595 lbs/hr Hexane 793 lbs/hr Hexane 843 ppm Hexane in air 30 hr/yr 8.93 tons/yr 11.89 tons/yr 30 hr/yr Total Uncontrolled Emissions (tons/yr) = 152.10 tons/yr 20.20 tons/yr Meal Dryers & Cooler from Normal Operations Limits = 0.03 galb/ton of soybean processed (2.251,836 tons), 32.8 lbs/hr VOC 232 lb C 8-1-6 VOC Limits 236 lbs/2 - 2 VOC Limits 183.96 tons/yr 143.66 tons/yr	Desolventized flakes to	dryer	156 1	on/hr	81.0	wt % of beans		208 ton/hr	78.8	3 wt % of beans
Desolventized flakes from cooler 148 ton/hr 76.9 wt % of beans 198 ton/hr 75.0 wt % of beans 13 wt. % H20 625 ppm Hexane in meal 13 wt. % H20 625 ppm Hexane in meal 248 lbs/hr Hexane Emissions for upset operation: 595 lbs/hr Hexane 793 lbs/hr Hexane 793 lbs/hr Hexane 633 ppm Hexane in air 30 hr/yr 30 hr/yr 30 hr/yr 8.93 tons/yr 11.89 tons/yr 11.89 tons/yr Total Uncontrolled Emissions (tons/yr) = 152.10 tons/yr 222.20 tons/yr Meal Dryers & Cooler from Normal Operations Limits = 0.03 gab/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC 226 lAC 8-1-6 226 lAC 8-1-6 VOC Limits 143.66 tons/yr 232 lAC 8-1-6 VOC Limits 143.66 tons/yr 103 gab/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC 143.66 tons/yr 104 Davers & Cooler (Stark 5.2) Stark Topy 143.66 tons/yr 143.66 tons/yr			10 1	WL % H2U	2500	lbs/hr Hexane	leal	16 WL. % H20	2500) lbs/hr Hexane
Desolventized flakes from cooler 148 ton/hr 76.9 wt % of beans 13 wt % H20 198 ton/hr 75.0 wt % of beans 625 ppm Hexane in meal 13 wt % H20 198 ton/hr 75.0 wt % of beans 625 ppm Hexane in meal 13 wt % H20 75.0 wt % of beans 625 ppm Hexane in meal 248 lbs/hr Hexane Emissions for upset operation: 595 lbs/hr Hexane 13 wt % H20 248 lbs/hr Hexane 633 ppm Hexane in air 30 hr/yr 793 lbs/hr Hexane 793 lbs/hr Hexane 793 lbs/hr Hexane Total Uncontrolled Emissions (tons/yr) = 152.10 tons/yr 11.89 tons/yr 202.20 tons/yr Meal Dryers & Cooler from Normal Operations Limits = 0.03 galb/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC 2326 lAC 8-1-6 VOC Limits 143.66 tons/yr 326 IAC 8-1-6 VOC Limits 189.15 tons/yr 143.66 tons/yr										
185 İbs/hr Hexane 248 İbs/hr Hexane Emissions for upset operation: 595 İbs/hr Hexane 793 Ibs/hr Hexane 633 ppm Hexane in air 843 ppm Hexane in air 30 hr/yr 30 hr/yr 30 hr/yr 30 hr/yr 633 tons/yr 11.89 tons/yr 70tal Uncontrolled Emissions (tons/yr) = 152.10 tons/yr 202.20 tons/yr Meal Dryers & Cooler from Normal Operations Limits = 0.03 galb/ton of soybean processed (2,251,836 tons/yr 13.66 tons/yr 326 IAC 8-1-6 VOC Limits 189.15 tons/yr 143.66 tons/yr	Desolventized flakes fro	m cooler	148 1	on/hr wt., % H20	76.9 625	wt % of beans ppm Hexane in n	neal	198 ton/hr 13 wt. % H20	75.0) wt % of beans 5 ppm Hexane in meal
Emissions for upset operation: 595 lbs/hr Hexane 793 lbs/hr Hexane 633 ppm Hexane in air 843 ppm Hexane in air 843 ppm Hexane in air 30 hr/yr 30 hr/yr 30 hr/yr 8.93 tons/yr 11.89 tons/yr Total Uncontrolled Emissions (tons/yr) = 152.10 tons/yr 202.20 tons/yr Meal Dryers & Cooler from Normal Operations Limits = 0.03 galb/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC 282.8 lbs/hr VOC 202.40 Limits 202.40 tons/yr 143.66 tons/yr 202.60 Limits 189.15 tons/yr 143.66 tons/yr 202.61 (Stork 5.2) Stort Tor-V/d/16702 143.66 tons/yr					185	lbs/hr Hexane			248	B lbs/hr Hexane
Chinadous for updat operation. 603 ppm Hexane in air 30 hr/yr 633 ppm Hexane in air 30 hr/yr 643 ppm Hexane in air 30 hr/yr Total Uncontrolled Emissions (tons/yr) = 152.10 tons/yr 202.20 tons/yr Meal Dryers & Cooler from Normal Operations Limits = 0.03 galb/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC 202.20 tons/yr Meal Dryers & Cooler from Normal Operations Limits = 0.03 galb/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC 143.66 tons/yr Meal Dryers & Cooler (Steel S 2) Steet Test (14/15/00) = 143.96 tons/yr 143.96 tons/yr	Emissions for upset one	aration.			505	lbs/br Hevane			70'	B lbe/br Hevane
30 hr/yr 30 hr/yr 30 hr/yr 8.93 tons/yr 11.89 tons/yr Total Uncontrolled Emissions (tons/yr) = 152.10 tons/yr 202.20 tons/yr Meal Dryers & Cooler from Normal Operations Limits = 0.03 galb/ton of soybean processed (2,251,836 tons), 32 bl/s/r VOC 201.00 km/yr 326 IAC 8-1-6 VOC Limits 189.15 tons/yr 326 IAC 8-1-6 VOC Limits 189.15 tons/yr 326 IAC 2-2 VOC Limits 143.66 tons/yr		Jiddon.			633	ppm Hexane in a	ir		843	3 ppm Hexane in air
Construction Construction<					30	hr/yr			30) hr/yr
Total Uncontrolled Emissions (tons/yr) = 152.10 tons/yr 202.20 tons/yr Meal Dryers & Cooler from Normal Operations Limits = 0.03 galb/ton of soybean processed (2.251,836 tons), 32.8 lbs/hr VOC 32.8 lbs/hr VOC 326 IAC 8-1-6 VOC Limits 189.15 tons/yr 326 IAC 8-2-2 VOC Limits 189.15 tons/yr 326 IAC 8-1-6 VOC Limits 143.66 tons/yr 326 IAC 9-2 VOC Limits 143.65 tons/yr					0.93	toris/yr			11.05	9 tons/yr
Meal Dryers & Cooler from Normal Operations Limits = 0.03 galb/ton of soybean processed (2,251,836 tons), 32.8 lbs/hr VOC 326 IAC 8-1-6 VOC Limits 189.15 tons/yr 143.66 tons/yr Meal Dryers & Cooler (Steek S.2) Steek Text (1/4/5/00)		Total Uncor	ntrolled Emissio	ns (tons/yr) =	152.10	tons/yr			202.20) tons/yr
326 IAC 8-1-6 VOC Limits 189.15 tons/yr 143.66 tons/yr 326 IAC 2-2 VOC Limits 189.15 tons/yr 143.66 tons/yr 326 IAC 2-2 VOC Limits 189.15 tons/yr 143.66 tons/yr		Meal Drivers & Cooler from Normal Operations Limits = 0.03 galb/ton of soyhean processed (2.251.836 tons). 32.8 lbs/br VOC								
226 IAC 2-2 VOC Limits 143,66 tons/yr						326 IAC 8-1-6	VOC Limits	189.15 tons/yr	143.66	tons/yr
			Meel Dave	ra 8 Caalar (Cha	ale C O) Charale	326 IAC 2-2	VOC Limits		143.66	tons/yr

Notes: The density of hexane is 5.6 lb/gal. ¹ Provided by the source in T085-21297-00102, issued on Janurary 24, 2006.

