INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
*We Protect Hoosiers and Our Environment.*
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

**Michael R. Pence**
*Governor*

**Thomas W. Easterly**
*Commissioner*

**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 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 Publlic 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: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

**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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*Commissioner*

**DRAFT**

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

Re: 085-35910-00102
Significant Permit Modification to
Part 70 Renewal T085-29197-00102

Louis Dreyfus Agricultural Industries (LDAI), LLC, was issued a Part 70 Permit Renewal 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 requesting changes to this permit was received on May 27, 2015. Pursuant to the provisions of 326 IAC 2-7-12, a Significant Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

Please find attached the entire Part 70 Operating Permit as amended. The permit references the below listed attachments. Since these attachments have been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this amendment:

Attachment A: 40 CFR Part 60.40b, Subpart Db, NSPS for Industrial-Commercial-Institutional Steam Generating Units

Attachment B: 40 CFR Part 60.300, Subpart DD, NSPS for Grain Elevators

Attachment C: 40 CFR Part 60.480, Subpart VV - 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.

Attachment D: 40 CFR Part 60.660, Subpart NNN - NSPS for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.

Attachment E: 40 CFR Part 60.700, Subpart RRR - NSPS for Volatile Organic Compounds Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

Attachment F: 40 CFR Part 60.4200, Subpart IIII - NSPS for Stationary Compression Ignition Internal Combustion Engines

Attachment G: 40 CFR Part 63.2430, Subpart FFFF - NESHAP: Miscellaneous Organic Chemical Manufacturing

Attachment H: 40 CFR Part 63.2830, Subpart GGGG - NESHAP: Solvent Extraction for Vegetable Oil Production

Attachment I: 40 CFR Part 63.6580, Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines

DRAFT

Attachment J: 40 CFR Part 63.7480, Subpart DDDDD - NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

Attachment K: 40 CFR Part 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

Previously issued approvals for this source containing these attachments are available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. 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: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

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 at 317-234-8530 or 1-800-451-6027, and ask for extension 4-8530.

Sincerely,

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

Attachments: Modified Permit and Technical Support Document
cc: File - Kosciusko County
Kosciusko County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch
IDEM Northern Regional Office

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DRAFT

# Part 70 Operating Permit Renewal

# 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 operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 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.

| Operating Permit No.: T085-29197-00102 | |
|---|---|
| Issued by: Original signed by:<br>Matthew Stuckey, Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date: November 22, 2011<br><br>Expiration Date: November 22, 2016 |

Significant Permit Modification No.: 085-31343-00102, issued on April 18, 2012
Administrative Amendment No.: 085-31787-00102, issued on May 23, 2012
Significant Permit Modification No.: 085-31979-00102, issued on October 11, 2012
Significant Permit Modification No.: 085-32885-00102, issued on June 7, 2013
Significant Permit Modification No.: 085-33481-00102, issued on November 25, 2013
Significant Permit Modification No.: 085-33904-00102, issued on February 13, 2014
Administrative Amendment No.: 085-35037-00102, issued on December 16, 2014

| Significant Permit Modification No.: 085-35910-00102 | |
|---|---|
| Issued by:<br><br>Jason R. Krawczyk, Section Chief,<br>Permits Branch<br>Office of Air Quality | Issuance Date:<br><br>Expiration Date: November 22, 2016 |

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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<br>Minor Source, under PSD Rules<br>Major Source, under Section 112 of the Clean Air Act<br>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 | Capacity (tons/hr) | Control | Discharging to Stack | Affected Facility? |
|---|---|---|---|---|---|
| A030000 | Truck Dump No. 1<br>*2006 | 600 | Grain Receiving/Meal Loadout Baghouse | Stack AF-2 | Yes under NSPS DD |
| A020000 | Truck Dump No. 2<br>*2006 | 600 | Grain Receiving /Meal Loadout Baghouse | Stack AF-2 | Yes under NSPS DD |
| Truck Dump No. 3 (with doors) | Truck Dump No. 3<br>*2013 | 360 | Grain Receiving/Meal Loadout Baghouse | Stack AF-2 | Yes under NSPS DD |
| A030100 | Discharge Conveyor No. 1<br>*2006 | 600 | Grain Receiving/Meal Loadout Baghouse | Stack AF-2 | Yes under NSPS DD |
| A020100 | Discharge Conveyor No. 2<br>*2006 | 600 | Grain Receiving/Meal Loadout Baghouse | Stack AF-2 | Yes under NSPS DD |
| A040000 | Bean Receiving Leg No. 1<br>*2006 | 600 | Grain Receiving/Meal Loadout Baghouse | Stack AF-2 | Yes under NSPS DD |
| A050000 | Bean Receiving Leg No. 2<br>*2006 | 600 | Grain Receiving/Meal Loadout Baghouse | Stack AF-2 | Yes under NSPS DD |

| 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 |

| 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 |

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

| 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? |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 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? |
|---|---|---|---|---|---|
| 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 |
| 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 |

| 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 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 |
| 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 |
| 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 |

| 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 *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 |
| 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 |
| I220000 | 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 |

| 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/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 |
| I040000 | Biodiesel Storage Tank #4 *2006, **2007 | 725,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I050000 | 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 |
| I070000 | Biodiesel Storage Tank #7 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I080000 | Biodiesel Storage Tank #8 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |

| Unit ID | Description | Capacity (tons/hr) | Control | Discharging to Stack | Affected Facility? |
|---|---|---|---|---|---|
| I090000 | Biodiesel Storage Tank #9 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I100000 | Biodiesel Storage Tank #10 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I110000 | 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 |
| I120000 | Glycerin Tank #12 *2006, **2010 | 360,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I130000 | Glycerin Tank #13 *2006, **2010 | 360,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I250000 | 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 |
| I260000 | 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 |
| I270000 | 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 |
| I280000 | 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 |
| I290000 | 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 |
| I300000 | Methanol Storage Tank #6 *2007 | 38,850 gallons | Mineral Oil Absorber and water absorber | Stack S-5 | Yes under NSPS VV, and NESHAP FFFF |
| I230000 | 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 |
| I240000 | 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 | |

| | | | |
|---|---|---|---|
| Hot Oil Heater<br>*2013 | 6 MMBtu/hr | None | Yes, Under NESHAP DDDDD |
| Glycerin Boiler<br>*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<br>*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.6 Property 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:

(1) 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:

(a) 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]

(l) 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.

(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 |

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

| | | | | | |
|---|---|---|---|---|---|
| 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 |
| 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? |
|---|---|---|---|---|---|
| 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, ** 2015 | 198 | Meal Loadout Baghouse 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, $PM_{10}$, 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 (lbs/hour) | $PM_{2.5}$ Limit (lbs/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, $PM_{10}$, 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 (lbs/hour) | $PM_{2.5}$ Limit (lbs/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
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**

D.1.5 Particulate Control

(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:**

(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 |
| 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 |
| 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 |

| | | | | | |
|---|---|---|---|---|---|
| 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 |

| | | | | | |
|---|---|---|---|---|---|
| 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.

(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 (lbs/hour) | $PM_{2.5}$ Limit (lbs/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.

(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 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, $PM_{10}$, 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, $PM_{10}$, 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, $PM_{10}$, 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:**

(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 |
| I220000 | 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 |
| 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 (lbs/hour) | $PM_{10}$ Limit (lbs/hour) | $PM_{2.5}$ Limit (lbs/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 (lbs/hour) |
|---|---|---|
| Soybean oil extractor system Normal operation | Mineral oil absorber | 9.3 |
| DC Decks Normal operation | DC Decks Cyclones | 32.8 |

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, $PM_{10}$, 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. $PM_{10}$ 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).

(iii) 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.

(d) 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 |
| I040000 | Biodiesel Storage Tank #4 *2006, **2007 | 725,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I050000 | 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 |
| I070000 | Biodiesel Storage Tank #7 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I080000 | Biodiesel Storage Tank #8 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I090000 | Biodiesel Storage Tank #9 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I100000 | Biodiesel Storage Tank #10 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |

| | | | | | |
|---|---|---|---|---|---|
| I110000 | 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 |
| I120000 | Glycerin Tank #12 *2006, **2010 | 360,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I130000 | Glycerin Tank #13 *2006, **2010 | 360,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I250000 | 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 |
| I260000 | 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 |
| I270000 | 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 |
| I280000 | 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 |
| I290000 | 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 |
| I300000 | Methanol Storage Tank #6 *2007 | 38,850 gallons | Mineral Oil Absorber and water absorber | Stack S-5 | Yes under NSPS VV, and NESHAP FFFF |
| I230000 | 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 |
| I240000 | 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 3-hour 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 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 |
| 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.

Insignificant Activities

| 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 *Approved in the year indicated above for construction.

(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.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 (lbs/hour) | $PM_{10}$ Limit (lbs/hour) | $PM_{2.5}$ Limit (lbs/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:

| Process | Control | VOC (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 $SO_2$ [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 $SO_2$ per thousand gallons of #2 fuel oil (lbs/kgal) used, as shown in the following equation:

$E_{SO2} = 142.0 \times S$, *where*

$E_{SO2}$ is the calculated $SO_2$ 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 (lb/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 (lb/MMBtu) heat input.

D.5.5 Sulfur Dioxide ($SO_2$) [326 IAC 7-1.1-2][326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1-2 ($SO_2$ Emissions Limitations), the $SO_2$ 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 $SO_2$ 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**

**Emissions Unit Description:**

(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 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 (lbs/hour) | $PM_{10}$ Limit (lbs/hour) | $PM_{2.5}$ Limit (lbs/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**

**Emissions Unit Description:** Insignificant Activities

| 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, 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.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]

(a) 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 (lb/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 *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:**

(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 |
| 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 |
| 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 |
| 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 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? |
|---|---|---|---|---|---|
| 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:**

(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 | 0.448 gpm | | Stack S-5 | Yes under NSPS VV, and NESHAP FFFF |
| I040000 | Biodiesel Storage Tank #4 *2006, **2007 | 725,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I050000 | 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 |
| I070000 | Biodiesel Storage Tank #7 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I080000 | Biodiesel Storage Tank #8 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I090000 | Biodiesel Storage Tank #9 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I100000 | Biodiesel Storage Tank #10 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |

| | | | | | |
|---|---|---|---|---|---|
| I110000 | 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 |
| I120000 | Glycerin Tank #12 *2006, **2010 | 360,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I130000 | Glycerin Tank #13 *2006, **2010 | 360,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I250000 | 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 |
| I260000 | 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 |
| I270000 | 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 |
| I280000 | 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 |
| I290000 | 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 |
| I300000 | Methanol Storage Tank #6 *2007 | 38,850 gallons | Mineral Oil Absorber and water absorber | Stack S-5 | Yes under NSPS VV, and NESHAP FFFF |
| I230000 | 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 |
| I240000 | 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 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

**SECTION E.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 Distillation | Biodiesel Distillation *2013 | 15 | Mineral Oil Absorber and water absorber | Stack S-5 | Yes under NSPS VVa, NSPS NNN, &, NESHAP FFFF |

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

**Insignificant Activities:**

| Description | Capacity | Control | Affected Facility? |
|---|---|---|---|
| Glycerin Refinery *2013, **2014 | 7.0 tons per hour | None | Yes, Under NSPS VVa, NSPS NNN, 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.4.1 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 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 | 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 |

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] *2006 | 575 BHP each | None | Yes under NSPS IIII 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.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

**SECTION E.7 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 | 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 |
| I040000 | Biodiesel Storage Tank #4 *2006, **2007 | 725,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I050000 | 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 |
| I070000 | Biodiesel Storage Tank #7 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I080000 | Biodiesel Storage Tank #8 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |

| | | | | | |
|---|---|---|---|---|---|
| I090000 | Biodiesel Storage Tank #9 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I100000 | Biodiesel Storage Tank #10 *2006, **2007 | 325,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I110000 | 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 |
| I120000 | Glycerin Tank #12 *2006, **2010 | 360,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I130000 | Glycerin Tank #13 *2006, **2010 | 360,000 gals | | | Yes under NSPS VV, and NESHAP FFFF |
| I250000 | 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 |
| I260000 | 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 |
| I270000 | 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 |
| I280000 | 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 |
| I290000 | 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 |
| I300000 | Methanol Storage Tank #6 *2007 | 38,850 gallons | Mineral Oil Absorber and water absorber | Stack S-5 | Yes under NSPS VV, and NESHAP FFFF |
| I230000 | 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 |
| I240000 | 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.

Insignificant Activities:

| Description | Capacity | Control | Affected Facility? |
|---|---|---|---|
| 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 |

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)

(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:**

(a)

| 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 |

| | | | | | |
|---|---|---|---|---|---|
| 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 |

| | | | | | |
|---|---|---|---|---|---|
| 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 |

| | | | | | |
|---|---|---|---|---|---|
| AF-4<br>C110000 | Flaker aspiration baghouse<br>*2006 | 24,000 acfm @ 0.005 grain/acf outlet grain loading | | Stack AF-4 | Yes under NESHAP GGGG |
| | | | | | |
| B040000 | Hulloosenator No. 1<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B080100 | Hulloosenator No. 2<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B130000 | Hulloosenator No. 3<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B170000 | Hulloosenator No. 4<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B050000 | Cascade Dryer No. 1<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B090000 | Cascade Dryer No. 2<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B140000 | Cascade Dryer No. 3<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B180000 | Cascade Dryer No. 4<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B210000 | CCD Cyclone<br>*2006, **2010 | 42,000 cfm | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B060000 | Cracking Roll No.1<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B100000 | Cracking Roll No.2<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B150000 | Cracking Roll No.3<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B190000 | Cracking Roll No.4<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B070000 | Cascade Conditioner No. 1<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B110000 | Cascade Conditioner No. 2<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B160000 | Cascade Conditioner No. 3<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B200000 | Cascade Conditioner No. 4<br>*2006, **2012 | 66.0 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| B230000 | CCC Cyclone<br>*2006, **2010 | 42,000 cfm | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| E130100 | Secondary Aspirator No 1<br>*2006, **2010 | 9.6 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| E150100 | Secondary Aspirator No 2<br>*2006, **2010 | 9.6 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| E160000 | Secondary Aspirator Cyclone<br>*2006, **2010 | 9.6 | Hot dehulling baghouse | Stack AF-5 | Yes under NESHAP GGGG |
| AF-5<br>B260000 | Hot dehulling baghouse<br>*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 |
| 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 |
| 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 *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 |
| 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 |
| I220000 | 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 |
| 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 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:**

(f)

| Unit ID | Description | Capacity | 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 *Approved in the year indicated above for construction.

Insignificant Activities:

| Description | Capacity | Control | Affected Facility? |
|---|---|---|---|
| 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 |

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:

**Main 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);
(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.

**Hot Oil Heater**

(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 63.7521(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
(10) 40 CFR Part 60.4248
(11) Table 1
(12) Table 2
(13) Table 3

## 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**

**Emissions Unit Description:**

(e)

| Unit ID | Description | Capacity (tons/hr) | Control | Discharging to Stack | Affected Facility? |
|---|---|---|---|---|---|
| Biodiesel Distillation | Biodiesel Distillation *2013 | 15 | Mineral Oil Absorber and water absorber | Stack S-5 | Yes under NSPS VVa, NSPS NNN& NESHAP FFFF |

Note *Approved in the year indicated above for construction.

