



*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant  
DATE: July 13, 2006  
RE: Cargill, Inc. / 157-21911-00038  
FROM: Nisha Sizemore  
Chief, Permits Branch  
Office of Air Quality

### **Notice of Decision: Approval – Effective Immediately**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
401 M Street  
Washington, D.C. 20406

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

---

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John Zoss  
Cargill Inc. - Soybean Processing Division  
1503 Wabash Avenue  
Lafayette, IN 47905-1039

July 13, 2006

Re: 157-21911-00038  
Third Significant Permit Modification to  
Part 70 Permit 157-5863-00038

Dear Mr. Zoss,

Cargill Inc. - Soybean Processing Division was issued a Part 70 permit on May 29, 2003 for a soybean processing plant located at 1503 Wabash Avenue, Lafayette, IN 47905-1039. An application requesting changes to this permit was received on October 17, 2005. 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.

The permit modification consists of changes to allow the combustion of vegetable oil, tallow, or grease as fuel in two of the plant's existing boilers.

All other conditions of the permit shall remain unchanged and in effect. Please retain a copy of the following revised permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Allen R. Davidson or extension 3-5693, or dial (317) 233-5693.

Sincerely,

Original Signed By:  
Nisha Sizemore, Chief  
Permits Branch  
Office of Air Quality

Attachments  
ARD

cc: File - Tippecanoe County  
Tippecanoe County Health Department  
Air Compliance Section Inspector - Wanda Stanfield  
Compliance Data Section  
Administrative and Development



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## PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

### Cargill, Inc. - Soybean Processing Division 1503 Wabash Avenue Lafayette, IN 47905-1039

(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.

Operation Permit No.: T157-5863-00038	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: May 29, 2003 Expiration Date: May 29, 2008
1st Administrative Amendment 157-17769-00038	Issuance Date: July 14, 2003.
1st Significant Permit Modification 157-19644-00038	Issuance Date: October 13, 2004
2nd Significant Permit Modification 157-20830-00038	Issuance Date: October 27, 2005
3rd Significant Permit Modification 157-21911-00038	Pages Affected: Entire Permit
Issued by: Original Signed By: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: July 13, 2006 Expiration Date: May 29, 2008

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## SECTION A

## SOURCE SUMMARY

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

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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The Permittee owns and operates a soybean oil extraction plant consisting of conventional desolventizer system, and flake desolventizer system.

Responsible Official:	John Zoss, Plant Manager
Source Address:	1503 Wabash Avenue, Lafayette, IN 47905-1039
Mailing Address:	1503 Wabash Avenue, Lafayette, IN 47905-1039
General Source Phone Number:	765-420-6612
SIC Code:	2075
County Location:	Tippecanoe
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major under PSD; Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

#### Permitted on December 3, 2001

- (1) One (1) first stage rising film evaporator associated with the solvent extraction equipment (EU-13) with a maximum capacity of 20 tons of soybean oil per hour, controlled by the mineral oil system and exhausted at stack point S-15.
- (2) One (1) Iso-hexane conversation system involving a rotocell condenser, a refrigerant type cooler with condenser and an additional cooling tower cell and pump, volatile organic compounds (VOC) emissions controlled by the mineral oil system and exhausted at stack point S-15.
- (3) One (1) column grain dryer (EU-4) with column plate perforation less than or equal to 2.4 mm diameter (0.094 inch) with a maximum capacity of 7,500 bushels per hour (225 tons per hour) exhausted at stack point S-20.
- (4) One (1) solvent/water separator with a maximum capacity of 600 gallons per minute, controlled by the mineral oil system and exhausted at stack point S-15.
- (5) Five (5) sets of cracking rolls (EU-6) with a maximum capacity of 3,350 bushels per hour (100.5 tons per hour), controlled by bag house #3 and exhausted at stack point S-7.
- (6) One (1) flaker aspiration system that collects and delivers dust from flakers (EU-11) to cyclone #4 and exhausted at stack point S-5.
- (7) Three (3) dust collection systems for bag house #4 exhausting at stack point S-13; baghouse #3 exhausting at stack point S-7; and cyclone #4 exhausting at stack point S-5.
- (8) One (1) FDS system cooler collector, exhausted at stack point S-22.
- (9) Two (2) expanders (EU-12) with a maximum capacity of 833 bushels per hour (25 ton per hour), controlled by cyclone #4 and exhausted at stack point S-5.
- (10) One (1) conveyor, DC400 with a maximum capacity of 3,350 bushels per hour, controlled by baghouse #3, and exhausted at stack point S-7.
- (11) One (1) conveyor, DC409, with a maximum capacity of 3,350 bushels per hour, controlled by cyclone #4, exhausted at stack point S-5.