 Methodology:

 Weight % Beans = Beans Processed (tons/hr) ÷ Extractor Capacity (tons/hr) * 100

 Ibs/hr Hexane = ppm Hexane + 1,000,000 ppm * Beans Processed (tons/hr) * 2000 lb/ton

 Emissions (tons/yr) = Emissions (lbs/hr) * 3760 hrs/yr + 2000 lbs/ton

 Increased Emissions (tons/vr) = Original Emissions (tons/vr) * Increased Capacity + Original Capacity

Appendix A: Emissions Calculations Hexane (VOC) Emissions from Meal Storage and Desolventized Meal

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: 7085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

c) Meal Storage

	Original		Increased					
Basis:	148 tons/hr	¹ of meal capacity	198	tons/hr	¹ of meal capacity			
	40 lbs/cu.ft.	¹ density of meal	40	lbs/cu.ft.	¹ density of meal			
	7400 cu.ft./hr.	of meal production	9900	cu.ft./hr.	of meal production			
200 ppm		hexane conc. in displaced storage air						
	0.218 lb/cu.ft.	density of oil @ 90.8°F						
		average temperature of so	y oil tempera	ture from sta	ck test			
Annual Emissions =	0.32 lbs/hr	=	0.43	lbs/hr				
	1.41 tons/yr		1.89	tons/yr				

d) Desolventized meal

	Original 148 tons/hr		Increased 198	tons/hr
Normal Operating Conditions	100 ppm for	8730 hrs/yr		
Solvent Content	29.6 lbs/hr		39.6	lbs/hr
Solvent Content	129.20 tons/yr		172.85	tons/yr
Upset Conditions	625 ppm for	30 hrs/yr		
Solvent Content	185 lbs/hr		248	lbs/hr
Solvent Content	2.78 tons/yr		3.71	tons/yr
Annual Emissions =	131.98		176.57	

Notes:

¹ Provided by the source in T085-21297-00102, issued on Janurary 24, 2006.

Methodology: Production (cu.ft./hr) = Capacity (tons/hr) * Meal Density (lb/cu. ft.) * 2000 lb/ton Annual Emissions (lb/hr) = Production (cu. ft./hr) * Oil Density (lb/cu. ft.) * Concentration (ppm) ÷ 1,000,000 Annual Emissions (tons/yr) = Annual Emissions (lbs/hr) * 8760 hr/yr ÷ 2000 lbs/ton

Appendix A: Emissions Calculations Fugitive (VOC) Emissions from Soybean Extraction Process

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35810-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

f) Plant Startup/Shutdown

Startup Solvent Loss = Shutdown Solvent Loss =	8,400 8,400	lbs or lbs or	1,500 1,500	gallons gallons	
Startup Duration = Shutdown Duration = Total Duration =	2 2 4	hrs hrs hrs			
Frequency =	2	times/yr			
Annual Emissions = Annual Emissions =	4,200 16.80	lbs/hr tons/yr	for	8	hrs/yr

g) General due to Equipment Failure, Routine Maintenance, and Leaks

These losses occur throughout the year, and there are no clearly predetermined conditions. Based on experience at this type of facility, the general emission factor equals 0.28 lbs/ton of beans.

	Original Emissions = Original Emissions =	0.28 236.08	lbs/ton of beans * tons/yr	192.5	tons/hr *	8760	hr/yr ÷	2000	hr/yr
	Increased Emissions = Increased Emissions =	0.28 323.77	lbs/ton of beans * tons/yr	264	tons/hr *	8760	hr/yr ÷	2000	hr/yr
h) Plant Upsets									
	Duration = Frequency =	3 10	hrs times/yr						

When the system loses normal vacuum (negative pressure) condition, VOCs are lost.

Original Air Flow in Flakes = Original Air Flow in Flakes =	192.5 106.9	tons/hr * cfm	2000	lb/ton ÷	60	min/hr ÷	(75-15) lt	o/cfm		
Increased Air Flow in Flakes = Increased Air Flow in Flakes =	264 146.7	tons/hr * cfm	2000	lb/ton ÷	60	min/hr ÷	(75-15) lt	o/cfm		
Assume the amount of VOCs lost to the atmosphere is roughly equal to the air normally pulled in.										
Original Emissions = Original Emissions =	106.9 19.25	cfm * tons/yr	60	min/hr *	0.2	lbs/cu.ft. ÷	2000	lb/ton *	30	hr/yr
Increased Emissions = Increased Emissions =	146.7 26.40	cfm * tons/yr	60	min/hr *	0.2	lbs/cu.ft. ÷	2000	lb/ton *	30	hr/yr

Methodology:

These fugitive calculations were provided by the source and are shown in Part 70 Permit No. T085-21297-00102 issued on January 24, 2006.

Appendix A: Emission Calculations VOC Emissions Biodiesel Manufacturing Process

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35810-00102 Operation Permit No: 1065-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

This process is controlled by a soy oil absorber followed by a water absorber and vents through stack S-5. Emissions from day tanks, methanol storage tanks, and methoxide (catalyst) storage tank are also controlled by the water absorber and vent through Stack S-5. Biodiesel storage tanks vent to day tanks.

	VOC Emission	Operating Hours	Limited PTE of	Control	Unlimited PTE of VOC
Process Description	Limit (lb/hr)	(hrs/yr)	VOC (tons/yr)	Efficiency	(tons/yr)
Normal Operation ^{1,2}	0.30	7,736	1.16	99%	116.04
Normal Operation with Methanol Unloading ^{1,2,3}	0.63	1,000	0.32	99%	31.50
Upset Conditions ^{1,4}	29.40	24	0.35	95%	7.06
	TOTAL	8,760	1.83		154.60

Notes:

¹ This emission limit was proposed by the permittee and will be verified by stack testing,
 ² This emission limit and control efficiency are the BACT requirements for the biodiesel manufacturing process pursuant to T085-21297-00102, issued on January 24, 2006.

³ Biodiesel manufacturing process with methanol tank loading is limited to 1,000 hours/yr.

⁴ Biodiesel manufacturing process upset operation is limited to 24 hours/yr.

Methodology: Limited PTE of VOC (tons/yr) = VOC Emission Limit (lbs/hr) x Operating Hours (hrs/yr) x 1 ton/2000 lbs Unlimited PTE of VOC (tons/yr) = Limited PTE of VOC + (1 - Control Efficiency)

Appendix A: Emissions Calculations VOC and HAP Emissions **Biodiesel Distillation**

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T 085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

This process is controlled by a mineral oil absorber followed by a water absorber and vents through stack S-5.