**Insignificant Activities:**

| Description | Capacity | Control | Affected Facility? |
|---|---|---|---|
| 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 |

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):

(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
(7) 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 LLC
Source Address: 7344 State Road 15 South, Claypool, Indiana 46510-9746
Part 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:

DRAFT

# 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 LLC
Source Address: 7344 State Road 15 South, Claypool, Indiana 46510-9746
Part 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: |

If any of the following are not applicable, mark N/A Page 2 of 2

| |
|---|
| Date/Time Emergency started: |
| Date/Time Emergency was corrected: |
| Was the facility being properly operated at the time of the emergency? Y N<br>Describe: |
| Type of Pollutants Emitted: TSP, PM-10, $SO_2$, VOC, $NO_X$, CO, Pb, other: |
| Estimated amount of pollutant(s) emitted during emergency: |
| Describe the steps taken to mitigate the problem: |
| Describe the corrective actions/response steps taken: |
| Describe the measures taken to minimize emissions: |
| If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value: |

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

DRAFT

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

## 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: Grain Receiving/Meal Loadout and Prep Area
Parameter: Soybeans processed
Limit: 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: _____

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

## 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
Parameter: Purchased seed oil
Limit: 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: _____

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

## 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 Reactor
Parameter: Seed oil processed to manufacture biodiesel
Limit: 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: _____

DRAFT

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

## 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: Main Boiler
Parameter: #2 fuel oil
Limit: 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: _____

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

## 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: _____

DRAFT

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

## 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 | | | |

☐ No deviation occurred in this quarter.

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

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

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

## 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 Loading Racks
Parameter: Throughout Rate
Limit: 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: _____

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

## 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: Storage Bean Piles #1 and #2
Parameter: Soybean throughput
Limit: 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:_____

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

□ No deviation occurred in this quarter.

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

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

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

## 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: Overall source
Parameter: Solvent Loss Ratio
Limit: 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 DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE AND ENFORCEMENT BRANCH
# PART 70 OPERATING PERMIT
# Quarterly 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: | Louis Dreyfus Agricultural Industries, LLC |
| Source Location: | 7344 State Road 15 South, Claypool, IN 46510 |
| County: | 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 | 085-31960I-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 | 085-32846I-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 | 085-33392I-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 or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June15, 2005.

(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 $PM_{2.5}$, $SO_2$, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
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 http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf ) 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.
[1]The 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 ($^0$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, $PM_{10}$, 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 (lbs/hour) | $PM_{2.5}$ Limit (lbs/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.

| Process/ Emission Unit | **Source Wide Emissions After Issuance** (ton/yr) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | PM | PM10 | PM2.5 | $SO_2$ | NOx | VOC | CO | 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 |
| Stack**s** 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 |

| Process/ Emission Unit | **Source Wide Emissions After Issuance** (ton/yr) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | PM | PM10 | PM2.5 | $SO_2$ | NOx | VOC | CO | 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 |

| Process/ Emission Unit | **Source Wide Emissions After Issuance** (ton/yr) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | PM | PM10 | PM2.5 | $SO_2$ | NOx | VOC | CO | 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** |

negl. = negligible
**Notes:**
[1]The 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 http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf ) 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** (ton/yr) | **Controlled PTE (tons/year)** (ton/yr) | **Part 70 Major Source Threshold** (ton/yr) | **CAM Applicable** (Y/N) | **Large Unit** (Y/N) |
| **VSC Air Heater No. 2 (B020500)** | PM | VSC Cyclone No. 2 (B020700) | 326 IAC 6-3<br>326 IAC 2-2 | 127.20 | 6.18 | 100* | N | N |
| | PM10 | | 326 IAC 2-2 | 31.80 | 6.18 | 100 | N | N |
| | PM2.5 | | 326 IAC 2-2 | 5.43 | 1.06 | 100 | N | N |
| | 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 |
| | CO | 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 Unit** | **Control Device** | **Pollutant** | **Timeframe for Testing** | **Frequency of Testing** |
| VSC Air Heater No. 2 | VSC Cyclone No. 2 | PM, $PM_{10}$, $PM_{2.5}$ | No later than 180 days after initial startup. | Every five (5) 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**:

Entire Permit - The unit descriptions for B010000, B020000, B010500, and B010700 have been revised to specify which cyclone control device controls the unit.

Entire Permit - The unit description for the new VSC Air Heater No. 2 (B020500) has been added to the permit.

Entire Permit - The unit description for the new control device, VSC Cyclone No. 2 (B020700), has been added to the permit.

Condition D.2.1 - The control description for the Jet Dryer/VSC has been revised to show more than one cyclone.

Condition D.2.2 - 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 to include the new VSC cyclone.

Condition D.2.5 - The testing requirements for the new control device, VSC Cyclone No. 2, have been added.

Condition D.2.6 - The visible emissions requirements for the new control device, VSC Cyclone No. 2, exhausting through stack S-6, have been added.

Condition D.2.10 - The visible emissions reporting requirements for the new control device, VSC Cyclone No. 2, exhausting through 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:

***

(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-1~~**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** |
| *** | | | | | |

***

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, $PM_{10}$, 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 (lbs/hour) | $PM_{2.5}$ Limit (lbs/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.1.6~~**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.

***

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

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-1~~**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** |
| *** | | | | | |

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, $PM_{10}$, 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 (lbs/hour) | $PM_{2.5}$ Limit (lbs/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]

(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

***

(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 cyclone**s**, 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, $PM_{10}$, and $PM_{2.5}$ testing on baghouses AF-4, AF-5, AF-6, AF-8, and AF-9 and VSC cyclone**s** (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, $PM_{10}$, 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, $PM_{10}$, 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 (lbs/hour) | $PM_{10}$ Limit (lbs/hour) | $PM_{2.5}$ Limit (lbs/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 (lbs/hour) | $PM_{10}$ Limit (lbs/hour) | $PM_{2.5}$ Limit (lbs/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)

| 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-1~~**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** |
| 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: http://www.in.gov/ai/appfiles/idem-caats/

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

**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

**Potential To Emit before Control**

| 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 $CO_2e$ (tons/yr) | Total HAPs (tons/yr) |
|---|---|---|---|---|---|---|---|---|---|
| Soybean Oil Extraction Plant | | | | | | | | | |
| Stack AF-2 (and uncaptured emissions) | 3,571.19 | 1,718.97 | 293.92 | - | - | - | - | - | - |
| 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 | - | - | - | - | - | - |
| Stack AF-4 | 62.65 | 83.54 | 83.54 | - | - | - | - | - | - |
| Stack AF-6 | 9,112.98 | 2,359.61 | 2,230.59 | - | - | - | - | - | - |
| Stack S-2 | 6,559.49 | 1,639.87 | 1,639.87 | - | - | - | - | - | - |
| 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 | - | - | - | - | - | - |
| Diatomaceous Earth (DE) Storage Bin | 0.38 | 0.06 | 0.02 | - | - | - | - | - | - |
| Main Gas Vent (Soybean Oil Extractor System) | - | - | - | - | - | 5,980.80 | - | - | 3,827.71 |
| Desolventized Meal Dryers & Cooler | - | - | - | - | - | 202.20 | - | - | 129.41 |
| Meal Storage | - | - | - | - | - | *fugitive* | - | - | 1.21 |
| Bound In Product & Byproduct Desolventized Meal (fugitive) | - | - | - | - | - | *fugitive* | - | - | 113.00 |
| Plant Startup/Shutdown | - | - | - | - | - | *fugitive* | - | - | 10.75 |
| General (equipment failure, leaks, etc.) | - | - | - | - | - | *fugitive* | - | - | 207.21 |
| Plant Upsets | - | - | - | - | - | *fugitive* | - | - | 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** | **4,308.42** |
| Biodiesel Production Plant | | | | | | | | | |
| Biodiesel Methanol Absorbers (worse case)[1] | - | - | - | - | - | 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) | - | - | - | - | - | <= 1.0 | - | - | <= 1.0 |
| 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 | 4.34 | - | - | - | - | - | - |
| Biodiesel Distillation | - | - | - | - | - | 1.31 | - | - | 1.31 |
| Hot Oil Heater | 0.05 | 0.20 | 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 | - | - | - | - | - | 3.31E-04 | - | - | - |
| Glycerin Refinery | - | - | - | - | - | 2.00E-04 | - | - | 0.0002 |
| **Total PTE at Biodiesel Plant** | **20.66** | **8.13** | **5.69** | **0.04** | **7.30** | **199.58** | **6.13** | **8,813** | **199.32** |
| **Total PTE at Entire Source including Fugitives from Roads** | **31,581.05** | **9,420.84** | **7,092.74** | **489.27** | **173.80** | **6,389.84** | **106.15** | **184,498** | **4,507.73** |

**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 $CO_2e$ (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 | 8.32 | - | - | - | - | - | - |
| 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 | - | - | - | - | - | - |
| Diatomaceous Earth (DE) Storage Bin | 0.38 | 0.06 | 0.02 | - | - | - | - | - | - |
| Main Gas Vent (Soybean Oil Extractor System) | - | - | - | - | - | 40.73 | - | - | 26.07 |
| Desolventized Meal Dryers & Cooler | - | - | - | - | - | 143.66 | - | - | 91.94 |
| Meal Storage | - | - | - | - | - | *fugitive* | - | - | 1.21 |
| Bound In Product & Byproduct Desolventized Meal (fugitive) | - | - | - | - | - | *fugitive* | - | - | 113.00 |
| Plant Startup/Shutdown | - | - | - | - | - | *fugitive* | - | - | 10.75 |
| General (equipment failure, leaks, etc.) | - | - | - | - | - | *fugitive* | - | - | 207.21 |
| Plant Upsets | - | - | - | - | - | *fugitive* | - | - | 16.90 |
| Combustion Sources | 14.74 | 23.74 | 23.74 | 248.94 | 149.11 | 7.75 | 85.41 | 114,212 | 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 Limited PTE from Soybean Oil Extraction Plant with Roads** | **245.02** | **169.34** | **152.35** | **249.05** | **166.29** | **193.09** | **99.84** | **134,949** | **469.31** |
| Biodiesel Production Plant | | | | | | | | | |
| Biodiesel Methanol Absorbers (worse case)[1] | - | - | - | - | - | 1.83 | - | - | 1.83 |
| Loading Racks[1] | - | - | - | - | - | 1.10 | - | - | 1.10 |
| Biodiesel Storage Tanks[1] | - | - | - | - | - | 4.31 | - | - | 4.31 |
| Glycerine Storage Tanks | - | - | - | - | - | 4.82E-03 | - | - | 4.82E-03 |
| Biodiesel Wastewater (fugitive) | - | - | - | - | - | 3.37 | - | - | 3.37 |
| Equipment Leaks (fugitive)[1] | - | - | - | - | - | 2.80 | - | - | 2.80 |
| 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 | - | - | - | - | - | 0.07 | - | - | 0.07 |
| Three (3) Soybean Oil Tanks (Degummed Oil Tanks #1 and #2 and Crude Oil Tank #3) | - | - | - | - | - | <= 1.0 | - | - | <= 1.0 |
| Purchased Soybean Oil Unloading | - | - | - | - | - | 4.00 | - | - | 4.00 |
| Two (2) Sodium Methylate Tanks | - | - | - | - | - | 0.01 | - | - | 0.01 |
| 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 | 4.34 | - | - | - | - | - | - |
| Biodiesel Distillation | - | - | - | - | - | 1.31 | - | - | 1.31 |
| Hot Oil Heater | 0.05 | 0.20 | 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 | - | - | - | - | - | 3.31E-04 | - | - | - |
| Glycerin Refinery | - | - | - | - | - | 0.0002 | - | - | 0.0002 |
| **Total Limited PTE from Biodiesel Production Plant** | **20.66** | **8.13** | **5.69** | **0.04** | **7.30** | **22.25** | **6.13** | **8,813** | **21.98** |
| **Total Limited PTE at Entire Source including Fugitives from Roads** | **249.51** | **174.24** | **157.24** | **249.09** | **173.59** | **215.34** | **105.97** | **143,763** | **491.29** |

**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** |

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

**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**

| Heat Input Capacity MMBtu/hr | HHV mmBtu / mmscf | Potential Throughput MMCF/yr |
|---|---|---|
| 40.0 | 1020 | 343.5 |

| | Pollutant | | | | | | |
|---|---|---|---|---|---|---|---|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.9 | 7.6 | 7.6 | 0.6 | 100 **see below | 5.5 | 84 |
| Potential Emission in tons/yr | 0.33 | 1.3 | 1.3 | 0.10 | 17.2 | 0.9 | 14.4 |

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

**Methodology**

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

**HAPS Calculations**

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

| | HAPs - Metals | | | | | |
|---|---|---|---|---|---|---|
| | Lead | Cadmium | Chromium | Manganese | Nickel | **Total - Metals** |
| Emission Factor in lb/MMcf | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 | |
| Potential Emission in tons/yr | 8.588E-05 | 1.889E-04 | 2.405E-04 | 6.527E-05 | 3.607E-04 | **9.413E-04** |
| | | | | | **Total HAPs** | **3.242E-01** |
| | | | | | **Worst HAP** | **3.092E-01** |

Methodology is the same as above.

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

**Greenhouse Gas Calculations**

| | Greenhouse Gas | | |
|---|---|---|---|
| | CO2 | CH4 | N2O |
| Emission Factor in lb/MMcf | 120,000 | 2.3 | 2.2 |
| Potential Emission in tons/yr | 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.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emissions Calculations**
**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:** 085-35870-00102
**Significant Permit Modification:** 085-35910-00102
**Operation Permit No.:** T 085 -29197-00102
**Permit Reviewer:** Tamera Wessel
**Date:** May 27, 2015

| Unit ID | Equipment Description | Capacity | Tank Diameter (ft) | Tank Height (ft) | 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) | 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 | 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 | 260.5 | tons/hr | | |
| Aspiration Rate | 116,000 | 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 total | | Controlled 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

| | | Uncontrolled total | | Controlled total | |
|---|---|---|---|---|---|
| Max Hourly | = | 1.64 | lbs/hr | 1.64 | lbs/hr |
| Max Yearly | = | 7.19 | tons/yr | 7.19 | tons/yr |

**Methodology**
Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (3/03)
Hourly Loading Rate (tons/hr) = [2,251,836 (tons/yr) + 30,0000 (tons storage capacity for two bins)] / 8,760 (hr/yr)
The hourly loading rate assumes the two (2) new storage bins process all of the soybeans for the entire plant.
Uncontrolled Emissions (lb/hr) = Hourly Loading Rate (tons/hr) * Emission Factor (lb/ton)
Controlled Emissions (lb/hr) = Uncontrolled Emissions (lb/hr) * (1-Control Efficiency)
Uncontrolled Emissions (ton/yr) = Uncontrolled Emissions (lb/hr) * 8,760 (hr/yr) / 2000 (lbs/ton)
Controlled Potential Emissions (ton/yr) = Uncontrolled Emissions (ton/yr) * (1-Control Efficiency).

**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: 085-35870-00102**
**Significant Permit Modification: 085-35910-00102**
**Operation Permit No.: T 085 -29197-00102**
**Permit Reviewer: Tamera Wessel**
**Date: May 27, 2015**

| Heat Input Capacity MMBtu/hr | HHV mmBtu/mmscf | Potential Throughput MMCF/yr |
|---|---|---|
| 1.0 | 1020 | 8.6 |

| | Pollutant | | | | | | |
|---|---|---|---|---|---|---|---|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.9 | 7.6 | 7.6 | 0.6 | 100<br>**see below | 5.5 | 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

**Methodology**

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

**HAPS Calculations**

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

| | HAPs - Metals | | | | | |
|---|---|---|---|---|---|---|
| | Lead | Cadmium | Chromium | Manganese | Nickel | **Total - Metals** |
| Emission Factor in lb/MMcf | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 | |
| Potential Emission in tons/yr | 2.147E-06 | 4.724E-06 | 6.012E-06 | 1.632E-06 | 9.018E-06 | **2.353E-05** |
| | | | | | **Total HAPs** | **8.104E-03** |
| | | | | | **Worst HAP** | **7.729E-03** |

**Hexane**

Methodology is the same as above.