- (12) Two (2) fully enclosed, sealed conveyors, DC412, and DC413, and DC seal screw with a maximum capacity of 3,350 bushels per hour.
- (13) One (1) deaerator tank with a maximum capacity of 130 gallons per minute.
- (14) One (1) rail soybean unloading system with a maximum unloading capacity of 20,000 bushels per hour; controlled by baghouse #10; and exhausted at stack point S-2.
- (15) One (1) desolventizer/toaster (EU-16) with two integral meal dryers with a maximum capacity of 3,350 bushels per hour; controlled by the mineral oil system; and exhausted at stack points S-15, S-11 and S-12.
- (16) One (1) meal cooler (EU-18) with a maximum capacity of 3,350 bushels per hour and exhausted at stack point S-21.
- (17) One (1) meal dryer (EU-17) with a maximum capacity of 3,350 bushels per hour and exhausted at stack point S-25.
- (18) Two (2) main transfer legs (north and south elevators).
- (19) One (1) second stage rising film evaporator associated with the solvent extraction process (EU-13) with a maximum capacity of 20 tons of soybean oil per hour, controlled by the mineral oil system, and exhausted at stack point S-15.
- (20) One (1) liquid brine tank.
- (21) One (1) bean truck scale with an enlarged pit.
- (22) One (1) mineral oil system with a maximum capacity of 150 pounds of hexane per hour, and exhausted at stack point S-15.
- (23) One (1) final vent condenser with a maximum capacity of 1100 pounds of hexane per hour, and exhausted at stack point S-15.
- (24) One (1) flaker (#2 Flaker) with a maximum capacity of 400 bushels per hour, controlled by cyclone #9, and exhausted at stack point S-5.
- (25) One (1) hull grinder.
- (26) One (1) pod grinder.

**Permitted and existing before December 3, 2001**

- (1) One (1) truck soybean receiving pit, maximum capacity of 25,000 bushels per hour, controlled by a receiving area baghouse #4, and exhausting at stack Pt # S-13.
- (2) One (1) totally enclosed truck soybean receiving pit drag conveyor (DC-431), maximum capacity of 25,000 bushels per hour aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (3) One (1) totally enclosed soybean receiving pit drag conveyor (DC-432), maximum capacity of 25,000 bushels per hour aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (4) One (1) soybean receiving bucket elevator #301, maximum capacity of 25,000 bushels per hour, controlled by a baghouse #10, and exhausting at stack Pt # S-2.
- (5) Three (3) totally enclosed soybean drag conveyors (DC-441, 442, & 443) in series, maximum capacity of 25,000 bushels per hour, each aspirated to baghouse #9, and exhausting at stack Pt # S-1.
- (6) One (1) totally enclosed soybean drag conveyor (DC-434), maximum capacity of 25,000 bushels per hour aspirated to baghouse #9, and exhausting at stack Pt # S-1.
- (7) Four (4) soybean storage tanks, total capacity of 1,213,000 bushels.
- (8) Two (2) totally enclosed soybean drag conveyors (DC-436, & 437) in series, maximum capacity of 5,000 bushels per hour, each aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (9) Two (2) totally enclosed soybean drag conveyors (DC-444, & 446) in series, maximum capacity of 5,000 bushels per hour, each aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (10) One (1) soybean transfer bucket elevator #303, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #10, and exhausting at stack Pt # S-2.
- (11) One (1) Texas shaker #2 screener, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #1, and exhausting at stack Pt # S-3.