30,000 lb/hr biodiesel at 120F The objective is to remove monoglyceride from biodiesel. ASTM has defined two grades of biodiesel - the distilled low monoglyceride biodiesel would be blended with containing higher than 0.4% monoglyceride in order to reduce the monoglyceride to less than 0.4%, thereby achieving the grade 1B specification. The distillation biodiesel process will be d

Biodiesel Feed Rate		30,000	lb/hr	
Methanol		0.08%		
Monoglycerides		0.45%		
Diglycerides/Triglycerides		0.05%		
Free Glycerin		0.00%		
Free Fatty Acid		0.05%		
NVR		0.05%		
Biodiesel/FAME		99.4%		
Biodiesel Product		29,664	lb/hr	
Monoglycerides		0.05%		
Biodiesel/FAME		99.95%	(Contains 0.07% Methan	ol in the Biodiesel product
Acid Value	<0.1			
Free Glycerin		0.002%		
Bottoms Purge		300	lb/hr	
Monoglycerides		45%		
Biodiesel/FAME		44%		
Balance: Diglycerides/Triglycerides, Free Fatty	Acid and	NVR		
		11%		
Vent to Scrubber				
Methanol		0.30	lb/hour	
Uncontrolled Emissions =		1.31	tons/year	
Scrubber Control Efficiency		99.5%	-	
VOC Emissions (Methanol) Controlled		0.002	lbs/hr	6.57E-03 tpy

Note: The amount of methanol (0.30 lbs/hr) vented to scrubber was provided by the source. The objective of biodiesel distillation is to remove monoglyceride from biodiesel. The distillation will be designed to process 30,000 lbs per hour of biodiesel. Emissions are vented to Mineral Oil Absorber and Water Absorber with a control efficiency of 99.5%. All VOC emissions are considered HAPs.

Appendix A: Emission Calculations VOC Emissions Biodiesel Loading Racks (Rail and Truck)

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: 1085-29197-00102 Permit Reviewer: Tamera Wessel

Date: May 27, 2015

Process Description	Capacity (gal/min)	¹ VOC Emission Eactor (lbs/kgal)	² VOC Emission	Max. Throughput (kgal/yr)	Unlimited PTE of VOC (tons/vr)	³ Limited Throughput (kgal/yr)	Limited PTE of VOC (tons/vr)
Loading Rack (Rail)	500	0.03	0.02	262,800	3.94	(rigui/yr)	(tonoryt)
Loading Rack (Truck Rack #1)	430	0.03	0.02	226,008	3.39	110,000	1.10
Loading Rack (Truck Rack #2)	430	0.03	0.02	226,008	3.39	1	

Notes:

¹ The unlimited PTE was calculated using the VOC emission factor for Splash loading - Dedicated normal service of Distillate Oil No. 2 (0.03 lbs/kgal) from Table 5.2-5 AP-42 Chapter 5.2 Transportation And Marketing Of Petroleum Liquids because biodiesel is assumed to be similar to distillate oil no. 2 for the purpose of determining the Maximum PTE.

² These VOC emission limits are pursuant to SPM 085-25147-00102, issued on January 28, 2008.

³ The limited throughput was pursuant to SPM 085-25147-00102, issued on January 28, 2008. Limited emissions shown are based on the limited VOC emission limit (0.02 lbs/kgal) and the limited throughput.

Methdology:

Max. Throughput (kgal/yr) = Capacity (gal/min) * 60 min/hr * 8760 hrs/yr ÷ 1,000 gal/kgal Uncontrolled PTE of VOC (tons/yr) = VOC Emission Limit (lbs/kgal) * Max. Throughput (kgal/yr) ÷ 2000 lb/ton Limited PTE of VOC (tons/yr) = VOC Emission Limit (lbs/kgal) * Limited Throughput (kgal/yr) ÷ 2000 lb/ton

Appendix A: Emission Calculations VOC Emissions Glycerine Storage Tanks, Biodiesel Wastewater, and Equipment Leaks

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Process Description	VOC Emission Limit (Ibs/hr)	Max. Operating Hours (hrs/yr)	PTE of VOC after Control (tons/yr)	Control Efficiency	PTE of VOC before Control (tons/yr)
Glycerine Tanks #12 and #13	0.0011	8,760	0.0048	0%	0.0048
Biodiesel Wastewater (Fugitive)	0.77	8,760	3.37	0%	3.37
Equipment Leaks (Fugitive)	0.64	8,760	2.80	78%	12.74
Total			6.18		16.12

Notes: The VOC emission rates for these processes were calculated based on the maximum soy oil process rate of 110 million gallons per year. The VOC limits were established pursuant to SPM 085-25147-00102. The control efficiency for equipment leaks is from Protocol for Equipment Leak Emission Estimates, EPA-453/R-95-017, Table 5-2.

Methodology:

PTE of VOC before Control (tons/yr) = VOC Emission Rate (lbs/hr) * Max. Operating Hours (hrs/yr) ÷ 2000 lb/ton PTE of VOC before Control (tons/yr) = PTE of VOC after Control (tons/yr) ÷ (1 - Control Efficiency)

Appendix A: Emission Calculations VOC Emissions Biodiesel Storage Tanks

Company Name: Louis Dreytva Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Unit ID	Emission Unit Description	Storage Capacity	PTE of VOC (lbs/yr/unit)	Number of Units	PTE of VOC (tons/yr)
1140000	Biodiesel Storage Tank #14	735,000 gallons	1,426.55	1	0.71
1040000 and 1050000	Biodiesel Storage Tank #4 and Biodiesel Storage Tank #5	725,000 gallons	1,762.00	2	1.76
1060000	Biodiesel Storage Tank #6	360,000 gallons	657.69	1	0.33
1070000, 1080000, 1090000, 1100000, and 1110000	Biodiesel Storage Tanks #7, Tank #8, Tank #9, Tank #10, and Tank #11	325,000 gallons	601.76	5	1.50
				TOTAL	4.31

Notes: The PTE of VOC from the tanks were calculated by the Permittee using EPA TANKS software (version 4.09d) and have been verified.

Methodology: PTE of VOC (tons/yr) = PTE of VOC (lbs/yr/unit) * Number of Units ÷ 2000 lb/ton

Appendix A: Emissions Calculations PM/PM₁₀ Emissions Noncontact Cooling Towers

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35810-00102 Operation Permit No: 1065-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Process Description:

Type of ² Cooling Tower: ¹ Circulation Flow Rate: ¹ Total Drift: ¹ Maximum Total Dissolved_Solids:	Induced Draft 660,000 0.005% 3,600	gal/hr of the circulating flow ppm**Average Total Dissolved Solids: 2,400 ppm
Density:	8.345	lbs/gal

Potential to Emit PM/PM10/PM2.5:

Assume all the dissolved solids become PM10 emissions and assume PM emissions are equal to PM10 emissions.

PTE of PM/PM ₁₀ /PM _{2.5} (lb/hr) = 660,000 gal/hr x 0.005% x 8.345 lbs/gal x 3,600 ppm ÷ 1,000,000 ppm =	0.99	lb/hr
PTE of PM/PM ₁₀ /PM _{2.5} (tons/yr) = 0.99 lbs/hr x 8760 hr/yr ÷ 2000 lb/ton =	4.34	tons/yr

Notes: The information above was provided by the source, pursuant to T085-21297-00102 issued on January 24, 2006. Calculation based on AP-42 Chapter 13.4. Assume that non VOC biocide utilized; therefore no VOCs included. The cooling tower is a noncontact cooling tower, and it serves both the extraction plant and the biodiesel plant. The approximate relative distribution of water to the cooling tower would be around 90% from extraction and 10% from biodiesel. Fugitive emissions from the cooling tower are counted towards the biodiesel plant for PSD purposes, but not towards the extraction plant.