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

**Greenhouse Gas Calculations**

| | Greenhouse Gas | | |
|---|---|---|---|
| | CO2 | CH4 | N2O |
| Emission Factor in lb/MMcf | 120,000 | 2.3 | 2.2 |
| Potential Emission in tons/yr | 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.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emissions Calculations**
**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: 085-35870-00102**
**Significant Permit Modification: 085-35910-00102**
**Operation Permit No.: T 085 -29197-00102**
**Permit Reviewer: Tamera Wessel**
**Date: May 27, 2015**

| Heat Input Capacity MMBtu/hr | HHV mmBtu/mmscf | Potential Throughput MMCF/yr |
|---|---|---|
| 10.0 | 1020 | 85.9 |

| | Pollutant | | | | | | |
|---|---|---|---|---|---|---|---|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.9 | 7.6 | 7.6 | 0.6 | 100<br>**see below | 5.5 | 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

**Methodology**

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

**HAPS Calculations**

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

| | HAPs - Metals | | | | | |
|---|---|---|---|---|---|---|
| | Lead | Cadmium | Chromium | Manganese | Nickel | **Total - Metals** |
| Emission Factor in lb/MMcf | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 | |
| Potential Emission in tons/yr | 2.147E-05 | 4.724E-05 | 6.012E-05 | 1.632E-05 | 9.018E-05 | **2.353E-04** |
| | | | | | **Total HAPs** | **8.104E-02** |
| | | | | | **Worst HAP** | **7.729E-02** |

Methodology is the same as above.

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

**Greenhouse Gas Calculations**

| | Greenhouse Gas | | |
|---|---|---|---|
| | CO2 | CH4 | N2O |
| Emission Factor in lb/MMcf | 120,000 | 2.3 | 2.2 |
| Potential Emission in tons/yr | 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.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emissions Calculations**
**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:

L = loading loss (lbs/kgal)
S = a saturation factor (see AP-42, Table 5.2-1)
P = true vapor pressure of the liquid loaded (psia) (see AP-42, Table 7.1-2)
M = molecular weight of vapors
T = temperature of the bulk liquid loaded (degree R)

| | 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 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: 085-35910-00102**
**Operation Permit No.: T 085 -29197-00102**
**Permit Reviewer: Tamera Wessel**
**Date: May 27, 2015**

| Heat Input Capacity MMBtu/hr | HHV mmBtu/mmscf | Potential Throughput MMCF/yr |
|---|---|---|
| 6.0 | 1020 | 51.5 |

| | Pollutant | | | | | | |
|---|---|---|---|---|---|---|---|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.9 | 7.6 | 7.6 | 0.6 | 100 **see below | 5.5 | 84 |
| Potential Emission in 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

**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 | | | | | |
|---|---|---|---|---|---|---|
| | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene | **Total - Organics** |
| Emission Factor in lb/MM | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 | |
| Potential Emission in tor | 5.411E-05 | 3.092E-05 | 1.932E-03 | 4.638E-02 | 8.760E-05 | **4.848E-02** |

| | HAPs - Metals | | | | | |
|---|---|---|---|---|---|---|
| | Lead | Cadmium | Chromium | Manganese | Nickel | **Total - Metals** |
| Emission Factor in lb/MM | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 | |
| 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** |
| | | | | | **Worst HAP** | **4.638E-02** |

Methodology is the same as above.

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

**Greenhouse Gas Calculations**

| | Greenhouse Gas | | |
|---|---|---|---|
| | CO2 | CH4 | N2O |
| Emission Factor in lb/MMcf | 120,000 | 2.3 | 2.2 |
| Potential Emission in tons/yr | 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**
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: 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

| | | Uncontrolled for each unit | | Controlled for each unit | |
|---|---|---|---|---|---|
| Max Hourly | = | 8.47 | lbs/hr | 0.11 | lbs/hr |
| Max Yearly | = | 37.11 | tons/yr | 0.48 | tons/yr |

| | | Total Uncontrolled | | Total Controlled | |
|---|---|---|---|---|---|
| Total Hourly | = | 16.95 | lbs/hr | 0.22 | lbs/hr |
| Total Yearly | = | 74.22 | tons/yr | 0.96 | tons/yr |

**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 (lb/ton) = Controlled Emission Factor (lb/ton)/(1 - 90% Control Efficiency)
Uncontrolled Potential Emissions (lb/hr) = Throughput (ton/hr) * Uncontrolled Emission factor (lb/ton)
Uncontrolled Potential Emissions (ton/yr) = Throughput (ton/hr) * Uncontrolled Emission factor (lb/ton) * 8760 (hours/year) / 2000 (lbs/ton)
Controlled Potential Emissions (lb/hr) = 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**

| 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 (lb/hr) for each unit |
|---|---|---|---|---|---|---|---|
| 1 | G160000 | Pellet Hulls Conveyor to Loadout | AF-1 | 1.04 | 0.01 | 17.0 | 27.36 |
| 1 | B030900 | Hull Collection Conveyor | AF-3 | 1.04 | 0.01 | 17.0 | 27.36 |
| 1 | B430000 | Secondary Hull Collection Conveyor | AF-3 | 1.04 | 0.01 | 17.0 | 27.36 |
| 1 | E070300 | 4 Hour Hull Tank | AF-3 | 0.43 | 0.003 | 17.0 | N/A[2] |
| 1 | B440000 | Secondary Hull Collection L-Path | AF-3 | 1.04 | 0.01 | 17.0 | 27.36 |
| 1 | E080000 | Pellet Cooler | AF-3 | 25.50 | 0.15 | 17.0 | 27.36 |
| 3 | E050000, E050200, and E050100 | [3]Hull Hammer Mill, Hull Hammer Mill Feeder, and Hull Hammer Mill Plenum | AF-3 | 34.00 | 0.20 | 17.0 | 27.36 |
| 1 | G050100 | Pelleted Hulls Leg | AF-3 | 1.04 | 0.01 | 17.0 | 27.36 |
| 1 | G050300 | Pelleted Hulls Storage Conveyor | AF-1 | 1.04 | 0.01 | 17.0 | 27.36 |
| 1 | E050400 | Hulls Addition Screw | AF-3 | 1.04 | 0.01 | 17.0 | 27.36 |
| 2 | C040000 and C070000 | [4]Flaking Rolls No. 4 and 7 | AF-4 | 0.13 | 0.13 | 22.9 | N/A[2] |
| 2 | C100000 and C010600 | [4]Flaking Rolls No. 1 and 10 | AF-4 | 0.22 | 0.22 | 22.9 | N/A[3] |
| 1 | | Hull Overflow Tank | Hull Bin Filter | 0.19 | 0.19 | 17.0 | N/A[2] |

**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 (lb/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 | VSC Feed Leg, VSC Leg Feed Conveyor, 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
**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

| Filter / Stack ID | Control / Stack Description | Emission unit ID | Number of Units | [1]Process | Notes | Unlimited Rate | | [3]Limited Rate | Emission Factors (lb/ton) | | | Aspiration Rate (cfm) | Control Efficiency | | Before Control | | | | | After Control | | | | | Emissions Based on Limited Soybeans Processed | | | Emissions Based on All Limits | | | Emission Factor Source |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | PM | | $PM_{10}$ | | [4]$PM_{2.5}$ | PM | | $PM_{10}$ | | [4]$PM_{2.5}$ | PM | $PM_{10}$ | [5]$PM_{2.5}$ | PM | $PM_{10}$ | $PM_{2.5}$ | |
| | | | | | | tons/hr | tons/yr | tons/yr | PM | $PM_{10}$ | $PM_{2.5}$ | | PM | $PM_{10}$ /$PM_{2.5}$ | 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 | tons/yr | | | | |
| [11]AF-2 | Grain Receiving / Meal Loadout Baghouse AF-2, 28,000 acfm @ 0.005 grain/acf outlet gr loading, and control efficiency 99.44% for $PM/PM_{10}/PM_{2.5}$ | 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 | 1.64 lb/hr (7.18 tons/yr) | 1.64 lb/hr (7.18 tons/yr) | 1.64 lb/hr (7.18 tons/yr) | 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, A130100, and A100100 | 6 | Discharge Conveyors No. 1 and No. 2, Bean Receiving Legs No. 1 and No. 2, and East and West Bin Feed Conveyors | | 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 |
| | | Rail Receiving Leg, Truck Dump No. 3 Receiving Conveyor & Truck Dump No. 3 Receiving Leg | 3 | Rail 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 | | | | |
| | | 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 | | | | |
| | | 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 | | 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 |
| | | A153000, A010100, A151000, A121000, A152000, and A122000 | 6 | 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 | | 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) | 4, 12 | 600 | 5,256,000 | 2,401,836 | 0.0610 | 0.0340 | 0.0100 | NA | 0.00% | 0.00% | 3.66 | 16.03 | 2.04 | 8.94 | 2.63 | 3.66 | 16.03 | 2.04 | 8.94 | 2.63 | 3.663 | 2.042 | 0.60 | 3.66 | 2.04 | 0.60 | SCC 3-02-005-51 and -52 |
| | | | 1 | Truck Dump No. 3 (uncaptured) | 4,12 | 360 | 3,153,600 | 2,401,836 | 0.1800 | 0.0590 | 0.0100 | NA | 0.00% | 0.00% | 3.24 | 14.19 | 1.06 | 4.65 | 0.79 | 3.24 | 14.19 | 1.06 | 4.65 | 0.79 | 10.808 | 3.543 | 0.60 | 10.81 | 3.54 | 0.60 | 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** | |
| AF-1 | Meal Loadout Baghouse AF-1, 22,125 cfm @ 0.005 grain/acf outlet gr loading, and control efficiency 99.44% for PM/PM10/PM2.5 | 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 | 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 3-02-007-91 |
| | | 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 | Truck and Rail Pelleted Hull Loadout Bins (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 | 1 | Meal Storage Feed Conveyor | | 200 | 1,752,000 | N/A | 0.061 | 0.034 | 0.0058 | 500 | 99.44% | 99.44% | 12.20 | 53.44 | 6.80 | 29.78 | 5.08 | 0.07 | 0.30 | 0.04 | 0.17 | 0.03 | 53.4 | 29.78 | 5.08 | | | | SCC 3-02-005-30 |
| | | G070300, G170000 and G290000 | 3 | Truck Meal Loadout Feed Conveyor, Rail Car Collection Conveyor and Truck Collection Conveyor | 15 | 300 | 2,628,000 | 2,401,836 | 0.061 | 0.034 | 0.0058 | 1,500 | 99.44% | 99.44% | 54.90 | 240.46 | 30.60 | 134.03 | 22.86 | 0.31 | 1.35 | 0.17 | 0.75 | 0.13 | 73.3 | 40.83 | 6.97 | | | | SCC 3-02-005-30 |
| | | G160000 | 1 | Pellet Hulls Convevor to Loadout | | 17 | 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 |
| | | G010100 and G010200 | 2 | Meal Reclaim Convevor and Meal Reclaim Leg | 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 |
| | | 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 | | | | SCC 3-02-005-40 |
| | | 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 | | | | SCC 3-02-005-30 |
| | | | 2 | Truck Loader No. 1 and No. 2 (uncaptured) | 4, 15 | 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 |
| | | | 1 | Rail Car Loadout (Pellets/Hulls) (uncaptured) | 4, 15 | 330 | 2,890,800 | 2,401,836 | 0.0033 | 0.0008 | 0.0008 | NA | 0.00% | 0.00% | 0.05 | 0.24 | 0.01 | 0.06 | 0.06 | 0.05 | 0.24 | 0.01 | 0.06 | 0.06 | 0.198 | 0.048 | 0.05 | 0.20 | 0.05 | 0.05 | SCC-3-02-008-03 |
| | | | 2 | Truck and Rail Pelleted Hull Loadout Bins (uncaptured) | 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 (tons/yr)** | | | | | | | | | | | **300.97** | **1,318.23** | **107.70** | **471.73** | **244.17** | **11.39** | **49.91** | **3.03** | **13.27** | **11.32** | **545.60** | **194.50** | **102.07** | **23.91** | **9.08** | **8.83** | |
| MBF-1, MBF-2, MBF-3, MBF-4 and MBF-5 | Meal bin filters, 1,000 acfm, and control efficiency 99.82% for PM/PM10/PM2.5 | 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/yr) | 0.034 lb/ton (4.08 tons/yr) | 0.0058 lb/ton (0.70 tons/yr) | 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 that start with 3-02-007 were taken from Table 9.11.1-1 in AP-42 section 9.11.1 (11/1995).
Emission factors based SCC Codes that start with 3-02-008 were taken from Table 9.9.1-2 in AP-42 section 9.9.1 (03/2003).
Emission factors based SCC Codes that start with 3-05-038 were taken from Table 11.19.2-4 in AP-42 section 11.19.2 (08/2004).

1) To obtain the sourcewide uncontrolled PTE for a process, the number of units of that process is multiplied by uncontrolled PTE for a single unit. The Uncontrolled PTE for a single unit of that process is shown in more detail on subsequent pages.
2) Capture efficiency at receiving/loadout is 95%; therefore, it is estimated that 5% of uncontrolled emission are uncaptured.
3) This source utilizes oil suppression.
4) Uncontrolled captured emissions from Receiving and Loadout were reduced to 95% due to assumption that 5% are uncaptured.
5) Emission factor adjusted to uncontrolled back calculating from a control efficiency of 90% for cyclones and 99% for fabric filters.
6) $PM_{2.5}$ emission factor not available. Pursuant to AP-42, Table 9.9.1-1 Note h, $PM_{10}$ emission factor scaled to total particulate using the ratio of 25 percent.
7) $PM_{10}$ emission factor not available. Pursuant to AP-42, Table 9.9.1-2 Note g, $PM_{10}$ emission factors can be estimated by taking 50 percent of the filterable PM emission factor.
8) $PM_{2.5}$ emission factor provided when available in AP-42. For all others, the assumption is that $PM_{10} = PM_{2.5}$. Control Efficiency for $PM_{10}$ was assumed to be equal to control efficiency for $PM_{2.5}$ since a control efficiency for $PM_{2.5}$ was not provided.
9) The maximum annual limited rate of these units would be the permitted crush rate of 2,251,836 tons per year plus 150,000 tons per year for the standing storage capacity of the plant (all storage silos and temporary storage). This equates to a maximum throughput of 2,401,836 tons per year which is used in calcualting the PTE. If the maximum throughput is less than the limited rate, then "N/A" was listed.
The maximum annual limited rate for meal loadout and meal is the permitted crush rate of 2,251,836 tons per year x 85% yield = 1,914,031 tons/year.
The maximum annual limited rate for pellets is the permitted crush rate of 2,251,836 tons per year x 8% yield = 180,147 tons/year.
10) This emission unit is aspirated and controlled via an aspirated device down stream.
11) All captured emissions exhaust through stack AF-2 and are limited to 1.64 lbs/hr of PM and $PM_{10}$. All uncaptured limits are shown above.
12) The entire plant capacity for receiving is 2,401,836 tons. Therefore, assuming everything is received by truck and none by rail gives the worse case PTE.
13) 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. These emission units do not have a limited throughput.
14) Pursuant to Minor Source Modification (MSM) No. 085-24676-00102, in order to render the requirements of 326 IAC 2-7-10.5(f) not applicable, the Permittee shall comply with a 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. The weight of the soybeans has been assumed to equal 60 pounds per bushel.
15) The uncaptured fugitive emissions from Truck Loader No.1 and 2, Rail Car Loadout (Pellets/Hulls), Truck and Rail Pelleted Hull Loadout Bins, Rail and Truck Meal Loadout Bins and the units that are routing to Stack AF-1 are not regulated under NSPS Subpart DD (Grain Elevators) nor are they part of the biodiesel plant (chemical plant 1 of 28 listed source categories).
16) PM2.5 emission factor not available. Pursuant to AP-42, Table 9.9.1-1 Note g, emission factor for PM-10 scaled to Pm2.5 using the mean ratio of 17 percent.