- (12) One (1) weed seed Kice, maximum capacity of 150 bushels per hour, controlled by a baghouse #1, and exhausting at stack Pt # S-3.
- (13) One (1) Kice #1 screener, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #1, and exhausting at stack Pt # S-3.
- (14) Two (2) totally enclosed soybean drag conveyors (DC-448, & 448A) in series, maximum capacity of 5,000 bushels per hour, each aspirated to baghouse #1, and exhausting at stack Pt # S-3.
- (15) One (1) totally enclosed soybean screw conveyor (SC212), maximum capacity of 150 bushels per hour.
- (16) One (1) 29 MMBtu natural gas fired soybean column dryer, maximum capacity of 5000 bushels per hour and exhausting at stack Pt # S-20.
- (17) Two (2) totally enclosed soybean drag conveyors (DC-449, & 450) in series, maximum capacity of 5,000 bushels per hour, each aspirated to baghouse #9, and exhausting at stack Pt # S-1.
- (18) One (1) dry soybean transfer bucket elevator #307, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #10, and exhausting at stack Pt # S-2.
- (19) One (1) totally enclosed dry soybean drag conveyor (DC-453), maximum capacity of 5,000 bushels per hour, aspirated to baghouse #9, and exhausting at stack Pt # S-1.
- (20) Eighteen (18) soybean bins (501, 502, 503, 506, 507, 508, 511, 512, 513, 516, 517, 518, 521, 522, 523, 526, 527, and 528), maximum total capacity of 261,000 bushels.
- (21) Two (2) totally enclosed soybean drag conveyors (DC-454, & 447) in series, maximum capacity of 5,000 bushels per hour each, each aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (22) One (1) dry soybean transfer bucket elevator #304, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #10, and exhausting at stack Pt # S-2.
- (23) One (1) totally enclosed dry soybean drag conveyor (DC-400A), maximum capacity of 5,000 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
- (24) One (1) soybean Thayer scale, maximum capacity of 5000 bushels per hour, controlled by a baghouse #3, and exhausting at stack Pt # S-7.
- (25) Two (2) weed seed bins (#207 & 208).
- (26) Two (2) totally enclosed soybean screw conveyors (SC 213 & 214), maximum capacity of 150 bushels per hour.
- (27) One (1) totally enclosed soybean screw conveyor (SC 215), maximum capacity of 5000 bushels per hour.
- (28) Three (3) totally enclosed soybean drag conveyors (DC-427, 428, & 429) in series, maximum capacity of 5,000 bushels per hour each.
- (29) One (1) totally enclosed dry soybean drag conveyor (DC-400), maximum capacity of 3350 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
- (30) Five (5) soybean surge bins.
- (31) Five (5) soybean cracking rolls.
- (32) Two (2) totally enclosed cracked soybean drag conveyor (DC-401 & 403), maximum capacity of 3350 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
- (33) One (1) primary Kice #1, maximum capacity of 3350 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
- (34) Two (2) totally enclosed cracked soybean screw conveyors (SC-201 & 202), in series, maximum capacity of 3350 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
- (35) One (1) triple S shaker, maximum capacity of 3350 bushels per hour, controlled by a baghouse #3, and exhausting at stack Pt # S-7.
- (36) One (1) hull grinding, maximum capacity of 150 bushels per hour, controlled by a cyclone #3, and a baghouse #3, and exhausting at stack Pt # S-7.
- (37) One (1) coarse cut aspiration, maximum capacity of 150 bushels per hour, controlled by a cyclone #1, and a baghouse #3, and exhausting at stack Pt # S-7.
- (38) One (1) fine cut aspiration, maximum capacity of 150 bushels per hour, controlled by a cyclone #2, and a baghouse #3, and exhausting at stack Pt # S-7.

- (39) One (1) rotary conditioner, maximum capacity of 3350 bushels per hour, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
- (40) Four (4) totally enclosed conditioned soybean drag conveyor (DC-404, 405, 406 & 407), maximum capacity of 3350 bushels per hour, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
- (41) Two (2) flaker banks #1 & 2, maximum capacity of 100.5 tons per hour each, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
- (42) Two (2) totally enclosed soybean flake screw conveyors (SC-206 & 207), maximum capacity of 100.5 tons per hour each, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
- (43) One (1) totally enclosed soybean flake drag conveyor (DC-409), maximum capacity 100.5 tons per hour, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
- (44) One (1) totally enclosed soybean flake drag conveyor (DC-410), maximum capacity of 100.5 tons per hour, and exhausting at steam vents.
- (45) One (1) totally enclosed soybean flake drag conveyor (DC-411), maximum capacity of 100.5 tons per hour, and exhausting at safety vent.
- (46) One (1) totally enclosed soybean flake screw conveyor (SC-209), maximum capacity of 100.5 tons per hour.
- (47) One (1) dryer deck #1, maximum capacity of 100.5 tons per hour, with a material handling cyclone, and exhausting at stack Pt # S-11.
- (48) One (1) dryer deck #2, maximum capacity of 100.5 tons per hour, with a material handling cyclone, and exhausting at stack Pt # S-12.
- (49) One (1) totally enclosed soybean meal drag conveyor (DC-414), maximum capacity of 100.5 tons per hour.
- (50) One (1) meal cooler #1, maximum capacity of 100.5 tons per hour, with a material handling cyclone, controlled by a cyclone #9, and exhausting at stack Pt # S-25.
- (51) One (1) meal cooler #2, maximum capacity of 100.5 tons per hour, with a material handling cyclone, and exhausting at stack Pt # S-21.
- (52) Two (2) totally enclosed soybean meal drag conveyors (DC 414A & 415), in series, maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (53) Three (3) meal sifters.
- (54) One (1) totally enclosed oversized soybean meal drag conveyor (DC 416), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (55) One (1) totally enclosed soybean meal screw conveyor (SC 223), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (56) Three soybean meal grinders maximum total capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (57) One (1) totally enclosed soybean meal screw conveyor (SC 221), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (58) One (1) totally enclosed soybean meal drag conveyor (DC 417), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (59) One (1) dry soybean meal transfer bucket elevator (BE 300), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (60) Two (2) totally enclosed dry soybean meal drag conveyors (DC 418 & 419), in series, maximum capacity of 100.5 tons per hour aspirated to a baghouse #2, and exhausting at stack Pt # S-6.
- (61) One (1) truck soybean meal, and hull loadout system, maximum capacity of 200 tons per hour controlled by a baghouse #5, and exhausting at stack Pt # S-14.
- (62) One (1) rail soybean meal, and hull loadout system, maximum capacity of 200 tons per hour controlled by a baghouse #5, and exhausting at stack Pt # S-14.
- (63) One (1) pneumatic flake conveying system consisting of two material handling baghouses #6 and 7, maximum capacity of 31.5 tons per hour, and exhausting at stack Pts # S-22 and 23.