Appendix A: Emission Calculations Soybean Oil Unloading

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-29197-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Determine Emission Factors for Soybean Oil Unloading at Louis Dreyfus Agricultural Industries LLC

Use Equation 1 from AP-42 Section 5.2 Transportation and Marketing of Petroleum Liquids Pursuant to AP-42, Section 5.2-4, emissions from loading petroleum liquid can be estimated (with a probable error of ± 30 percent) using the following expression:

L_L = 12.46 <u>SPM</u>

- L_L = S = loading loss, pounds per 1000 gallons (lb/10 3 gal) of liquid loaded a saturation factor (see Table 5.2-1)
- true vapor pressure of liquid loaded, pounds per square inch absolute (psia) (see Section 7.1, "Organic P = Liquid Storage Tanks")
- molecular weight of vapors, pounds per pound-mole (lb/lb-mole) (see Section 7.1, "Organic Liquid M =
- Storage Tanks")
- temperature of bulk liquid loaded, °R (°F+460) volume of soybean oil transferred volume of hexane transferred Т =
- Soy = Hexane =

 Calculations for Sovbean Oil portion of emissions

 S =
 0.60 Submerged Loading: dedicated normal service

 M =
 292 lb/lb-mol (per TANKS calculation)

(The maximum rate that crude oil may be unloaded is the same as for truck loadout at 430 gallons per minute) x 2 truck racks Soy = 452,016,000 gal/year

T, deg F	T, deg R	¹ P , psia	L , lb/10 ³ gal	Emissions from Soy, Ib/year	L _L , lb/10 ³ gal with 30% error	Emissions from Soy, Ib/year with 30% error
60	519	1.081E-14	4.543E-14	2.053E-08	5.906E-14	2.669E-08
100	559	1.641E-12	6.402E-12	2.894E-06	8.322E-12	3.762E-06

Note 1: P. psia is calculated on the next page

 S =
 1.45
 Submerged Loading: dedicated normal service

 M =
 86.17
 Ib/Ib-mol (AP-42, Section 7.1, Table 7.1-3)

Hexane = 452,0	16 gal/yea	· (@1000 ppm	(worse case))
----------------	------------	--------------	---------------

T, deg F	T, deg R	²P, psia	L, lb/10 ³ gal	Emissions from Hexane, Ib/year	L _L , lb/10 ³ gal with 30% error	Emissions from Hexane, Ib/year with 30% error			
60	519	1.876	5.6233	2,541.82	7.3103	3,304.37			
100	559	4.892	13.6145	6,153.96	17.6988	8,000.15			
Note 2: P,	Note 2: P, psia was provided by source								

Total Potential to Emit

T, deg F	Total Emissions, Ib/year	Total Emissions, ton/year
60	3,304.37	1.65
400	9 000 1E	4.00

Annual Average Temp = 58.82F

Appendix A: Emission Calculations Calculations for Vapor Pressure for Soybean Oil Unloading

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35810-00102 Operation Permit No: 1085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Instructions: Enter the vapor pressure from the MSDS in B17, and the Celsius temperature for that vapor pressure in C17. Then enter the atmospheric boiling point (deg C) in C19. Values for the condensation spreadsheet calculate automatically.

	mmHg	deg C	К		
MSDS vapor pressure data	0.000000001	50	323		
MSDS boiling point		300	573		
	В	А			
Clausius-Clapeyron coefficients In P = A- B/T	20253	42			
For condensation worksheet	p, mmHg	T, deg C	T, deg R	T, deg F	P, psia
	3.4E-14	4	499	40.04	6.562E-16
	1.42E-13	10	509	50.02	2.7406E-15
	5.6E-13	16	519	59.98	1.0808E-14
	2.1E-12	21	529	69.95	4.053E-14
	7.6E-12	27	539	80.02	1.4668E-13
	2.6E-11	32	549	90.02	5.018E-13
	8.5E-11	38	559	100.01	1.6405E-12
	100	269	975	516.03	1.93

Saturation vapor pressure: 8.56282E-20 atm

Appendix A: Emission Calculations VOC Emissions Other Tanks

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Unit ID	Equipment Description	Capacity	Control Efficiency	Pot'l VOC Working Loss (lbs/yr)	Pot'l VOC Standing Loss (lbs/yr)	Pot'l VOC Max Emissions (lbs/yr)	Pot'l VOC Max Emissions (tons/year)	Pot'l VOC After Control (tons/year)
1220000	¹ One (1) Soybean Oil Pre-Treat Tank	35,170 gallons	0%	0.00	0.00	0.00	0.01	0.01
	³ 3 Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3)	725,000 gallons each	0%	See Note 3			<= 1.0	<= 1.0
	⁴ 5 Hexane Tanks	20,690 gallons	98%	142.47	661.93	4,022	2.01	0.04
	Diesel/#2 Fuel Oil Storage Tank	44,839 gallons	0%	26.78	0.88	27.66	0.014	0.014

Original Throughput = Proposed Throughput = 110 119

million gallons per year million gallons per year

Unit ID	Equipment Description	Capacity	Control Efficiency	Original Pot'l VOC Max Emissions (lbs/vr)	Proposed Pot'l VOC Max Emissions (lbs/vr)	Proposed Pot'l VOC Max Emissions (tons/vear)	Proposed Pot'l VOC After Control (tons/year)
1250000, 1260000, 1270000, 1280000, 1290000, and 1300000	^{2,5} 6 Methanol Tanks	38,850 gallons each	98.35%	8,299.44	8,978.49	4.49	0.07
1230000 and 1240000	2.52 Sodium Methylate Tanks	38,850 gallons each	98.35%	1,103.59	1,193.88	0.60	0.01

Notes:

Pursuant to 085-27442-00102, issued on January 25, 2010, the tank has potential VOC emissions of less than 0.01 ton/year.

² Stack test result from the existing soy oil absorber and water absorber controlling the biodiesel production plant has a control efficiency of 98.35% for VOC (methanol only). Methanol storage tanks and sodium methylate tanks are controlled by the soy oil absorber.

³ Emissions from the biodiesel storage tanks were calculated by the Permittee using EPA TANKS software (version 4.09d) storing oil with an average of 200 ppmwt hexane content are solv oil from all three tanks is assumed to be less than or equal to 1 too of VOC per year.

⁴ Hexane tanks are used at the soy oil extraction plant and are controlled by a mineral oil absorber with assumed control efficiency of 98%.

⁵ The methanol/sodium methylate unloading pump is being replaced with a larger pump, allowing these tanks to increase their unloading rate to 119 million gallons per year.

Methodology:

VOC Max Emissions (tons/yr) = VOC Max Emissions (lb/yr) ÷ 2000 lb/ton VOC After Control (tons/yr) = VOC Max Emissions (tons/yr) * (1 - Control Efficiency) Proposed Pot'l VOC Max Emissions (tons/yr) = Original Pot'l VOC Max Emissions (tons/yr) * Proposed Throughput ÷ Original Throughput

Appendix A: Emission Calculations Fugitive Dust Emissions - Paved Roads Trucks

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Annual fugitive particulate emissions from Trucks on paved roads = VMT * E

Calculate VMT:			Annual			Vehicle	VMT	VMT	Avg Vehicle
			Tonnage	Trips per	Trips per	Weight	per trip	per year	Weight
				Year	Day	(tons)	(miles/trip)	(miles/yr)	(tons)
	Bean	Full	1,686,300	64858	178	40	0.314	20,391	
		Empty		64858	178	14	0.636	41,273	
	Meal	Empty		49865	137	14	0.379	18,888	
		Full	1,296,480	49865	137	40	0.572	28,521	26.1
	Hull/Pellet	Empty		1937	5.3	14	0.379	734	20.1
		Full	50,370	1937	5.3	40	0.572	1,108	
	Oil	Empty		15000	41.1	15	0.417	6,250	
	(110 MM gal)	Full	375,000	15,000	41.1	40	0.534	8,011	
	Totals		3,408,150		360.7			125,176	