**Appendix A: Emission Calculations**
**PM Summary**
**Stacks AF-3, AF-7, and S-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: 085-35910-00102**
**Operation Permit No.: T 085 -29197-00102**
**Permit Reviewer: Tamera Wessel**
**Date: May 27, 2015**

| Filter / Stack ID | Control / Stack Description | Emission unit ID | Number of Units | [1]Process | Notes | Unlimited Rate | | [3]Limited Rate | Emission Factors (lb/ton) | | | Aspiration Rate (cfm) | Control Efficiency | | Before Control | | | | | After Control | | | | | Emissions Based on Limited Soybeans Processed | | | Emissions Based on All Limits | | | Emission Factor Source |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | PM | | $PM_{10}$ | | [6]$PM_{2.5}$ | PM | | $PM_{10}$ | | [6]$PM_{2.5}$ | PM | $PM_{10}$ | [3]$PM_{2.5}$ | | | | |
| | | | | | | tons/hr | tons/yr | tons/yr | PM | $PM_{10}$ | $PM_{2.5}$ | | 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 | PM10 | PM2.5 | |
| AF-3 | Prep Exhaust Filter Baghouse AF-3, 28,900 acfm 99.41% PM/$PM_{10}$ control | 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 | 0.42 | 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 | 0.00 | 0.00 | 0.00 | 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 | 0.01 | 0.00 | 0.00 | 0.00 | 1.34 | 0.74 | 0.13 | | | | SCC 3-02-005-30 |
| | | B011300 | 1 | Bean Weigh Scale | 3 | 264 | 2,312,640 | 2,251,836 | 0.061 | 0.034 | 0.0058 | 500 | 99.41% | 99.41% | 16.10 | 70.54 | 8.98 | 39.31 | 6.71 | 0.10 | 0.42 | 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 | 1.66 | 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 | 0.83 | 0.11 | 0.46 | 0.08 | 68.68 | 38.28 | 6.53 | | | | SCC 3-02-005-30 |
| | | 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 | 0.03 | 0.00 | 0.01 | 0.00 | 4.54 | 2.53 | 0.43 | | | | SCC 3-02-005-30 |
| | | 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 | 0.03 | 0.00 | 0.02 | 0.00 | 5.13 | 2.86 | 0.49 | 1.26 lb/hr (5.52 tons/yr) | 1.26 lb/hr (5.52 tons/yr) | 1.26 lb/hr (5.52 tons/yr) | SCC 3-02-005-30 |
| | | 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 | 0.03 | 0.00 | 0.01 | 0.00 | 4.54 | 2.53 | 0.43 | | | | SCC 3-02-005-30 |
| | | 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 | 0.01 | 0.00 | 0.00 | 0.00 | 1.86 | 0.47 | 0.08 | | | | 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 | 0.03 | 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 | 0.66 | 0.08 | 0.33 | 0.33 | 111.69 | 55.85 | 55.85 | | | | SCC 3-02-008-16 |
| | | E050000, E050200, and E050100 | 3 | Hull Hammer Mill, Hull Hammer Mill Feeder, and Hull Hammer Mill Plenum | 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 | 2.64 | 0.30 | 1.32 | 1.32 | 446.76 | 223.38 | 223.38 | | | | SCC 3-02-007-86 |
| | | G050100 | 1 | Pelleted Hulls Leg | | 17.0 | 148,920 | N/A | 0.061 | 0.034 | 0.0058 | 1,000 | 99.41% | 99.41% | 1.04 | 4.54 | 0.58 | 2.53 | 0.43 | 0.01 | 0.03 | 0.00 | 0.01 | 0.00 | 4.54 | 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 | 0.03 | 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 | 0.01 | 0.00 | 0.00 | 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 | 0.68 | 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** | **7.50** | **0.86** | **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 | 0.44 | 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/yr) | SCC 3-02-007-86 |
| | | **AF-7 Total** | | | | | | | | | | | | | **10.00** | **43.80** | **2.50** | **10.95** | **10.95** | **0.10** | **0.44** | **0.03** | **0.11** | **0.11** | **43.80** | **10.95** | **10.95** | **6.57** | **6.57** | **6.57** | |
| S-1 | Jet Dryer Baghouses 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 | 2.54 | 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% PM10 control. Control efficiencies of the VSC Cyclones were estimated by the source. | 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 | 12.36 | 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 | | 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 | 5.62 | 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** | **20.53** | **4.25** | **18.61** | **7.84** | **0.00** | **0.00** | **0.00** | **21.59** | **14.67** | **14.67** | |
| | | **Page 2 Subtotal (tons/yr)** | | | | | | | | | | | | | **442.81** | **1,895.70** | **181.82** | **796.37** | **415.44** | **6.40** | **28.03** | **5.11** | **22.39** | **9.99** | **866.09** | **449.96** | **308.35** | **33.68** | **26.76** | **26.76** | |

**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 that start with 3-02-007 were taken from Table 9.11.1-1 in AP-42 section 9.11.1 (11/1995).
Emission factors based SCC Codes that start with 3-02-008 were taken from Table 9.9.1-2 in AP-42 section 9.9.1 (03/2003).
Emission factors based SCC Codes that start with 3-05-038 were taken from Table 11.19.2-4 in AP-42 section 11.19.2 (08/2004).

1) To obtain the sourcewide uncontrolled PTE for a process, the number of units of that process is multiplied by uncontrolled PTE for a single unit. The Uncontrolled PTE for a single unit of that process is shown in more detail on subsequent pages.
2) Capture efficiency at receiving/loadout is 95%; therefore, it is estimated that 5% of uncontrolled emission are uncaptured.
3) This source utilizes oil suppression.
4) Uncontrolled captured emissions from Receiving and Loadout were reduced to 95% due to assumption that 5% are uncaptured.
5) Emission factor adjusted to uncontrolled back calculating from a control efficiency of 90% for cyclones and 99% for fabric filters.
6) $PM_{2.5}$ emission factor not available. Pursuant to AP-42, Table 9.9.1-1 Note h, $PM_{10}$ emission factor scaled to total particulate using the ratio of 25 percent.
7) $PM_{10}$ emission factor not available. Pursuant to AP-42, Table 9.9.1-2 Note g, $PM_{10}$ emission factors can be estimated by taking 50 percent of the filterable PM emission factor.
8) $PM_{2.5}$ emission factor provided when available in AP-42. For all others, the assumption is that $PM_{10} = PM_{2.5}$. Control Efficiency for $PM_{10}$ was assumed to be equal to control efficiency for $PM_{2.5}$ since a control efficiency for $PM_{2.5}$ was not provided.
9) The amount of soybeans processed shall be limited to less than 2,251,836 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. If the maximum throughput is less than the limited rate, then "N/A" was listed.
10) This emission unit is aspirated and controlled via an aspirated device down stream.
11) These emission units do not have a limited throughput.
12) The outlet PM emission rate was 0.88 lb/hr and the outlet $PM_{10}$ emission rate was 1.05 lb/hr from stack testing of the VSC Cyclone No.1.
13) Maximum Throughput design rate for each heater is 264 tons per hour. However, the throughput rate is limited by the maximum design capacity of the milling operations (264 tons/hr total). Therefore the PTE calculations are based on a combined throughput of 264tons/hr through both VSC Air Heater No. 1 and No.2.

**Appendix A: Emission Calculations**
**PM Summary**
**Stacks AF-5, AF-4, and AF-6**

**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

| Filter / Stack ID | Control / Stack Description | Emission unit ID | Number of Units | [1]Process | Notes | Unlimited Rate | | [9]Limited Rate | Emission Factors (lb/ton) | | | Aspiration Rate (cfm) | Control Efficiency | | Before Control | | | | | After Control | | | | | Emissions Based on Limited Soybeans Processed | | | Limits | | | Emission Factor Source |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | PM | | $PM_{10}$ | | [8]$PM_{2.5}$ | PM | | $PM_{10}$ | | [8]$PM_{2.5}$ | PM | $PM_{10}$ | [8]$PM_{2.5}$ | PM | $PM_{10}$ | [8]$PM_{2.5}$ | |
| | | | | | | tons/hr | tons/yr | tons/yr | PM | $PM_{10}$ | $PM_{2.5}$ | | 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 | tons/yr | PM | $PM_{10}$ | $PM_{2.5}$ | |
| AF-5 | Hot Dehulling Filter, Baghouse AF-5, 43,600 acfm, 99.18% PM/$PM_{10}$ Control. | 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 | | | | SCC 3-02-007-85 |
| | | 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 |
| | | 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 (11.21 tons/yr) | 2.56 lb/hr (11.21 tons/yr) | 2.56 lb/hr (11.21 tons/yr) | SCC 3-02-007-85 |
| | | B070000, B110000, B160000, and B200000 | 4 | Cascade Conditioner No. 1, No. 2, No. 3, and No. 4 | 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 | | | | SCC 3-02-007-87 |
| | | E130100, E150100, and A160100 | 3 | Secondary Aspirator No. 1 and No. 2, and Feed Dav Tank Convevor | 15 | 9.6 | 84,096 | no limit | 0.061 | 0.034 | 0.0058 | Not Provided | 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 |
| | | A160000, A160500 and B420000 | 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 |
| | | **AF-5 Total** | | | | | | | | | | | | | **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** | |
| [10]AF-4 | Flaker Asp. Filter, 24,000 acfm , 99.07% control PM/$PM_{10}$ | C010000 | 1 | Flaking Roll No. 1 | 13, 14, 15 | 22.9 | 200,604 | no limit | See AF-4 spreadsheet for calculation details | | | NA | 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 |
| | | 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 | | | | Not Provided | 99.07% | 99.07% | | | | | | | | | | | | | | | | | |
| | | C200100 and C010600 | 2 | Flaker Feed Loop Conveyor and Flake Collection Convevor | 15 | 247 | 2,163,720 | no limit | | | | 24,000 | 99.07% | 99.07% | | | | | | | | | | | | | | | | | |
| | | C100000 | 1 | Flaking Roll No. 10 | 11. 14. 15 | 22.9 | 200,604 | no limit | | | | NA | 99.07% | 99.07% | | | | | | | | | | | | | | | | | |
| | | C0110000 and C012000 | 2 | Flaking Rolls No. 11 and 12 | 10, 15 | 22.9 | 200,604 | no limit | | | | 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% | | | | | | | | | | | | | | | | | |
| | | **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** | |
| AF-6 | Meal Grinding Filter, Baghouse AF-6, 18,000 acfm, 99.50% PM/PM10 control | E020300, E020400, E010100, and E010300 | 4 | Grinding Discharge Conveyor, Hammer Mill Mixing 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 | 0.945 lb/hr (4.14 tons/yr) | 0.945 lb/hr (4.14 tons/yr) | 0.945 lb/hr (4.14 tons/yr) | SCC 3-02-005-30 |
| | | E020200, E030200, E040200, E020000, E030000, and E040000 | 6 | Meal Hammer Mill Feeders No. 1, No. 2 and No. 3, Meal Hammer Mills No. 1, No. 2 and No. 3 | 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 | | | | SCC 3-02-007-93 |
| | | E230200 and E230000 | 2 | Meal Hammer Mill Feeder No. 5, Meal Hammer Mill No. 5 | 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 | | | | SCC 3-02-007-93 |
| | | G010300 | 1 | 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 | | | | SCC 3-02-005-30 |
| | | E020100, E030100, and E040100 | 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 | | | | SCC 3-02-005-40 |
| | | 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 | | | | 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** | |
| | | **Page 3 Subtotal (tons/yr)** | | | | | | | | | | | | | **4088.53** | **17907.77** | **1056.76** | **4628.61** | **4436.82** | **26.88** | **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 section 9.9.1 (03/2003).
Emission factors based SCC Codes that start with 3-02-007 were taken from Table 9.11.1-1 in AP-42 section 9.11.1 (11/1995).
Emission factors based SCC Codes that start with 3-02-008 were taken from Table 9.9.1-2 in AP-42 section 9.9.1 (03/2003).
Emission factors based SCC Codes that start with 3-05-038 were taken from Table 11.19.2-4 in AP-42 section 11.19.2 (08/2004).

1) To obtain the sourcewide uncontrolled PTE for a process, the number of units of that process is multiplied by uncontrolled PTE for a single unit. The Uncontrolled PTE for a single unit of that process is shown in more detail on subsequent pages.
2) Capture efficiency at receiving/loadout is 95%; therefore, it is estimated that 5% of uncontrolled emission are uncaptured.
3) This source utilizes oil suppression.
4) Uncontrolled captured emissions from Receiving and Loadout were reduced to 95% due to assumption that 5% are uncaptured.
5) Emission factor adjusted to uncontrolled back calculating from a control efficiency of 90% for cyclones and 99% for fabric filters.
6) $PM_{2.5}$ emission factor not available. Pursuant to AP-42, Table 9.9.1-1 Note h, $PM_{2.5}$ emission factor scaled to total particulate using the ratio of 25 percent.
7) $PM_{2.5}$ emission factor not available. Pursuant to AP-42, Table 9.9.1-2 Note g, $PM_{2.5}$ emission factors can be estimated by taking 50 percent of the filterable PM emission factor.
8) $PM_{2.5}$ emission factor provided when available in AP-42. For all others, the assumption is that $PM_{10} = PM_{2.5}$. Control Efficiency for $PM_{10}$ was assumed to be equal to control efficiency for $PM_{2.5}$ since a control efficiency for $PM_{2.5}$ was not provided.
9) The amount of soybeans processed shall be limited to less than 2,251,836 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. If the maximum throughput is less than the limited rate, then N/A was listed.
10) Pursuant to Administrative Amendment 085-27694-00102, baghouse AF-4 was determined to be an integral part of the flaking process for Flaking Roll No. 11 and 12.
11) Pursuant to Significant Permit Modification 085-27442-00102, baghouse AF-4 was determined to be an integral part of the flaking process for Flaking Roll No. 10.
12) Pursuant to Significant Source Modification 085-31960-00102, baghouse AF-4 was determined to be an integral part of the flaking process for Flaking No. 4 and 7.
13) Pursuant to Minor Source Modification 085-32846-00102, baghouse AF-4 was determined to be an integral part of the flaking process for Flaking No. 1.
14) This emission unit is aspirated and controlled via an aspirated device down stream.
15) These emission units do not have a limited throughput.