Calculate E:

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1.3 (01/2011)

Where	E = particulate emission factor (Ib/VMT) k = particle size multiplier (Ib/VMT) sL = road surface silt loading (g/m ²) W = weight average (tons) of vehicles traveling the road						
	k =	0.011	Ib/VMT	for PM30 = TSP = PM			
	k =	0.0022	lb/VMT	for PM10			
	k =	0.00054	lb/VMT	for PM2.5			
	sL =	0.6	grams/m ²				
	W =	26.1	tons				
	E _{PM} =	0.193	Ibs PM/VM1	г			
	E _{PM10} =	0.039	Ibs PM ₁₀ /VM	ИТ			
	E _{PM2.5} =	0.009	lbs PM _{2.5} /VI	ИT			

Calculate Emissions:

Grain Elevator Original Capacity	=	1,686,300	tons/yr	Grain Elevator Proposed Capacity	=	2,251,836	tons/yr
Total fugitive PM	=	VMT x E _{PM}		Total fugitive PM	=	VMT x E _{PM}	
	=	24,102	lbs/yr		=	32,185	lbs/yr
	=	2.75	lbs/hr		=	3.67	lbs/hr
	=	12.05	tons/yr		=	16.09	tons/yr
Total fugitive PM10	=	VMT x E _{PM10}		Total fugitive PM10	=	VMT x E _{PM10}	
	=	4,820	lbs/yr		=	6,437	lbs/yr
	=	0.55	lbs/hr		=	0.73	lbs/hr
	=	2.41	tons/yr		=	3.22	tons/yr
Total fugitive PM2.5	=	VMT x EPM2 5		Total fugitive PM2.5	=	VMT x EPM2 5	
0	=	1.183	lbs/vr	0	=	1.580	lbs/vr
	=	0.14	lbs/hr		=	0.18	lbs/hr
	=	0.59	tons/yr		=	0.79	tons/yr

Appendix A: Emission Calculations Fugitive Dust Emissions - Paved Roads Cars Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35870-00102 Operation Permit No: 1065-29197-00102 Operation Permit No: 1065-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Annual fugitive particulate emissions from Cars on paved roads = VMT * E

Calculate VMT:

VMT = (Total number cars) * (Maximum car mileage onsite)*(365 days/yr)

Assume Total Number Cars = Number of Employess Total Number Cars = 70

Maximum car mileage onsite = 0.5 miles

VMT = Total number of cars x Maximum car mileage onsite/day x 365 days/year = 12775

Calculate E:

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1.3 (01/2011)

- N	0.011	107 11111	10111100
k =	0.0022	lb/VMT	for PM10
k =	0.00054	lb/VMT	for PM2.5
sL =	0.6	grams/m ²	
W =	2.0	tons	
E _{PM} =	0.0140	lbs PM/VM	Т
E _{PM10} =	0.0028	lbs PM ₁₀ /VI	MT
E _{PM2.5} =	0.0007	lbs PM _{2.5} /V	MT

Calculate Emissions:

Total fugitive PM	= = =	VMT x E _P 179 0.02	/ lbs/yr lbs/hr
	=	0.09	tons/yr
Total fugitive PM10	= = =	VMT x E _{PI} 36 0.004 0.02	^{M10} Ibs/yr Ibs/hr tons/yr
Total fugitive PM2.5	= = =	VMT x E _{PI} 8.79 0.001 0.004	^{M2.5} Ibs/yr Ibs/hr tons/yr

Appendix A: Emissions Calculations Combustion Summary

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35810-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

	Uncontrolled PTE (tons/year)								
Emission Units	РМ	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	со	GHGs as CO ₂ e (tons/yr)	
Boiler (natural gas only)	1.79	7.18	7.18	0.57	132.26	5.20	79.36	113,598	
Boiler (#2 fuel oil only)	13.77	22.71	22.71	488.68	68.83	1.38	34.41	154,074	
						l			
Boiler (worse case)	13.77	22.71	22.71	488.68	132.26	5.20	79.36	154,074	
Fire Pumps (diesel fuel)	0.95	0.95	0.95	0.44	13.37	1.08	2.88	498	
Space Heaters (natural gas only)	0.004	0.016	0.016	0.001	0.215	0.012	0.180	259	
Emergency Generator (natural gas only)	0.033	0.041	0.041	0.001	3.481	0.025	3.174	116.83	
Total	14.75	23.72	23.72	489.13	149.32	6.32	85.59	154,947.33	
	Limited PTE (tons/year)								
Emission Units	PM	PM ₁₀	PM _{2.5}	SO ₂	NOx	voc	со	GHGs as CO ₂ e	
Boiler (natural gas only)	13.75	22.73	22.73	0.57	132.26	5.21	79.36	113.598	
Boiler (#2 fuel oil only)	13.75	22.73	22.73	248.50	35.00	5.21	17.50	78,348	
				1					
Boilers (worse case)	13.75	22.73	22.73	248 50	132.26	5.21	79.36	113 597 8	
Space Heaters (natural gas only)	13.75 0.004	22.73 0.016	22.73 0.016	248.50	132.26	5.21 0.012	79.36	113,597.8	
Space Heaters (natural gas only) Emergency Generator (natural gas only)	13.75 0.004 0.033	22.73 0.016 0.041	22.73 0.016 0.041	248.50 0.001	132.26 3.481	5.21 0.012 0.025	79.36 3.174	113,597.8 116.8	
Boilers (worse case) Space Heaters (natural gas only) Emergency Generator (natural gas only) Fire Pumps (diesel fuel)	13.75 0.004 0.033 0.95	22.73 0.016 0.041 0.95	22.73 0.016 0.041 0.95	248.50 0.001 0.44	132.26 3.481 13.37	5.21 0.012 0.025 2.50	79.36 3.174 2.88	113,597.8 116.8 497.6	

Uncontrolled PTE (tons/year) HAPs - Organics Total worst case individual HAPs from boiler, fire Acetaldehyde 8.94E-03 Arsenic 3.85E-03 Dichlorobenzene Formaldehyde 1.1E-03 0.12 Hexane 1.70 Toluene 5.28E-03 Xylenes 8.60E-04 Benzene 6.46E-03 Lead 9.14E-03 pumps, space heaters, and HAPs - Metals Manganese 0.01 Selenium 0.01 Beryllium 2.89E-03 Chromium 4.22E-03 Mercury 2.89E-03 Total PAH 6.21E-04 Total 1.90 Cadmium 3.93E-03 Nickel 4.88E-03 generator

HAPs Emission Summary

Notes:

¹ In order to render 326 IAC 2-2 (PSD) not applicable, the source has accepted pound per hour PM, PM10, PM2.5, and VOC limits for the Main Boiler.
² Limited PTE (tons/yr) is not shown for HAPs because it will change upon the usage of natural gas and #2 fuel in the boiler.
113,367

Summed Limited Emissions Total Limited CO₂e

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR >100 Boiler B-1

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35919-00102 Operation Permit No:: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