**Appendix A: Emission Calculations**
**PM Summary**
**Stack S-2, Insignificant Activities, and Fugitives**

**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

| Filter / Stack ID | Control / Stack Description | Emission unit ID | Number of Units | [1]Process | Notes | Unlimited Rate | | Limited Rate | Emission Factors (lb/ton) | | | Aspiration Rate (cfm) | Control Efficiency | | Before Control | | | | | After Control | | | | | Emissions Based on Limited Soybeans Processed | | | Limits | | | Emission Factor Source |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | PM | | $PM_{10}$ | | [3]$PM_{2.5}$ | PM | | $PM_{10}$ | | [4]$PM_{2.5}$ | PM | $PM_{10}$ | [3]$PM_{2.5}$ | PM | $PM_{10}$ | $PM_{2.5}$ | |
| | | | | | | tons/hr | tons/yr | tons/yr | PM | $PM_{10}$ | $PM_{2.5}$ | | 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 | tons/yr | tons/yr | tons/yr | tons/yr | |
| 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/yr) | 1.9 lbs/hr (8.32 tons/yr) | 1.9 lbs/hr (8.32 tons/yr) | 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 | | | Road Traffic | 9. 10 | | | | | | | | | | 3.69 | 16.18 | 0.74 | 3.24 | 0.79 | 3.69 | 16.18 | 0.74 | 3.24 | 0.79 | N/A | N/A | N/A | 16.18 | 3.24 | 0.79 | AP 42 Table 13.2.1 |
| | Tower | | | Cooling Towers | 10 | | | | | | | | | | 0.99 | 4.34 | 0.99 | 4.34 | 4.34 | 0.99 | 4.34 | 0.99 | 4.34 | 4.34 | N/A | N/A | N/A | 4.34 | 4.34 | 4.34 | |
| | | | | **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 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 that start with 3-02-007 were taken from Table 9.11.1-1 in AP-42 section 9.11.1 (11/1995).
Emission factors based SCC Codes that start with 3-02-008 were taken from Table 9.9.1-2 in AP-42 section 9.9.1 (03/2003).
Emission factors based SCC Codes that start with 3-05-038 were taken from Table 11.19.2-4 in AP-42 section 11.19.2 (08/2004).

1) To obtain the sourcewide uncontrolled PTE for a process, the number of units of that process is multiplied by uncontrolled PTE for a single unit. The Uncontrolled PTE for a single unit of that process is shown in more detail on subsequent pages.
2) Capture efficiency at receiving/loadout is 95%; therefore, it is estimated that 5% of uncontrolled emission are uncaptured.
3) This source utilizes oil suppression.
4) Uncontrolled captured emissions from Receiving and Loadout were reduced to 95% due to assumption that 5% are uncaptured.
5) Emission factor adjusted to uncontrolled back calculating from a control efficiency of 90% for cyclones and 99% for fabric filters.
6) $PM_{10}$ emission factor not available. Pursuant to AP-42, Table 9.9.1-1 Note h, $PM_{10}$ emission factor scaled to total particulate using the ratio of 25 percent.
7) $PM_{2.5}$ emission factor not available. Pursuant to AP-42, Table 9.9.1-2 Note g, $PM_{10}$ emission factors can be estimated by taking 50 percent of the filterable PM emission factor.
8) $PM_{2.5}$ emission factor provided when available in AP-42. For all others, the assumption is that $PM_{10} = PM_{2.5}$. Control Efficiency for $PM_{10}$ was assumed to be equal to control efficiency for $PM_{2.5}$ since a control efficiency for $PM_{2.5}$ was not provided.
9) Road Traffic provided by the source in T085-21297-00102, issued on Janurary 24, 2006.
10) These emission units do not have a limited throughput.
11) The hourly capacity of 40 tons/hr was not used to calculate the maximum PTE for the Kaolin Receiving Tank. The quantity of kaolin used to calculate the PTE (that would correspond to the permitted crush rate of 2,251,836 tons per year) would be 7,000 tons.
12) The hourly capacity of 17 tons/hr was not used to calculate the maximum PTE for the Hull Overflow tank. The quantity of hulls used to calculate the PTE (that would correspond to the permitted crush rate of 2,251,836 tons per year) would be 67,263 tons.
13) The hourly capacity of 600 tons/hr of the Bean Storage Bins was not used to calculate the maximum PTE. The maximum annual throughput of the bean storage bins would be the permitted crush rate of 2,251,836 tons per year plus 180,000 tons per year for the standing storage capacity of the plant (all storage silos and temporary storage). This equates to a maximum throughput of 2,431,836 tons per year which is used in calculating the PTE.
14) Diatomaceous Earth (DE) Storage Bin has an hourly usage rate of 175 lbs/hr and a storage capacity of 40 tons.

**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 | 0.180 | lb/ton | Source: SCC 3-02-005-51 |
| PM10/PM2.5 Emission Factor | 0.059 | lb/ton | 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) | Uncontrolled for each unit | | Controlled 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) | Uncontrolled for each unit | | Controlled 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) | Uncontrolled 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) | Uncontrolled for each unit | |
|---|---|---|
| Max Hourly | 1.77 | lbs/hr |
| Max Yearly | 7.75 | tons/yr |
| Limited Yearly | 3.54 | tons/yr |

**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: 085-35870-00102**
**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 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 | Source: SCC 3-02-005-30 |
| PM10/PM2.5 Emission Factor | 0.034 | lb/ton | SCC 3-02-005-30 |
| Hourly Loading Rate | 600.0 | tons/hr | |
| Limited Loading Rate | 1,686,300 | tons/yr | |
| Aspiration Rate | 5000 | 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
Discharge Conveyors No. 1 and No. 2, Bean Receiving Legs No. 1 and No. 2, and East and West Bin Feed Conveyors

| | Uncontrolled 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

| | Uncontrolled for each unit | | Controlled 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:**
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: 085-35910-00102**
**Operation Permit No.: T085-29197-00102**
**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: SCC 3-02-005-30 |
| PM10 /PM2.5Emission Factor | 0.034 | lb/ton | SCC 3-02-005-30 |
| Hourly Loading Rate | 600 | tons/hr | Notes: |
| Limited Loading Rate | 1,686,300 | tons/yr | * 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

| Cross Bins No 1 thru 6 | Uncontrolled 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

| Cross Bins No 1 thru 6 | Uncontrolled for each unit | | Controlled 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 |

**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

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 for each unit | | Controlled for each unit | |
|---|---|---|---|---|
| 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 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:**
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**
**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: 085-35910-00102**
**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 | 0.2700 | lb/ton | Source: SCC 3-02-007-91 |
| PM10/PM2.5 Emission Factor | 0.0675 | lb/ton | SCC 3-02-007-91 |
| Hourly Loading Rate | 330 | tons/hr | |
| Aspiration Rate | 3000 | 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 Loadout No. 1 and No. 2 (captured)

| | Uncontrolled for each unit | | Controlled for 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/PM2.5 emissions
Truck Loadout No. 1 and No. 2 (captured)

| | Uncontrolled for each unit | | Controlled for 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 emissions from
Truck Loadout No. 1 and No. 2 (uncaptured)

| | Uncontrolled for each unit | |
|---|---|---|
| Max Hourly | 4.46 | lbs/hr |
| Max Yearly | 19.51 | tons/yr |
| Limited Yearly | 11.38 | tons/yr |

Potential PM10/PM2.5 emissions
Truck Loadout No. 1 and No. 2 (uncaptured)

| | Uncontrolled for each unit | |
|---|---|---|
| Max Hourly | 1.11 | lbs/hr |
| Max Yearly | 4.88 | tons/yr |
| Limited Yearly | 2.85 | tons/yr |

**Notes**
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 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**
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 PM emissions

| Rail Car Loadout (Pellets/Hulls) (captured) | Uncontrolled 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 PM10/PM2.5 emissions

| Rail Car Loadout (Pellets/Hulls) (captured) | Uncontrolled 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 Loadout (Pellets/Hulls) (uncaptured) | Uncontrolled for each unit | |
|---|---|---|
| Max Hourly | 0.05 | lbs/hr |
| Max Yearly | 0.24 | tons/yr |
| Limited Yearly | 0.14 | tons/yr |

Potential PM10/PM2.5 emissions

| Rail Car Loadout (Pellets/Hulls) (uncaptured) | Uncontrolled 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 Factor | 0.0250 | lb/ton | Source: | SCC 3-02-005-40 | |
| 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 emissions
Rail Meal Loadout Bin (captured) and Truck Meal Loadout Bin (captured)

| | Uncontrolled for each unit | | Controlled for 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 emissions
Rail Meal Loadout Bin (captured) and Truck Meal Loadout Bin (captured)

| | Uncontrolled for each unit | | Controlled for 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 emissions
Rail Meal Loadout Bin (captured) and Truck Meal Loadout Bin (captured)

| | Uncontrolled for each unit | | Controlled for each unit | |
|---|---|---|---|---|
| Maximum Potential | 0.30 | lbs/hr | 0.30 | lbs/hr |
| Maximum Potential | 1.33 | tons/yr | 0.0074 | tons/yr |
| Limited Potential | 0.97 | tons/yr | 0.0054 | tons/yr |

Potential PM emissions
Rail Meal Loadout Bin (uncaptured) and Truck Meal Loadout Bin (uncaptured)

| | | |
|---|---|---|
| Maximum Potential | 0.38 | lbs/hr |
| Maximum Potential | 1.64 | tons/yr |
| Limited Potential | 1.20 | tons/yr |

Potential PM10 emissions
Rail Meal Loadout Bin (uncaptured) and Truck Meal Loadout Bin (uncaptured)

| | | |
|---|---|---|
| Maximum Potential | 0.09 | lbs/hr |
| Maximum Potential | 0.41 | tons/yr |
| Limited Potential | 0.30 | tons/yr |

Potential PM2.5 emissions
Rail Meal Loadout Bin (uncaptured) and Truck Meal Loadout Bin (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 Loadout Bin (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**
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 emissions

| Truck and Rail Pelleted Hull Loadout Bins | | Uncontrolled for each unit | | Controlled for 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/PM2.5 emissions

| Truck and Rail Pelleted Hull Loadout Bins | | Uncontrolled for each unit | | Controlled for 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 unit G020500**
**Meal Storage 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 | 200 | 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 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 | | 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 Storage Feed Conveyor | | Uncontrolled for each unit | | Controlled 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**

| | | | | |
|---|---|---|---|---|
| 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 | 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 | | Uncontrolled for each unit | | Controlled 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 Truck Collection Conveyor | | 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**
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)
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 system.

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: 085-35910-00102**
**Operation Permit No.: T085-29197-00102**
**Permit Reviewer: Tamera Wessel**
**Date: May 27, 2015**

**PTE for emission units G010000, G020000, G030000, G040000, G050000**
**[1]Meal Bin No. 1 thru 5 Vent Filters**

| | | | | |
|---|---|---|---|---|
| PM Emission Factor | #REF! | lb/ton | Source: | #REF! |
| 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 | | Uncontrolled for each unit | | 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 | | | | | |
|---|---|---|---|---|---|
| Meal Bin No. 1 thru 5 Vent Filters | | Uncontrolled for each unit | | 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 Factor | 0.061 | lb/ton | Source: | SCC 3-02-005-40 |
| PM10/PM2.5 Emission Factor | 0.034 | lb/ton | | SCC 3-02-005-40 |
| Hourly Loading Rate | 17 | tons/hr | | |
| Aspiration Rate | 500 | cfm | | |
| % Control PM | 99.44% | | | |
| % Control PM10/PM2.5 | 99.44% | | | |

| Potential PM emissions | | | | | |
|---|---|---|---|---|---|
| Pelleted Hulls Storage Conveyor | | 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 | | | | | |
|---|---|---|---|---|---|
| Pelleted Hulls Storage Conveyor | | Uncontrolled for each unit | | Controlled for 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 units G150000**
Meal Conveyor to Loadout

| | | | | |
|---|---|---|---|---|
| PM Emission Factor | 0.061 | lb/ton | Source: | SCC 3-02-005-27 |
| PM10/PM2.5 Emission Factor | 0.034 | lb/ton | | SCC 3-02-005-27 |
| Hourly Loading Rate | 198 | tons/hr | | |
| Aspiration Rate | 500 | cfm | | |
| % Control PM | 99.44% | | | |
| % Control PM10/PM2.5 | 99.44% | | | |

| Potential PM emissions | | | | | |
|---|---|---|---|---|---|
| Meal Conveyor to Loadout | | Uncontrolled for each unit | | Controlled for each unit | |
| Max Hourly | = | 12.08 | lbs/hr | 0.07 | lbs/hr |
| Max Yearly | = | 52.90 | tons/yr | 0.30 | tons/yr |

| Potential PM10/PM2.5 emissions | | | | | |
|---|---|---|---|---|---|
| Meal Conveyor to Loadout | | Uncontrolled for each unit | | Controlled for 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

| Piles #1 and #2 | | Uncontrolled for each unit | |
|---|---|---|---|
| Max Hourly | = | 21.96 | lbs/hr |
| Max Yearly | = | 96.18 | tons/yr |
| Limited Yearly | = | 7.32 | tons/yr |

Potential PM10/PM2.5 emissions

| Piles #1 and #2 | | Uncontrolled for each unit | |
|---|---|---|---|
| Max Hourly | = | 12.24 | lbs/hr |
| Max Yearly | = | 53.61 | tons/yr |
| Limited Yearly | = | 4.08 | tons/yr |

**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 | | Uncontrolled 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 emissions

| Screener | | Uncontrolled 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 A170000**
**Screenings 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 | 5.0 | tons/hr | Loadings are based on assumption of 2.5% of |
| Aspiration Rate | 500 | cfm | raw beans will be lost |
| % Control PM | 99.41% | | |
| % Control PM10/PM2.5 | 99.41% | | |

Potential PM emissions

| Screenings Tank | | Uncontrolled 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 emissions

| Screenings Tank | | Uncontrolled 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:**
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:**
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**
**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 | 0.061 | lb/ton | Source: | SCC 3-02-005-30 |
| PM10/PM2.5 Emission Factor | 0.0340 | lb/ton | | SCC 3-02-005-30 |
| Hourly Loading Rate | 5.0 | tons/hr | | Loadings are based on assumption of 2.5% of |
| Aspiration Rate | 500 | cfm | | raw beans will be lost |
| % Control PM | 99.41% | | | |
| % Control PM10/PM2.5 | 99.41% | | | |

Potential PM emissions

| Screenings Recycle Leg | | Uncontrolled for each unit | | Controlled for 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 emissions

| 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 B011300**
**Bean Weigh Scale**

| | | | | |
|---|---|---|---|---|
| PM Emission Factor | 0.061 | lb/ton | Source: | SCC 3-02-005-30 |
| PM10/PM2.5 Emission Factor | 0.0340 | 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

| Bean Weigh Scale | | Uncontrolled 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

| Bean Weigh Scale | | Uncontrolled 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.

**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**
**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 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 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
VSC Feed Leg, VSC Leg Feed Conveyor, Screener Feed Conveyor and Conditioned Bean Feed Conveyor

| | | Uncontrolled 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
VSC Feed Leg, VSC Leg Feed Conveyor, Screener Feed Conveyor and Conditioned Bean Feed Conveyor

| | | Uncontrolled 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

| | | Uncontrolled 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
Whole Bean Aspiration No. 1 and No. 2

| | | Uncontrolled 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.

**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**
**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 | 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 | * | This source utilizes oil suppression. |
| Aspiration Rate | 500 | cfm | | |
| % Control PM | 99.41% | | | |
| % Control PM10/PM2.5 | 99.41% | | | |

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 emissions

| Hull Collection Conveyor | | Uncontrolled for each unit | | 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 E130000 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 | | Uncontrolled for each unit | | Controlled for each unit | |
|---|---|---|---|---|---|
| Max Hourly | = | 0.59 | lbs/hr | 0.00 | lbs/hr |
| Max Yearly | = | 2.56 | tons/yr | 0.02 | tons/yr |

Potential PM10/PM2.5 emissions

| Hull Screener No. 1 and No. 2 | | Uncontrolled for each unit | | Controlled for each unit | |
|---|---|---|---|---|---|
| Max Hourly | = | 0.33 | lbs/hr | 0.00 | lbs/hr |
| Max Yearly | = | 1.43 | tons/yr | 0.01 | 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.

**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**
**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 | 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 | 3000 | cfm | | |
| % Control PM | 99.41% | | | |
| % Control PM10/PM2.5 | 99.41% | | | |

Potential PM emissions
Secondary 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 emissions
Secondary Hull Collection Conveyor

| | | Uncontrolled for each unit | | 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 E070300**
**4 Hour Hull 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 | 17.0 | tons/hr | | |
| Aspiration Rate | 1500 | cfm | | |
| % Control PM | 99.41% | | | |
| % Control PM10/PM2.5 | 99.41% | | | |

Potential PM emissions
4 Hour Hull Tank

| | | Uncontrolled for each unit | | 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 emissions
4 Hour Hull Tank

| | | Uncontrolled for each unit | | 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.

**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**
**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: 085-35910-00102**
**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 | 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 | Not Provided | cfm | | |
| % Control PM | 99.41% | | | |
| % Control PM10/PM2.5 | 99.41% | | | |

Potential PM emissions
Secondary Hull Collection L-Path

| | | 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 emissions
Secondary Hull Collection L-Path

| | | Uncontrolled for each unit | | 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 E080000**
**Pellet Cooler**

| | | | | |
|---|---|---|---|---|
| PM Emission Factor | 1.5 | lb/ton | Source: | SCC 3-02-008-16 |
| PM10/PM2.5 Emission Factor | 0.75 | lb/ton | | SCC 3-02-008-16 |
| Hourly Loading Rate | 17.0 | tons/hr | * | Emission Factor was adjusted to uncontrolled |
| Aspiration Rate | 6500 | cfm | | based on assumption that cyclones provide 90% |
| % Control PM | 99.41% | | | control. |
| % Control PM10/PM2.5 | 99.41% | | | |

Potential PM emissions
Pellet Cooler

| | | Uncontrolled for each unit | | Controlled for 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 emissions
Pellet Cooler

| | | Uncontrolled for each unit | | Controlled for 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.

**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**
**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
Hull Hammer Mill, Hull Hammer Mill Feeder, and Hull Hammer Mill Plenum

| | | Uncontrolled for each unit | | Controlled for each unit | |
|---|---|---|---|---|---|
| Max Hourly | = | 34.000 | lbs/hr | 0.201 | lbs/hr |
| Max Yearly | = | 148.920 | tons/yr | 0.879 | tons/yr |

Potential PM10/PM2.5 emissions
Hull Hammer Mill, Hull Hammer Mill Feeder, and Hull Hammer Mill Plenum

| | | Uncontrolled for each unit | | 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 G050100**
**Pelleted Hulls 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 | 17.0 | tons/hr | |
| Aspiration Rate | 1000 | cfm | |
| % Control PM | 99.41% | | |
| % Control PM10/PM2.5 | 99.41% | | |

Potential PM emissions
Pelleted Hulls Leg

| | | 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 emissions
Pelleted Hulls Leg

| | | Uncontrolled for each unit | | 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.

**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**
**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: 085-35910-00102**
**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 | 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 | Not Provided | cfm | | |
| % Control PM | 99.41% | | | |
| % Control PM10/PM2.5 | 99.41% | | | |

Potential PM emissions
Hulls Addition Screw

| | | 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 emissions
Hulls Addition Screw

| | | Uncontrolled for each unit | | 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 B310000**
**Screenings Weight Belt**

| | | | | |
|---|---|---|---|---|
| PM Emission Factor | 0.061 | lb/ton | Source: | SCC 3-02-007-86 |
| PM10/PM2.5 Emission Factor | 0.034 | lb/ton | | SCC 3-02-007-86 |
| Hourly Loading Rate | 5.0 | tons/hr | | |
| Aspiration Rate | 500 | cfm | | |
| % Control PM | 99.41% | | | |
| % Control PM10/PM2.5 | 99.41% | | | |

Potential PM emissions
Screenings Weight Belt

| | | Uncontrolled for each unit | | Controlled for each unit | |
|---|---|---|---|---|---|
| Max Hourly | = | 0.305 | lbs/hr | 0.002 | lbs/hr |
| Max Yearly | = | 1.336 | tons/yr | 0.008 | tons/yr |

Potential PM10/PM2.5 emissions
Screenings Weight Belt

| | | Uncontrolled for each unit | | Controlled for each unit | |
|---|---|---|---|---|---|
| Max Hourly | = | 0.170 | lbs/hr | 0.001 | lbs/hr |
| Max Yearly | = | 0.745 | tons/yr | 0.004 | tons/yr |

**PTE for emission unit B010300**
**Conditioner Bean Loop Path**

| | | | | |
|---|---|---|---|---|
| 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 | 264 | tons/hr | | |
| Aspiration Rate | 42,000 | cfm | | |
| % Control PM | 99.41% | | | |
| % Control PM10/PM2.5 | 99.41% | | | |

Potential PM emissions

| Conditioner Bean Loop Path | | Uncontrolled for each unit | | Controlled for each unit | |
|---|---|---|---|---|---|
| Max Hourly | = | 26.400 | lbs/hr | 0.156 | lbs/hr |
| Max Yearly | = | 115.632 | tons/yr | 0.682 | tons/yr |

Potential PM10/PM2.5 emissions

| Conditioner Bean Loop Path | | Uncontrolled for each unit | | Controlled for each unit | |
|---|---|---|---|---|---|
| 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.

**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**
**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 | 2.00 | lb/ton | Source: SCC 3-02-007-86 |
| PM10/PM2.5 Emission Factor | 0.50 | lb/ton | SCC 3-02-007-86 |
| Hourly Loading Rate | 5.0 | tons/hr | |
| Aspiration Rate | 5000 | cfm | |
| % Control PM | 99.00% | | |
| % Control PM10/PM2.5 | 99.00% | | |

Potential PM emissions
Pod Grinder/Destoner

| | | Uncontrolled for each 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 emissions
Pod Grinder/Destoner

| | | Uncontrolled for each 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:**
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**
**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**

**PTE for emission unit B010500**
**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

| | | Uncontrolled for each unit | | 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

| | | Uncontrolled for each 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:**
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**
**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

| | | Uncontrolled for each unit | | Controlled for 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

| | | Uncontrolled for each unit | | Controlled for 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**
**Dryers 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**

| | | | | |
|---|---|---|---|---|
| PM Emission Factor | 3.60 | lb/ton | Source: | SCC 3-02-007-85 |
| PM10/PM2.5 Emission Factor | 0.90 | lb/ton | | SCC 3-02-007-85 |
| Hourly Loading Rate | 66 | tons/hr | Note: | Source is aspirated via the Cascade Dryers |
| Aspiration Rate | NA | cfm | | |
| % Control PM | 99.18% | | | |
| % Control PM10/PM2.5 | 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 | 1.95 | lbs/hr |
| Max Yearly | = | 1040.69 | tons/yr | 8.53 | 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 | |
|---|---|---|---|---|---|
| Max Hourly | = | 59.40 | lbs/hr | 0.49 | lbs/hr |
| Max Yearly | = | 260.17 | tons/yr | 2.13 | tons/yr |

**PTE for emission units B050000, B090000, B140000, and B180000**
**Cascade Dryer No. 1, No. 2, No. 3, and No. 4**

| | | | | |
|---|---|---|---|---|
| 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 | 66 | tons/hr | | |
| Aspiration Rate | 30,000 | cfm | | |
| % Control PM | 99.18% | | | |
| % Control PM10/PM2.5 | 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 | = | 14.520 | lbs/hr | 0.119 | lbs/hr |
| Max Yearly | = | 63.598 | tons/yr | 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:**
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**
**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 | 3.60 | lb/ton | Source: | SCC 3-02-007-85 |
| PM10/PM2.5 Emission Factor | 0.90 | lb/ton | | SCC 3-02-007-85 |
| Hourly Loading Rate | 66 | tons/hr | Note: | This source is aspirated via the |
| Aspiration Rate | NA | cfm | | Cascade Conditioners |
| % Control PM | 99.18% | | | |
| % Control PM10/PM2.5 | 99.18% | | | |

Potential PM emissions
Cracking Roll No. 1, No. 2, No. 3, and No. 4

| | | Uncontrolled for each unit | | 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 emissions
Cracking Roll No. 1, No. 2, No. 3, and No. 4

| | | Uncontrolled for each 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 B070000, B110000, B160000, and B200000**
**Cascade Conditioner No. 1, No. 2, No. 3, and No. 4**

| | | | | |
|---|---|---|---|---|
| PM Emission Factor | 0.100 | 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 | 66 | tons/hr | | |
| Aspiration Rate | 42,600 | cfm | | |
| % Control PM | 99.18% | | | |
| % Control PM10/PM2.5 | 99.18% | | | |

Potential PM emissions
Cascade Conditioner No. 1, No. 2, No. 3, and No. 4

| | | Uncontrolled for each unit | | Controlled for 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 emissions
Cascade Conditioner No. 1, No. 2, No. 3, and No. 4

| | | Uncontrolled for each unit | | Controlled for 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:**
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**
**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: 085-35910-00102**
**Operation Permit No.: T085-29197-00102**
**Permit Reviewer: Tamera Wessel**
**Date: May 27, 2015**

**PTE for emission units E130100, E150100, and A160100**
**Secondary Aspirator No. 1 and No. 2, and Feed Day Tank 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 | 9.6 | tons/hr | |
| Aspiration Rate | Not Provided | cfm | |
| % Control PM | 99.18% | | |
| % Control PM10/PM2.5 | 99.18% | | |

Potential PM emissions
Secondary Aspirator No. 1 and No. 2, and Feed Day Tank Conveyor

| | | Uncontrolled for each unit | | Controlled 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 emissions
Secondary Aspirator No. 1 and No. 2, and Feed Day Tank Conveyor

| | | Uncontrolled for each unit | | Controlled 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 A160000, A160500 and B420000**
**Day Tank (with Aspirator and Cyclone)**

| | | | |
|---|---|---|---|
| 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 | 264 | tons/hr | * This source utilizes 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

| | | 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/PM2.5 emissions
Day Bin Vent

| | | 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.

**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**
**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, C0110000, C0120000, C200100, and C010600**
**Flaking Rolls No. 1 through No. 12 and Conveyors**

Stack Test done on April 15-17, 2008:

| | | |
|---|---|---|
| Air Flow Rate = | 16,592 | dry standard cubic feet/minute |
| PM Outlet Grain Loading = | 0.0009 | grain/dry standard cubic feet |
| $PM_{10}$ Outlet Grain Loading = | 0.0012 | grain/dry standard cubic feet |
| $PM/PM_{10}$ Control Efficiency = | 99.07% | |

**Controlled PTE**

| | | | | | |
|---|---|---|---|---|---|
| Hourly PM Emissions | 0.13 | lb/hr | Hourly $PM_{10}/PM_{2.5}$ Emissions | 0.17 | lb/hr |
| Yearly PM Emissions | 0.56 | tons/yr | Yearly $PM_{10}/PM_{2.5}$ Emissions | 0.75 | tons/yr |

**Uncontrolled PTE (Original Capacity)**

| | | | | | |
|---|---|---|---|---|---|
| Hourly PM Emissions | 13.76 | lb/hr | Hourly $PM_{10}/PM_{2.5}$ Emissions | 18.35 | lb/hr |
| Yearly PM Emissions | 60.28 | tons/yr | Yearly $PM_{10}/PM_{2.5}$ Emissions | 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 (085-31979-00102)**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 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 Increase in Capacity)**

| | | | | | |
|---|---|---|---|---|---|
| Hourly PM Emissions | 14.03 | lb/hr | Hourly $PM_{10}/PM_{2.5}$ Emissions | 18.71 | lb/hr |
| Yearly PM Emissions | 61.47 | tons/yr | Yearly $PM_{10}/PM_{2.5}$ Emissions | 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 Increase in Capacity)**

| | | | | | |
|---|---|---|---|---|---|
| Hourly PM Emissions | 14.30 | lb/hr | Hourly $PM_{10}/PM_{2.5}$ Emissions | 19.07 | lb/hr |
| Yearly PM Emissions | 62.65 | tons/yr | Yearly $PM_{10}/PM_{2.5}$ Emissions | 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 (tons/yr) = PTE (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 (tons/yr) = Controlled PTE (tons/yr) ÷ (1 - Control Efficiency)
Uncontrolled PTE After Increase (lb/hr) = Uncontrolled PTE Before Increase (lb/hr) * Increase in Capacity ÷ Original Capacity
Uncontrolled PTE After Increase (tons/yr) = Uncontrolled PTE Before Increase (tons/yr) * 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
Grinding Discharge Conveyor, Hammer Mill Mixing Conveyor, Meal L-Path Conveyor, and Meal Hammer Mill Feed Conveyor

| | | Uncontrolled for each unit | | Controlled for 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
Grinding Discharge Conveyor, Hammer Mill Mixing Conveyor, Meal L-Path Conveyor, and Meal Hammer Mill Feed Conveyor

| | | Uncontrolled for each unit | | Controlled 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 | 3.4 | lb/ton | Source: SCC 3-02-007-93 |
| PM10/PM2.5 Emission Factor | 0.9 | lb/ton | SCC 3-02-007-93 |
| Hourly Loading Rate | 74 | tons/hr | * Emission Factor was adjusted to uncontrolled based on assumption that cyclones provide 90% control |
| Aspiration Rate | 3000 | cfm | |
| % Control PM | 99.50% | | |
| % Control PM10/PM2.5 | 99.50% | | |

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 Mill No. 5

| | | Uncontrolled for each unit | | Controlled for each unit | |
|---|---|---|---|---|---|
| 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. 3, Meal Hammer Mills No. 1, No. 2 and No. 3
Meal Hammer Mill Feeder No. 5, Meal Hammer Mill No. 5

| | | Uncontrolled for each 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.

**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**
**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**

| | | | | |
|---|---|---|---|---|
| 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 | 1,000 | cfm | | |
| % Control PM | 99.50% | | | |
| % Control PM10/PM2.5 | 99.50% | | | |

Potential PM emissions
Meal Leg

| | | Uncontrolled for each unit | | Controlled 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/PM2.5 emissions
Meal Leg

| | | Uncontrolled for each unit | | Controlled 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 emission units E020100, E030100, E040100, and E230100**
**Meal Hammer Mill Bins No. 1, No. 2 and No. 3**
**Meal Hammer Mill Bin No. 5**

| | | | | |
|---|---|---|---|---|
| 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 | 74 | tons/hr | | |
| Aspiration Rate | 6,000 | cfm | | |
| % Control PM | 99.50% | | | |
| % Control PM10/PM2.5 | 99.50% | | | |

Potential PM emissions
Meal Hammer Mill Bins No. 1, No. 2 and No. 3
Meal Hammer Mill Bin No. 5

| | | Uncontrolled for each unit | | Controlled 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/PM2.5 emissions
Meal Hammer Mill Bins No. 1, No. 2 and No. 3
Meal Hammer Mill Bin No. 5

| | | Uncontrolled for each unit | | Controlled for each unit | |
|---|---|---|---|---|---|
| Max Hourly | = | 0.466 | lbs/hr | 0.002 | lbs/hr |
| Max Yearly | = | 2.042 | tons/yr | 0.010 | 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.

**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**
**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 | 208 | tons/hr | * | Emission Factor was adjusted to |
| Aspiration Rate | 63,900 | cfm | | uncontrolled based on assumption that |
| % Control PM | 98.10% | | | cyclones provide 90% control |
| % Control PM10/PM2.5 | 97.89% | | | |

Hourly throughput is based on maximum extraction process design - weight of oil extracted.