								Name	Chemical Formula	Global warming potential
								Carbon dioxide	CO ₂	1
Boiler B-1 Potential								Methane	CH_4	21
Heat Input Capacity Throughput								Nitrous oxide	N ₂ O	310
(MMBtu/hr) (MMCF/year) 220 1,889.4										
			Pollutant						Greenhouse Ga	IS
	PM*	PM10*	PM2.5	SO ₂	NOx	VOC	CO	CO2	CH4	N2O
Emission Factor (Ib/MMCF)	1.9	7.6	7.6	0.6	140.0 **see below	5.5	84.0	120,000	2.3	0.64
								113,364.71	2.17	0.60
Unlimited Potential Emissions (tons/yr)	1.79	7.18	7.18	0.57	132.26	5.20	79.36	Summed Potenti	al Emissions	113,367
								Total CO ₂ e		113,598
***Limited (by lb/hr limits) Potential Emissions (tons/yr)	13.75	22.73	22.73	N/A	N/A	5.21	N/A	N/A	N/A	N/A
Maximum Limited Potential Emissions (tons/yr)	13.75	22.73	22.73	0.57	132.26	5.21	79.36	113,364.71	2.17	0.60

*PM emission factor is filterable PM only. PM10 and PM2.5 emission factors are filterable and condensable PM combined. **Emission Factors for NOx from Large Wall-Fired Boilers: Uncontrolled (Pre-NSPS) = 280, Uncontrolled (Post-NSPS) = 190, Controlled Low NOx Burners = 140, Controlled Flue gas recirculation = 100 ***Limited emissions are in order to render the requirements of 326 IAC 2-2 (PSD) not applicable. See TSD for specific limits for each pollutant.

Methodology All emission factors are based on normal firing. MMBtu = 1,000,000 Btu MMCF = 1,000,000 Cubic Feet of Gas

 MMCF = 1,000,000 Cubic Feet of Gas

 NOx and CO Emission Factors are from AP 42, Chapter 1.4, Table 1.4-1

 PM and SO_Emission Factors are from AP 42, Chapter 1.4, Table 1.4-2

 Potential Throughput (MMCF) = Heat Input Capacity (MMBRuhr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

 Potential Emission factor for Iow Nox burner is 0.64.

 Emission Factor for Iow Nox burner is 0.64.

 Emission Factor for Iow Nox burner is 0.64.

 Emission Factor for Iow Nox burner is 0.64.

 Potential Emission factor for Iow 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.

 Greenhouse Warning Potentials (GWP) from Table A.1 of 40 CFR Part 98 Subpart A.

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

 Total CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N20 Potential Emission ton/yr x N20 GWP (310).

See next page for HAPs emissions calculations.

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR >100 HAPs Emissions Boiler B-1

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35919-00102 Operation Permit No:: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Boiler B-1 Heat Input Capacity (MMBtu/hr) 220.00 Г Potential Throughput (MMCF/year) 1889.4

	HAPs - Organics								
Emission Factor in Ib/MMcf	Benzene 2.1E-03	Dichlorobenzen e 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03				
Potential Emission in tons/yr	1.98E-03	1.13E-03	0.0709	1.700	3.21E-03				

	HAPs - Metals										
Emission Factor in Ib/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total					
Potential Emission in tons/yr	4.72E-04	1.04E-03	1.32E-03	3.59E-04	1.98E-03	1.783					

Methodology: Methodology is the same as previous page. Organic HAPs Emission Factors are from AP 42, Chapter 1.4, Table 1.4-3 Metal HAPs Emission Factors are from AP 42, Chapter 1.4, Table 1.4-4 The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4, Tables 1.4-3 and 1.4-4 Limited Emission (tons/yr) = Limited Throughput (MMCF/yr) x Emission Factor (Ib/MMCF)/2,000 Ib/ton

Global warming

Chemical

Name

Appendix A: Emissions Calculations Commercial/Institutional/Residential Combustors No. 2 Fuel Oil Fired - Boiler

Company Name: Louis Drayfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

									Name	Formula	potential
									Carbon dioxide	CO ₂	1
Bolier B-1	Potential				S = Weight % Sulf	fur			Methane	CH ₄	21
Heat Input Capacity	Throughput	(kaals/yoar)			0.5				Nitrous oxide	N ₂ O	310
(MMBtu/hr)	(kgals/year)	(Kgais/year)				-					
220	13,765.71	7,000	usage for entire	source							
					Pollutant					Greenhouse Ga	IS
		PM*	PM10**	PM2.5**	SO ₂	NOx	VOC	CO	CO2	CH4	N2O
Emission Factor (Ib/kgal)		2.0	3.3	3.3	71 (142.0S)	10.0	0.20	5.0	22,300	0.216	0.26
									153,487.71	1.49	1.79
Unlimited Potential Emissions (tons/yr)		13.77	22.71	22.71	488.68	68.83	3 1.38	34.41	Summed Potential Emissions		153,491
									Total CO ₂ e		154,074
***Limited (by fuel oil usage) Potential	Emissions (tons/yr)	7.00	11.55	11.55	248.50	35.00	0.70	17.50	78,050.00	0.76	0.91
***Limited (by lb/hr limits) Potential Em	issions (tons/yr)	13.75	22.73	22.73	N/A	N/A	5.21	N/A	N/A	N/A	N/A
Maximum Limited Potential Emissions	(tons/yr)	13.75	22.73	22.73	248.50	35.00	5.21	17.50	78,050.00	0.76	0.91
									Summed Limited	d Emissions	78,052
									Total Limited CC	D ₂ e	78,348

PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.
 PM10 and PM2.5 emission factors are filterable and condensable PM combined.
 The limited emissions are in order to render the requirements of 326 IAC 2-2 (PSD) not applicable. The PM, PM₁₀, and VOC emission limits are pursuant to Operating Permit No. T085-21297-00102.

The PM25 and fuel usage limits are pursuant to Operating Permit Renewal No. 7085-29197-00102. The source requested that the fuel limit be source-wide and not specific to the boiler.

Methodology

 Methodology

 1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

 Emission Factors are from AP 42 May 2010, Tables 1.3-1, 1.3-2, 1.3-3, 1.3-8, and 1.3-12. NOx emission factor for No. 2 oil fired, LNB/FGR. VOC emission factor for Industrial boiler - distillate oil fired (1-02-005-01/02/03)

 Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

 Potential Emission (tons/yr) = Introughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

 Limited Emission (tons/yr) = Limited Fuel (kgals/ yr) x Emission Factor (tb/kgal)/2,000 lb/ton

 The CO2 Emission Factor for #1 Fuel Oil is 21500. The CO2 Emission Factor for #2 Fuel Oil is 22300.

 Emission (tons/yr) = Limited P42, Tables 1.3-3, 1.3-8, and 1.3-12 (SC 10-3-005-01/02/03) Supplement E 9/99 (see erata file)

 Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

 Patential Emission (tons/yr) = Throughput (kgals/ yr) are mission Factor (lb/kgal)/2,000 lb/ton

Potential Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton Total 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).

See next page for HAPs emission calculations.

Appendix A: Emissions Calculations Commercial/Institutional/Residential Combustors No. 2 Fuel Oil Fired - Boiler HAPs Emissions

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No: 1085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Heat Input Capacity MMBtu/hr calculated from limited fuel (kgals/year) 111.87	***Limited Fuel (kgals/year) 7000.00				
			HARs - Motals		
	America	Dendlines	Cadera iner	Characterist	Leed
Emission Factor in Ib/mmBtu	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	3.85E-03	2.89E-03	2.89E-03	2.89E-03	0.009
***! in its d Detectiol Environment Even in terro (m	1.005.00	4 475 00	4 475 00	4.475.00	0.004
Limited Potential Emission Fuel in tons/yr	1.90E-03	1.47E-03	1.47E-03	1.47E-03	0.004
		HAP	s - Metals (contin	nued)	
Emission Factor in Ib/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05	Total (tons/yr)
Potential Emission in tons/yr	2.89E-03	0.006	2.89E-03	0.014	0.047
***Limited Potential Emission Fuel in tons/yr	1.47E-03	2.94E-03	1.47E-03	7.35E-03	0.024

***Limited emissions are in order to render the requirements of 326 IAC 2-2 (PSD) not applicable.

Methodology Methodology is the same as previous page. No data was available in AP-42 for organic HAPs. Metal HAPs Emission Factors are from AP 42, Chapter 1.3, Table 1.3-10 Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton Limited Emissions (tons/year) = Limited throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A: Emissions Calculations No. 2 Distillate Fuel Oil Fired Emergency Fire Pumps

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35919-00102 Operation Permit No:: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

			ritarito	
SO2 Emission factor = 0.00205 x	S		Carbon dioxide	
S = % Sulfur Content =	0.50		Methane	
		_	Nitrous oxide	

Г

Namo	Onennear	Ciobai warning				
Name	Formula	potential				
arbon dioxide	CO ₂	1				
Methane	CH_4	21				
itrous oxide	N ₂ O	310				

-

Observiced Observices

Three (3) Fire Pumps Capacity in hp 1725.00

				Pollutant				Greenhouse Gas		
Emission Factor (lb/hp-hr)	PM* 2.200E-03	PM10* 2.200E-03	PM2.5* 2.200E-03	SO2 1.025E-03	**NOx 3.100E-02	VOC 2.514E-03 **TOC value	CO 6.680E-03	CO2 1.150	CH4 4.64E-05	N2O 9.28E-06
								495.94	0.020	0.004
Unlimited Potential Emissions (tons/yr)	0.95	0.95	0.95	0.44	13.37	1.08	2.88	Summed Potent	ial Emissions	496
								Total CO2e		498
*** Limited Potential Emissions (tons/yr)	N/A	N/A	N/A	N/A	N/A	2.50	N/A	N/A	N/A	N/A
Limited (ware and) Detected Emissions (terrated)	0.05	0.05	0.05	0.44	40.07	0.50	0.00	405.04	0.00	0.004
Limited (worse case) Potential Emissions (tons/yr)	0.95	0.95	0.95	0.44	13.37	2.50	2.88	495.94	0.02	0.004
								Summed Limited	d Emissions	496
								Total Limited CC	2e	498

**The VOC value given is total organic compounds (TOC).

""" United envisions are in order to ender the requirements of 326 IAC 2-2 (PSD) not applicable. The PM, PM10 and VOC emission limits are pursuant to T085-21297-00102, issued on January 24, 2006

Methodology MMBtu = 1,000,000 Btu

The generators are only emergency generators. Therefore, they will not operate more than 500 hours per year. Emission Factors are from AP 42, Chapter 3.3, Table 3.3-1

Emission Factors are from AP 42, Chapter 3.3, Table 3.3-1 *PM and PM2.5 emission factors are from AP 42, Chapter 3.3, Table 3.3-1 *PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable. *The VOC value given is total organic compounds (TOC). Potential Emission factors are from AP42 (Supplement B 10x8), Tables 3.3-1 and 3.3-2 CH4 and N20 Emission Factor rem 40 EFR 98 Subpart C1 Bable C-2. Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A. Potential Throughput (hp-trivy) = [Output Horsepower Rating (hp)].*[Maximum Hour Sprated per Year] Potential Throughput (hp-trivy) = [Colorut Horsepower Rating (hp)].*[Maximum Hour Sprated per Year] Potential Emission (nors/y) = 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).

See the following page for HAPs emissions calculations.

Appendix A: Emissions Calculations No. 2 Distillate Fuel Oil Fired Emergency Fire Pumps

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35910-00102 Operation Permit No:: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

				HAPS			
	Benzene	Formaldehyde	Toluene	Xylenes	Acetaldehyde	Total PAH	
Emission Factor in lb/hp-hr	6.5E-06	8.3E-06	2.9E-06	2.0E-06	5.4E-06	1.2E-06	TOTAL HAPs (tons/yr)
Potential Emission in tons/yr	2.816E-03	3.562E-03	1.235E-03	8.603E-04	2.315E-03	5.072E-04	1.130E-02

 Methodology:

 Methodology is the same as previous page.

 The six highest organic HAPs emission factors are available in AP-42, Chapter 3 Table 3.3-2

 Additional HAPs emission factors are available in AP-42, Chapter 3 Table 3.3-2

 HAP emission factors converted from Ib/MMBtu in Table 3.3-2 to Ib/hp-hr using the follwing method:

 Emission Factor in Ib/MMBtu x1 MMBtu/1000,000 Bux 27000 Bt/hp-hr = Emission Factor in Ib/hp-hr Conversion factor of 7.000Bt/hp-hr taken from AP-42, Table 3.3-1

 Emission (tons/yr) = Hp x Emission Factor (Ib/hp-hr)/2,000 Ib/ton x 500 hrs/year.

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Two (2) Space Heaters - 0.25 MMBtu/hr, Each

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-35870-00102 Operation Permit No: 1085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Heat Input Capacity MMBtu/hr

Potential Throughput ннv mmBtu MMCF/yr 4.3

mmsc 0.5 1020

		Pollutant									
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO				
Emission Factor in Ib/MMCF	1.9	7.6	7.6	0.6	100	5.5	84				
					**see below						
Potential Emission in tons/yr	0.004	0.016	0.016	0.001	0.2	0.01	0.2				

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

 Methodology

 All emission factors are based on normal firing.

 MMBtu = 1,000,000 Btu

 MMCF = 1,000,000 Cubic Feet of Gas

 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

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

Emission (to	ons/yr) =	 Throughput 	(MMCF/yr)	x Emission F	actor (Ib/MMC	F)/2,000 lb/ton	
--------------	-----------	--------------------------------	-----------	--------------	---------------	-----------------	--

			HAPs	 Organics 		
Emission Factor in Ib/MMcf	Benzene 2.1E-03	Dichlorobenze 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Total - Organics
Potential Emission in tons/yr	4.509E-06	2.576E-06	1.610E-04	3.865E-03	7.300E-06	4.040E-03
			HAP	s - Metals		
Emission Factor in Ib/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total - Metals
Potential Emission in tons/yr	1.074E-06	2.362E-06	3.006E-06	8.159E-07	4.509E-06	1.177E-05

Total HAPs Worst HAP

4.052E-03

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

		Greenhouse G	ias
Emission Factor in Ib/MMcf	CO2 120,000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	258	4.94E-03	4.72E-03
Summed Potential Emissions in tons/yr		258	
CO2e Total in tons/yr		259	

Methodology

Methodology The N2C 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/ry) x Emission Factor (Ib/MMCF)/2,000 Ib/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: Emission Calculations Combustion Engines - Natural Gas

Company Name: Louis Dreyfus Agricultural Industries LLC Address City IN Zip: 7344 State Road 15 South, Claypool, Indiana 46510 Significant Source Modification: 085-35870-00102 Significant Permit Modification: 085-29197-00102 Operation Permit No.: T085-29197-00102 Permit Reviewer: Tamera Wessel Date: May 27, 2015

Maximum Heat Input Capacity (MMBtu/hr)	3.41
Maximum Hours Operated per Year (hr/yr)	500
Potential Fuel Usage (MMBtu/yr)	1706.5
High Heat Value (MMBtu/MMscf)	1020
Potential Fuel Usage (MMcf/vr)	1.67

	Pollutant*						
Criteria Pollutants	PM**	PM10**	PM2.5**	SO2	NOx	VOC	CO
Emission Factor (lb/MMBtu)	3.84E-02	4.83E-02	4.83E-02	5.88E-04	4.08E+00	2.96E-02	3.72E+00
Potential Emissions (tons/yr)	0.033	0.041	0.041	0.001	3.48	0.025	3.17

Emission Factors are from AP-42 (Supplement F, July 2000), Tables 3.2-1 and 3.2-3

The source is not sure if the engine will be a 2-Stroke Lean Burn, 4-Stroke Lean Burn, or 4-Stroke Rich Burn. Therefore, for each pollutant IDEM has used the worst case emission factor for the three different types of engines.