Potential PM emissions
DC Decks No. 1, No. 2, No. 3, and No. 4

| | | Uncontrolled for each unit | | Controlled 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 emissions
DC Decks No. 1, No. 2, No. 3, and No. 4

| | | Uncontrolled for each unit | | Controlled 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: 085-35910-00102**
**Operation Permit No.: T085-29197-00102**
**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
Diatomaceous Earth (DE) Storage Bin

| | | Uncontrolled | | 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

| | | Uncontrolled | | 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 | | Controlled | |
|---|---|---|---|---|---|
| Max Hourly | = | 6.94 | lbs/hr | 6.94 | lbs/hr |
| Max Yearly | = | 30.40 | tons/yr | 30.40 | tons/yr |

Potential PM10/PM2.5 emissions
Bean Storage Bin No. 2, 3, 4, 6, 7, and 8 and Bean Storage Silo No. 1 and 5

| | | Uncontrolled | | Controlled | |
|---|---|---|---|---|---|
| Max Hourly | = | 1.75 | lbs/hr | 1.75 | lbs/hr |
| Max Yearly | = | 7.66 | tons/yr | 7.66 | 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; 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: 085-35870-00102**
**Significant Permit Modification: 085-35910-00102**
**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

| | | Uncontrolled | | Controlled | |
|---|---|---|---|---|---|
| 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 | | Controlled | |
|---|---|---|---|---|---|
| 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 | | Controlled | |
|---|---|---|---|---|---|
| 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
PTE for Hull Overflow Tank

| | | Uncontrolled | | Controlled | |
|---|---|---|---|---|---|
| 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: 085-35870-00102**
**Significant Permit Modification: 085-35910-00102**
**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

Bound in product/by-product
- d) Desolventized Meal

**a) Main Gas Vent (Soybean Oil 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 | ppm outlet from vent | | | | | | | |
| | | 225 | cubic feet per minute flowrate | | | | | | | |
| | | 8760 | hours per year operating rate | | | | | | | |
| | | 98.60% | control efficiency | | | | | | | |
| | 3000 | ppm * | 86.17 | lb/lbmol ÷ | 3.82E+08 | cf ppm/lbmol = | 6.76E-04 | lb/cf | | |
| | 6.76E-04 | lb/cf * | 225 | cfm * | 60 | min/hr = | 9.13 | lb/hr | | |
| from Normal Operations: | | | | | | | | | | |
| Controlled Emissions (tons/yr) = | | 9.13 | lb/hr * | 8736 | hr/yr ÷ | 2000 | lb/ton = | | 39.87 | tons/yr |
| Uncontrolled Emissions (tons/yr) = | | 39.87 | tons/yr ÷ | (1 - | 98.60% | ) = | | | 2,848.14 | tons/yr |
| from Upset Operations: | | | | | | | | | | |
| Controlled Emissions (tons/yr) = | | 1,765 | lb/hr[1] * | 24 | hr/yr ÷ | 2000 | lb/ton = | | 21.18 | tons/yr |
| Uncontrolled Emissions (tons/yr) = | | 21.18 | tons/yr ÷ | (1 - | 98.60% | ) = | | | 1,512.86 | tons/yr |
| | | | | | | Original Total Uncontrolled Emissions = | | | 4,361.00 | tons/yr |
| | | | | | | Original Capacity = | | | 192.5 | tons/hr |
| | | | | | | Increased Capacity = | | | 264 | tons/hr |
| | | | | | | **Increased Total Uncontrolled Emissions =** | | | **5,980.80** | **tons/yr** |

Mineral Oil Absorber System Normal Operation Limits = 0.048 lb/ton of soybean processed (2,251,836 tons), 9.3 lbs/hr VOC

| | | | | | |
|---|---|---|---|---|---|
| 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**

Basis: DC Deck Cyclone No. 1 through No. 4 (18,000 scfm each) 72,000 SCFM

| | MW | Spec Grav | at 70°F | at 80°F | at 90.8°F |
|---|---|---|---|---|---|
| | lb/lbmol | Rel to Air | lb/cu.ft. | lb/cu.ft. | lb/cu.ft. |
| Hexane | 86.17 | 2.975 | 0.226 | 0.222 | 0.218 |
| Air | 28.96 | 1.000 | 0.076 | | |

average temperature of soy oil temperature from stack test

Normal Operating Conditions

| | Original 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 | 200 [1]ppm Hexane in meal | | 18 wt.. % H20 | 200 [1]ppm Hexane in meal | |
| | | 62.4 lbs/hr Hexane | | | 83.2 lbs/hr Hexane | |
| Desolventized flakes from dryers | 149 ton/hr | 77.4 wt % of beans | | 200 ton/hr | 75.8 wt % of beans | |
| | 14 wt.. % H20 | 119 [1]ppm Hexane in meal | | 14 wt.. % H20 | 113 [1]ppm Hexane in meal | |
| | | 37.1 lbs/hr Hexane | | | 47.1 lbs/hr Hexane | |
| Estimated VOC Emissions from dryers: | | 25.3 lbs/hr Hexane | | | 36.1 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 | 100 [1]ppm Hexane in meal | | 13 wt.. % H20 | 100 [1]ppm Hexane in meal | |
| | | 29.6 lbs/hr Hexane | | | 39.6 lbs/hr Hexane | |
| Estimated VOC Emissions from cooler: | | 7.5 lbs/hr Hexane | | | 7.5 lbs/hr Hexane | |
| Emissions for dryers/cooler for normal operation: | | 32.8 lbs/hr Hexane | | | 43.6 lbs/hr Hexane | |
| (same stack) | | 34.9 [1]ppm Hexane in air | | | 46.4 [1]ppm Hexane in air | |
| | | 8730 hr/yr | | | 8730 hr/yr | |
| | | 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 | | | 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 in meal | |
| | | 780 lbs/hr 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 | 625 ppm Hexane in meal | | 13 wt.. % H20 | 625 ppm Hexane in meal | |
| | | 185 lbs/hr Hexane | | | 248 lbs/hr Hexane | |
| Emissions for upset operation: | | 595 lbs/hr Hexane | | | 793 lbs/hr Hexane | |
| | | 633 ppm Hexane in air | | | 843 ppm Hexane in air | |
| | | 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

| | | | | | |
|---|---|---|---|---|---|
| 326 IAC 8-1-6 | VOC Limits | 189.15 | tons/yr | **143.66** | **tons/yr** |
| 326 IAC 2-2 | VOC Limits | | | 143.66 | tons/yr |

Meal Dryers & Cooler (Stack S-2) Stack Test (4/15/08) = 107.75 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
lbs/hr Hexane = ppm Hexane ÷ 1,000,000 ppm * Beans Processed (tons/hr) * 2000 lb/ton
Emissions (tons/yr) = Emissions (lbs/hr) * 8760 hrs/yr ÷ 2000 lbs/ton
Increased Emissions (tons/yr) = Original Emissions (tons/yr) * 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.:** T085-29197-00102
**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 soy oil temperature from stack test | | | |
| **Annual Emissions =** | **0.32** | **lbs/hr** | = | **0.43** | **lbs/hr** | |
| | **1.41** | **tons/yr** | | **1.89** | **tons/yr** | |

**d) Desolventized meal**

| | Original | | | Increased | |
|---|---|---|---|---|---|
| | 148 | tons/hr | | 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 Emisisons (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: 085-35910-00102**
**Operation Permit No.: T085-29197-00102**
**Permit Reviewer: Tamera Wessel**
**Date: May 27, 2015**

**f) Plant Startup/Shutdown**

| | | | | | |
|---|---|---|---|---|---|
| Startup Solvent Loss = | 8,400 | lbs or | 1,500 | gallons | |
| Shutdown Solvent Loss = | 8,400 | lbs or | 1,500 | gallons | |
| Startup Duration = | 2 | hrs | | | |
| Shutdown Duration = | 2 | hrs | | | |
| Total Duration = | 4 | hrs | | | |
| Frequency = | 2 | times/yr | | | |
| Annual Emissions = | 4,200 | lbs/hr | for | 8 | hrs/yr |
| Annual Emissions = | 16.80 | tons/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 = | 0.28 | lbs/ton of beans * | 192.5 | tons/hr * | 8760 | hr/yr ÷ | 2000 | hr/yr |
| Original Emissions = | 236.08 | tons/yr | | | | | | |
| Increased Emissions = | 0.28 | lbs/ton of beans * | 264 | tons/hr * | 8760 | hr/yr ÷ | 2000 | hr/yr |
| Increased Emissions = | 323.77 | tons/yr | | | | | | |

**h) Plant Upsets**

| | | |
|---|---|---|
| Duration = | 3 | hrs |
| Frequency = | 10 | times/yr |

When the system loses normal vacuum (negative pressure) condition, VOCs are lost.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Original Air Flow in Flakes = | 192.5 | tons/hr * | 2000 | lb/ton ÷ | 60 | min/hr ÷ | (75-15) lb/cfm |
| Original Air Flow in Flakes = | 106.9 | cfm | | | | | |
| Increased Air Flow in Flakes = | 264 | tons/hr * | 2000 | lb/ton ÷ | 60 | min/hr ÷ | (75-15) lb/cfm |
| Increased Air Flow in Flakes = | 146.7 | cfm | | | | | |

Assume the amount of VOCs lost to the atmosphere is roughly equal to the air normally pulled in.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Original Emissions = | 106.9 | cfm * | 60 | min/hr * | 0.2 | lbs/cu.ft. ÷ | 2000 | lb/ton * | 30 | hr/yr |
| Original Emissions = | 19.25 | tons/yr | | | | | | | | |
| Increased Emissions = | 146.7 | cfm * | 60 | min/hr * | 0.2 | lbs/cu.ft. ÷ | 2000 | lb/ton * | 30 | hr/yr |
| Increased Emissions = | 26.40 | tons/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:** 085-35910-00102
**Operation Permit No.:** T085-29197-00102
**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.

| Process Description | VOC Emission Limit (lb/hr) | Operating Hours (hrs/yr) | Limited PTE of VOC (tons/yr) | Control Efficiency | Unlimited PTE of VOC (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 biodiesel 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 process will be d process 30,000 lb/hr biodiesel.

| | | | |
|---|---|---|---|
| **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% Methanol 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.:** T085-29197-00102
**Permit Reviewer:** Tamera Wessel
**Date:** May 27, 2015

| Process Description | Capacity (gal/min) | [1]VOC Emission Factor (lbs/kgal) | [2]VOC Emission Limit (lbs/kgal) | Max. Throughput (kgal/yr) | Unlimited PTE of VOC (tons/yr) | [3]Limited Throughput (kgal/yr) | Limited PTE of VOC (tons/yr) |
|---|---|---|---|---|---|---|---|
| Loading Rack (Rail) | 500 | 0.03 | 0.02 | 262,800 | 3.94 | 110,000 | 1.10 |
| Loading Rack (Truck Rack #1) | 430 | 0.03 | 0.02 | 226,008 | 3.39 | | |
| Loading Rack (Truck Rack #2) | 430 | 0.03 | 0.02 | 226,008 | 3.39 | | |

**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 (lbs/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 after 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 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 | Emission Unit Description | Storage Capacity | PTE of VOC (lbs/yr/unit) | Number of Units | PTE of VOC (tons/yr) |
|---|---|---|---|---|---|
| I140000 | Biodiesel Storage Tank #14 | 735,000 gallons | 1,426.55 | 1 | 0.71 |
| I040000 and I050000 | Biodiesel Storage Tank #4 and Biodiesel Storage Tank #5 | 725,000 gallons | 1,762.00 | 2 | 1.76 |
| I060000 | Biodiesel Storage Tank #6 | 360,000 gallons | 657.69 | 1 | 0.33 |
| I070000, I080000, I090000, I100000, and I110000 | 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**
**$PM/PM_{10}$ 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: 085-35910-00102**
**Operation Permit No.: T085-29197-00102**
**Permit Reviewer: Tamera Wessel**
**Date: May 27, 2015**

**Process Description:**

| | | | |
|---|---|---|---|
| Type of [2]Cooling Tower: | Induced Draft | | |
| [1]Circulation Flow Rate: | 660,000 | gal/hr | |
| [1]Total Drift: | 0.005% | of the circulating flow | |
| [1]Maximum Total Dissolved Solids: | 3,600 | 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: 085-35910-00102**
**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:

$$L_L = 12.46 \frac{SPM}{T}$$

$L_L$ = loading loss, pounds per 1000 gallons (lb/$10^3$ gal) of liquid loaded
S = a saturation factor (see Table 5.2-1)
P = true vapor pressure of liquid loaded, pounds per square inch absolute (psia) (see Section 7.1, "Organic Liquid Storage Tanks")
M = molecular weight of vapors, pounds per pound-mole (lb/lb-mole) (see Section 7.1, "Organic Liquid Storage Tanks")
T = temperature of bulk liquid loaded, °R (°F+460)
Soy = volume of soybean oil transferred
Hexane = volume of hexane transferred

**Calculations for Soybean Oil portion of emissions**
**S =** 0.60 Submerged Loading: dedicated normal service
**M =** 292 lb/lb-mol (per TANKS calculation)
**Soy =** 452,016,000 gal/year (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

| T, deg F | **T**, deg R | [1] **P**, psia | $\mathbf{L_L}$, lb/$10^3$ gal | Emissions from Soy, lb/year | $L_L$, lb/$10^3$ gal with 30% error | Emissions from Soy, lb/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

**Calculations for Hexane portion of emissions**
**S =** 1.45 Submerged Loading: dedicated normal service
**M =** 86.17 lb/lb-mol (AP-42, Section 7.1, Table 7.1-3)
**Hexane =** 452,016 gal/year (@1000 ppm (worse case))

| T, deg F | **T**, deg R | [2] **P**, psia | $\mathbf{L_L}$, lb/$10^3$ gal | Emissions from Hexane, lb/year | $L_L$, lb/$10^3$ gal with 30% error | Emissions from Hexane, lb/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, psia was provided by source

**Total Potential to Emit**

| T, deg F | Total Emissions, lb/year | Total Emissions, ton/year |
|---|---|---|
| 60 | 3,304.37 | 1.65 |
| 100 | 8,000.15 | 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:** 085-35910-00102
**Operation Permit No.:** T085-29197-00102
**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 | K |
|---|---|---|---|
| MSDS vapor pressure data | 0.000000001 | 50 | 323 |
| MSDS boiling point | | 300 | 573 |

| | B | A |
|---|---|---|
| Clausius-Clapeyron coefficients | 20253 | 42 |
| ln P = A- B/T | | |

| **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) |
|---|---|---|---|---|---|---|---|---|
| I220000 | [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 = 110 million gallons per year
Proposed Throughput = 119 million gallons per year

| Unit ID | Equipment Description | Capacity | Control Efficiency | Original Pot'l VOC Max Emissions (lbs/yr) | Proposed Pot'l VOC Max Emissions (lbs/yr) | Proposed Pot'l VOC Max Emissions (tons/year) | Proposed Pot'l VOC After Control (tons/year) |
|---|---|---|---|---|---|---|---|
| I250000, I260000, I270000, I280000, I290000, and I300000 | [2,5]6 Methanol Tanks | 38,850 gallons each | 98.35% | 8,299.44 | 8,978.49 | 4.49 | 0.07 |
| I230000 and I240000 | [2,5]2 Sodium Methylate Tanks | 38,850 gallons each | 98.35% | 1,103.59 | 1,193.88 | 0.60 | 0.01 |

**Notes:**

[1] 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 equal to 0.06 tons/yr per tanks. The source has three tanks and the ppmwt hexane varies in the purchased soy oil. Therefore, to be conservative the PTE from VOC from the purchased soy oil from all three tanks is assumed to be less than or equal to 1 ton 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 Tonnage | Trips per Year | Trips per Day | Vehicle Weight (tons) | VMT per trip (miles/trip) | VMT per year (miles/yr) | Avg Vehicle Weight (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 | |
| | 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 (lb/VMT)
k = particle size multiplier (lb/VMT)
sL = road surface silt loading ($g/m^2$)
W = weight average (tons) of vehicles traveling the road

| | | | |
|---|---|---|---|
| k = | 0.011 | lb/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 | lbs PM/VMT |
| $E_{PM10}$ = | 0.039 | lbs $PM_{10}$/VMT |
| $E_{PM2.5}$ = | 0.009 | lbs $PM_{2.5}$/VMT |