*PM, PM10, PM2.5, SO2, and HAPs Emission Factors for 2-Stroke Lean Burn Engine. NOX Emission Factors for 4-Stroke Lean Burn Engine. VOC

⁴ **PM emission factor is for filterable PM-10. PM10 emission factor is filterable PM10 + condensable PM. PM2.5 emission factor is filterable PM2.5 + condensable PM.

Hazardous Air Pollutants (HAPs)

	Emission	Potential
	Factor	Emissions
Pollutant	(lb/MMBtu)	(tons/yr)
Acetaldehyde	7.76E-03	0.007
Acrolein	7.78E-03	0.007
Benzene	1.94E-03	0.002
1,3-Butadiene	8.20E-04	0.001
Ethylbenzene	1.08E-04	0.000
Formaldehyde	5.52E-02	0.047
Methanol	2.48E-03	0.002
Methylene Chloride	1.47E-04	0.000
Hexane	4.45E-04	0.000
Toluene	9.63E-04	0.001
2,2,4-Trimethylpentane	8.46E-04	0.001
Total PAH**	1.34E-04	0.000
	Total	0.07

**PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter) HAP pollutants consist of the twelve highest HAPs included in AP-42 Table 3.2-1 - 2-Stroke Lean Burn Engine.

Methodology Emission Factors (Ib/MMSCF) = Emission Factor (Ib/MMBtu) * 1,020 MMBtu/MMSCF Potential Fuel Usage (MMBtu/yr) = [Maximum Heat Input Capacity (MMBtu/hn]) * [Maximum Hours Operating per Year (hr/yr)] Potential Emissions (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (Ib/MMBtu)] / [2000 Ib/ton]

	Greenhouse Gas (GHG)				
Greenhouse Gases (GHGs)	CO2	CH4	N2O		
Emission Factor in Ib/MMBtu	110	1.25			
Emission Factor in Ib/MMCF	112,200	1,275.00	2.20		
Potential Emission in tons/yr	93.86	1.07	0.002		
Summed Potential Emissions in tons/yr		94.93			
CO2e Total in tons/yr		116.83			

Methodology

Methodology **The CO2 and CH4 emission factors are from AP-42 (Supplement F, July 2000), Table 3.2-1. These emission factors are not dependent on engine type. **The N2O emission factor is from AP 42, Table 1.4-2. The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64. Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A. For CO2 and CH4: Emission (tons/yr) = [Potential Fuel Usage (MMEtwyr)] * [Emission Factor (lb/MMBtu)] / [2,000 lb/ton] For N2O: Emission (tons/yr) = [Potential Fuel Usage (MMCF/yr)] * [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 N20 GWP (310).

Abbreviations

PM = Particulate Matter PM10 = Particulate Matter (<10 um) PM2.5 = Particulate Matter (<2.5 um)

SO2 = Sulfur Dioxide NOx = Nitrous Oxides VOC - Volatile Organic Compounds CO = Carbon Monoxide CO2 = Cabon Dioxide CH4 = Methane N2O = Nitrous Oxide CO2e = CO2 equivalent emissions



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Michael R. Pence Governor Thomas W. Easterly Commissioner

August 10, 2015

Mr. David Selig Louis Dreyfus Agricultural Industries, LLC 7344 State Road 15 South Claypool, IN 46510

> Re: Public Notice Louis Dreyfus Agricultural Industries, LLC Permit Level: Title V Significant Source Modification and Significant Permit Modification Permit Number: 085-35870-00102 and 085-35910-00102

Dear Mr. Selig:

Enclosed is a copy of your draft Title V Significant Source Modification and Significant Permit Modification, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Times Union in Warsaw, Indiana publish the abbreviated version of the public notice no later than August 13, 2015. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Warsaw Community Public Library, 315 East Center Street in Warsaw, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Tamera Wessel, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-8530 or dial (317) 234-8530.

Sincerely,

Vívían Haun

Vivian Haun Permits Branch Office of Air Quality

> Enclosures PN Applicant Cover lette-2014. Dot4/10/14





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ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

August 7, 2015

Times Union PO Box 1448 Warsaw, IN 46581-1448

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Louis Dreyfus Agricultural Industries (LDAI), LLC, Kosciusko County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than August 13, 2015.

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

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Vivian Haun at 800-451-6027 and ask for extension 3-6878 or dial 317-233-6878.

Sincerely,

Vívían Haun

Vivian Haun Permit Branch Office of Air Quality

Permit Level: Title V Significant Source Modification and Significant Permit Modification Permit Number: 085-35870-00102 and 085-35910-00102

Enclosure PN Newspaper.dot 6/13/2013







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Michael R. Pence Governor Thomas W. Easterly Commissioner

August 10, 2015

To: Warsaw Community Public Library

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

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

Applicant Name:Louis Dreyfus Agricultural Industries (LDAI), LLCPermit Number:085-35870-00102 and 085-35910-00102

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

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

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

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

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

> Enclosures PN Library.dot 6/13/2013





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Michael R. Pence Governor Thomas W. Easterly Commissioner

Notice of Public Comment

August 10, 2015 Louis Dreyfus Agricultural Industries (LDAI), LLC 085-35870-00102 and 085-35910-00102

Dear Concerned Citizen(s):

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

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

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

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

Enclosure PN AAA Cover.dot 6/13/13







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AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD DRAFT INDIANA AIR PERMIT

August 10, 2015

A 30-day public comment period has been initiated for:

Permit Number:085-35870-00102 and 085-35910-00102Applicant Name:Louis Dreyfus Agricultural Industries (LDAI), LLCLocation:Claypool, Kosciusko County, Indiana

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at: http://www.in.gov/ai/appfiles/idem-caats/

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

Indiana Department of Environmental Management Office of Air Quality, Permits Branch 100 North Senate Avenue Indianapolis, IN 46204

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at <u>chammack@idem.IN.gov</u> or (317) 233-2414.

Affected States Notification.dot 3/13/2013





Mail Code 61-53

IDEM Staff	VHAUN 8/10/2015 085-35870 and 35910-00102 DRAFT					
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1		David Selig Louis Dreyfus Agricultural Industries LLC 7344 SR 15 S Claypool IN 46510	0-9746 (Sour	ce CAATS)				•			
2		Bruce Chapin Vice President Louis Dreyfus Agricultural Industries LLC 4800 Main St	Suite 600 Kar	nsas City MO	46510-9746 <i>(RO C)</i>	AATS)					
3		Kosciusko County Board of Commissioners 100 W. Center St, Room 220 Warsaw IN	46580 <i>(Loc</i>	al Official)							
4		David Jordan Environmental Resources Management (ERM) 8425 Woodfield Crossing	g Blvd., Suite	560-W Indiana	polis IN 46240 (Co	onsultant)					
5		Claypool Town Council P.O. Box 6 Claypool IN 46510 (Local Official)									
6		Kosciusko County Health Department 100 W. Center Street, 3rd Floor Warsaw IN 46580-2877 (Health Department)									
7		Warsaw Community Public Library 315 E Center Street Warsaw IN 46580 (Library)									
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