**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 $E_{PM2.5}$ | | Total fugitive PM2.5 | = | VMT x $E_{PM2.5}$ | |
| | = | 1,183 | lbs/yr | | = | 1,580 | lbs/yr |
| | = | 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:** 085-35910-00102
**Operation Permit No.:** T085-29197-00102
**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)

Where
E = particulate emission factor (lb/VMT)
k = particle size multiplier (lb/VMT)
sL = road surface silt loading ($g/m^2$)
W = weight average (tons) of vehicles traveling the road

| | | | |
|---|---|---|---|
| k = | 0.011 | lb/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 = | 2.0 | tons | |

| | | |
|---|---|---|
| $E_{PM}$ = | 0.0140 | lbs PM/VMT |
| $E_{PM10}$ = | 0.0028 | lbs $PM_{10}$/VMT |
| $E_{PM2.5}$ = | 0.0007 | lbs $PM_{2.5}$/VMT |

**Calculate Emissions:**

| | | | |
|---|---|---|---|
| Total fugitive PM | = | VMT x $E_{PM}$ | |
| | = | 179 | lbs/yr |
| | = | 0.02 | lbs/hr |
| | = | 0.09 | tons/yr |
| Total fugitive PM10 | = | VMT x $E_{PM10}$ | |
| | = | 36 | lbs/yr |
| | = | 0.004 | lbs/hr |
| | = | 0.02 | tons/yr |
| Total fugitive PM2.5 | = | VMT x $E_{PM2.5}$ | |
| | = | 8.79 | lbs/yr |
| | = | 0.001 | lbs/hr |
| | = | 0.004 | 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:** 085-35910-00102
**Operation Permit No.:** T085-29197-00102
**Permit Reviewer:** Tamera Wessel
**Date:** May 27, 2015

| | Uncontrolled PTE (tons/year) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Emission Units** | **PM** | **$PM_{10}$** | **$PM_{2.5}$** | **$SO_2$** | **$NO_x$** | **VOC** | **CO** | **GHGs as $CO_2e$ (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 |
| 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** | **$PM_{10}$** | **$PM_{2.5}$** | **$SO_2$** | **$NO_x$** | **VOC** | **CO** | **GHGs as $CO_2e$ (tons/yr)** |
| 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 |
| Boilers (worse case)[1] | 13.75 | 22.73 | 22.73 | 248.50 | 132.26 | 5.21 | 79.36 | 113,597.8 |
| Space Heaters (natural gas only) | 0.004 | 0.016 | 0.016 | | | 0.012 | | |
| Emergency Generator (natural gas only) | 0.033 | 0.041 | 0.041 | 0.001 | 3.481 | 0.025 | 3.174 | 116.8 |
| Fire Pumps (diesel fuel) | 0.95 | 0.95 | 0.95 | 0.44 | 13.37 | 2.50 | 2.88 | 497.6 |
| **Total** | **14.74** | **23.74** | **23.74** | **248.94** | **149.11** | **7.75** | **85.41** | **114,212.19** |

**HAPs Emission Summary**

| | Uncontrolled PTE (tons/year)[2] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | HAPs - Organics | | | | | | | | |
| Total worst case individual HAPs from boiler, fire pumps, space heaters, and generator | Acetaldehyde | Arsenic | Dichlorobenzene | Formaldehyde | Hexane | Toluene | Xylenes | Benzene | Lead |
| | 8.94E-03 | 3.85E-03 | 1.1E-03 | 0.12 | 1.70 | 5.28E-03 | 8.60E-04 | 6.46E-03 | 9.14E-03 |
| | HAPs - Metals | | | | | | | | |
| | Beryllium | Cadmium | Chromium | Manganese | Nickel | Mercury | Selenium | Total PAH | **Total** |
| | 2.89E-03 | 3.93E-03 | 4.22E-03 | 0.01 | 4.88E-03 | 2.89E-03 | 0.01 | 6.21E-04 | **1.90** |

**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.

**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: 085-35910-00102**
**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 |
| Methane | $CH_4$ | 21 |
| Nitrous oxide | $N_2O$ | 310 |

| Boiler B-1 Heat Input Capacity (MMBtu/hr) | Potential Throughput (MMCF/year) |
|---|---|
| 220 | 1,889.4 |

| | Pollutant | | | | | | | Greenhouse Gas | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | PM* | PM10* | PM2.5 | $SO_2$ | NOx | VOC | CO | CO2 | CH4 | N2O |
| Emission Factor (lb/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 Potential Emissions | | 113,367 |
| | | | | | | | | Total $CO_2e$ | | 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 |
| | | | | | | | | Summed Limited Emissions | | 113,367 |
| | | | | | | | | Total Limited $CO_2e$ | | 113,598 |

*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
NOx and CO Emission Factors are from AP 42, Chapter 1.4, Table 1.4-1
PM and $SO_2$ Emission Factors are from AP 42, Chapter 1.4, Table 1.4-2
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Potential Emission (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
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.
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Potential Emission (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/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 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: 085-35910-00102**
**Operation Permit No.: T085-29197-00102**
**Permit Reviewer: Tamera Wessel**
**Date: May 27, 2015**

| Boiler B-1 Heat Input Capacity (MMBtu/hr) | Potential Throughput (MMCF/year) |
|---|---|
| 220.00 | 1889.4 |

| | HAPs - Organics | | | | |
|---|---|---|---|---|---|
| | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
| Emission Factor in lb/MMcf | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 |
| Potential Emission in tons/yr | 1.98E-03 | 1.13E-03 | 0.0709 | 1.700 | 3.21E-03 |

| | HAPs - Metals | | | | | |
|---|---|---|---|---|---|---|
| | Lead | Cadmium | Chromium | Manganese | Nickel | |
| Emission Factor in lb/MMcf | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 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 (lb/MMCF)/2,000 lb/ton

**Appendix A: Emissions Calculations**
**Commercial/Institutional/Residential Combustors**
**No. 2 Fuel Oil Fired - Boiler**

**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**

| Name | Chemical Formula | Global warming potential |
|---|---|---|
| Carbon dioxide | $CO_2$ | 1 |
| Methane | $CH_4$ | 21 |
| Nitrous oxide | $N_2O$ | 310 |

| Bolier B-1 Heat Input Capacity (MMBtu/hr) | Potential Throughput (kgals/year) | ***Limited Fuel (kgals/year) | | S = Weight % Sulfur |
|---|---|---|---|---|
| 220 | 13,765.71 | 7,000 | usage for entire source | 0.5 |

| | Pollutant | | | | | | | Greenhouse Gas | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | PM* | PM10** | PM2.5** | $SO_2$ | NOx | VOC | CO | CO2 | CH4 | N2O |
| Emission Factor (lb/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 | 1.38 | 34.41 | Summed Potential Emissions | | 153,491 |
| | | | | | | | | Total $CO_2e$ | | 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 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 | 248.50 | 35.00 | 5.21 | 17.50 | 78,050.00 | 0.76 | 0.91 |
| | | | | | | | | Summed Limited Emissions | | 78,052 |
| | | | | | | | | Total Limited $CO_2e$ | | 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, $PM_{10}$, and VOC emission limits are pursuant to Operating Permit No. T085-21297-00102.
The $PM_{2.5}$ and fuel usage limits are pursuant to Operating Permit Renewal No. T085-29197-00102. The source requested that the fuel limit be source-wide and not specific to the boiler.

**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) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton
Limited Emission (tons/yr) = Limited Fuel (kgals/ yr) x Emission Factor (lb/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 Factors are from AP 42, Tables 1.3-3, 1.3-8, and 1.3-12 (SCC 1-03-005-01/02/03) Supplement E 9/99 (see erata file)
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
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.: T085-29197-00102**
**Permit Reviewer: Tamera Wessel**
**Date: May 27, 2015**

| Heat Input Capacity MMBtu/hr calculated from limited fuel (kgals/year) | ***Limited Fuel (kgals/year) |
|---|---|
| 111.87 | 7000.00 |

| | HAPs - Metals | | | | |
|---|---|---|---|---|---|
| Emission Factor in lb/mmBtu | Arsenic 4.0E-06 | Beryllium 3.0E-06 | Cadmium 3.0E-06 | Chromium 3.0E-06 | Lead 9.0E-06 |
| Potential Emission in tons/yr | 3.85E-03 | 2.89E-03 | 2.89E-03 | 2.89E-03 | 0.009 |
| ***Limited Potential Emission Fuel in tons/yr | 1.96E-03 | 1.47E-03 | 1.47E-03 | 1.47E-03 | 0.004 |

| | HAPs - Metals (continued) | | | | |
|---|---|---|---|---|---|
| Emission Factor in lb/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: 085-35910-00102**
**Operation Permit No.: T085-29197-00102**
**Permit Reviewer: Tamera Wessel**
**Date: May 27, 2015**

SO2 Emission factor = 0.00205 x S
S = % Sulfur Content = 0.50

Three (3) Fire Pumps
Capacity in hp
1725.00

| Name | Chemical Formula | Global warming potential |
|---|---|---|
| Carbon dioxide | $CO_2$ | 1 |
| Methane | $CH_4$ | 21 |
| Nitrous oxide | $N_2O$ | 310 |

| | 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 |
| Unlimited Potential Emissions (tons/yr) | 0.95 | 0.95 | 0.95 | 0.44 | 13.37 | 1.08 | 2.88 | 495.94 | 0.020 | 0.004 |
| | | | | | | | | Summed Potential Emissions | | 496 |
| | | | | | | | | Total $CO_2e$ | | 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 (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 Emissions | | 496 |
| | | | | | | | | Total Limited $CO_2e$ | | 498 |

**The VOC value given is total organic compounds (TOC).

***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 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
*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 (tons/yr) = Hp x Emission Factor (lb/hp-hr)/2,000 lb/ton x 500 hrs/year.
Calculations are based using fuel oil with 0.50% sulfur content, changes in the % sulfur content of fuel oil will affect the actual amount of $SO_2$ that is emitted.
Emission Factors are from AP42 (Supplement B 10/96), Tables 3.3-1 and 3.3-2
CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]
Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [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 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 | TOTAL HAPs (tons/yr) |
| Emission Factor in lb/hp-hr | 6.5E-06 | 8.3E-06 | 2.9E-06 | 2.0E-06 | 5.4E-06 | 1.2E-06 | |
| 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 provided above.
Additional HAPs emission factors are available in AP-42, Chapter 3 Table 3.3-2
HAP emission factors converted from lb/MMBtu in Table 3.3-2 to lb/hp-hr using the follwing method:
Emission Factor in lb/MMBtu x 1 MMBtu/1,000,000 Btu x 7000 Btu/hp-hr = Emission Factor in lb/hp-hr
Conversion factor of 7,000Btu/hp-hr taken from AP-42, Table 3.3-1
Emission (tons/yr) = Hp x Emission Factor (lb/hp-hr)/2,000 lb/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: 085-35910-00102**
**Operation Permit No.: T085-29197-00102**
**Permit Reviewer: Tamera Wessel**
**Date: May 27, 2015**

| Heat Input Capacity MMBtu/hr | HHV mmBtu / mmscf | Potential Throughput MMCF/yr |
|---|---|---|
| 0.5 | 1020 | 4.3 |

| | Pollutant | | | | | | |
|---|---|---|---|---|---|---|---|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.9 | 7.6 | 7.6 | 0.6 | 100 **see below | 5.5 | 84 |
| Potential Emission in tons/yr | 0.004 | 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/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

| | HAPs - Organics | | | | | |
|---|---|---|---|---|---|---|
| | Benzene | Dichlorobenze | Formaldehyde | Hexane | Toluene | **Total - Organics** |
| Emission Factor in lb/MMcf | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 | |
| Potential Emission in tons/yr | 4.509E-06 | 2.576E-06 | 1.610E-04 | 3.865E-03 | 7.300E-06 | **4.040E-03** |

| | HAPs - Metals | | | | | |
|---|---|---|---|---|---|---|
| | Lead | Cadmium | Chromium | Manganese | Nickel | **Total - Metals** |
| Emission Factor in lb/MMcf | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 | |
| Potential Emission in tons/yr | 1.074E-06 | 2.362E-06 | 3.006E-06 | 8.159E-07 | 4.509E-06 | **1.177E-05** |
| | | | | | **Total HAPs** | **4.052E-03** |
| | | | | | **Worst HAP** | **3.865E-03** |

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

| | Greenhouse Gas | | |
|---|---|---|---|
| | CO2 | CH4 | N2O |
| Emission Factor in lb/MMcf | 120,000 | 2.3 | 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**
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: 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: 085-35910-00102**
**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/yr) | 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 and CO Emission Factors for 4-Stroke Rich Burn Engine.
**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)**

| Pollutant | Emission Factor (lb/MMBtu) | Potential Emissions (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 (lb/MMSCF) = Emission Factor (lb/MMBtu) * 1,020 MMBtu/MMSCF
Potential Fuel Usage (MMBtu/yr) = [Maximum Heat Input Capacity (MMBtu/hr)] * [Maximum Hours Operating per Year (hr/yr)]
Potential Emissions (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2000 lb/ton]

| | Greenhouse Gas (GHG) | | |
|---|---|---|---|
| **Greenhouse Gases (GHGs)** | CO2 | CH4 | N2O |
| Emission Factor in lb/MMBtu | 110 | 1.25 | |
| Emission Factor in lb/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**
*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 (MMBtu/yr)] * [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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**
*We Protect Hoosiers and Our Environment.*
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

**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,

Vivian Haun

Vivian Haun
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover lette-2014. Dot4/10/14

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*Commissioner*

**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,

Vivian 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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*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), LLC**
**Permit 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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*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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**Michael R. Pence**
*Governor*

**Thomas W. Easterly**
*Commissioner*

# 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 085-35910-00102**
**Applicant Name:** **Louis Dreyfus Agricultural Industries (LDAI), LLC**
**Location:** **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 chammack@idem.IN.gov or (317) 233-2414.

# Mail Code 61-53

| | | | |
|---|---|---|---|
| IDEM Staff | VHAUN 8/10/2015 085-35870 and 35910-00102 DRAFT<br>Louis Dreyfus Agricultural Industries LLC | | AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING |
| Name and address of Sender | ▶ | Indiana Department of Environmental Management<br>Office of Air Quality – Permits Branch<br>100 N. Senate<br>Indianapolis, IN 46204 | Type of Mail:<br>**CERTIFICATE OF MAILING ONLY** |

| Line | Article Number | Name, Address, Street and Post Office Address | Postage | Handing Charges | Act. Value (If Registered) | Insured Value | Due Send if COD | R.R. Fee | S.D. Fee | S.H. Fee | Rest. Del. Fee / Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | David Selig Louis Dreyfus Agricultural Industries LLC 7344 SR 15 S Claypool IN 46510-9746 (Source CAATS) | | | | | | | | | |
| 2 | | Bruce Chapin Vice President Louis Dreyfus Agricultural Industries LLC 4800 Main St Suite 600 Kansas City MO 46510-9746 *(RO CAATS)* | | | | | | | | | |
| 3 | | Kosciusko County Board of Commissioners 100 W. Center St, Room 220 Warsaw IN 46580 *(Local Official)* | | | | | | | | | |
| 4 | | David Jordan Environmental Resources Management (ERM) 8425 Woodfield Crossing Blvd., Suite 560-W Indianapolis IN 46240 *(Consultant)* | | | | | | | | | |
| 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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