- (64) One (1) pneumatic reject flake conveying system consisting of one baghouse #8, maximum capacity of 9 tons per hour, and exhausting at stack Pt # S-24.
- (65) One (1) totally enclosed soybean flake screw conveyor, maximum capacity of 9 tons per hour (SC 218).
- (66) Two (2) totally enclosed soybean flake drag conveyors (DC 461 & 462), in series, maximum capacity of 200 tons per hour.
- (67) One (1) soybean flake loadout system, maximum capacity of 200 tons per hour controlled by a baghouse #7, and exhausting at stack Pt # S-23.
- (68) One (1) pneumatic hull conveying system consisting of one material handling filter separator, maximum capacity of 4.5 tons per hour, and exhausting at stack Pts # S4.
- (69) One (1) desolventizer toaster, maximum capacity of 100.5 tons per hour, controlled by a mineral oil absorber system.
- (70) One (1) flake desolventizer system, maximum capacity of 100.5 tons per hour, controlled by a mineral oil absorber system.
- (71) One (1) mineral oil absorber system.
- (72) One (1) 48% meal tank.
- (73) One (1) 44% meal tank.
- (74) One (1) boiler, identified as Boiler #2, constructed in 1996, with a heat input capacity of 75.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels. Emissions are exhausted to stack S-17.
- (75) One (1) boiler, identified as Boiler #1, constructed in 1955, with a heat input capacity of 60.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels. Emissions are exhausted to stack S-16.
- (76) Two (2) hexane tanks #809 A & B vented to the process or vented through the flame arrester.
- (77) Three (3) fuel oil storage tanks #860 A, B, and C, maximum capacity of 25000 gallons each.
- (78) One (1) fuel oil storage tank #815, maximum capacity of 125000 gallons.

### Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.
- (2) Propane or liquid petroleum gas, or butane fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
- (3) Combustion source flame safety purging on startup.
- (4) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
- (5) Vessels storing lubricating oils, hydraulic oils, and machining fluids.
- (6) Cleaners and solvents characterized as follows:
  - (A) Having a vapor pressure equal to or less than 2kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (1000F) or,
  - (B) Having a vapor pressure equal to or less than 0.7kPa; 5mm Hg; or 0.1 psi measured at 20 degrees C (600F) or;The use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (7) Closed loop heating and cooling systems.
- (8) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (9) Forced and induced draft cooling tower not regulated under a NESHAP.
- (10) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

- (11) Heat exchanger cleaning and repair.
- (12) Process vessel degassing and cleaning to prepare for internal repairs.
- (13) Asbestos abatement projects regulated by 326 IACC 14-10.
- (14) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks temporary liquid separators, tanks, and fluid handling equipment.
- (15) Blowdown for any of the following: sight glass, boiler, compressors, pumps, and cooling tower.
- (16) Stationary fire pumps. Purge double block and bleed valves.
- (17) A laboratory as defined in 326 IAC 2-7-1(20)(C).
- (18) Other categories with emissions below insignificant thresholds:
  - (A) Storage tanks emitting less than one (1) ton per year of a single HAP and less than fifteen (15) pounds per day of VOC.
    - (i) Three (3) fuel oil storage tanks #860 A, B, and C, constructed in 1960, and maximum capacity of 25,000 gallons each.
    - (ii) One (1) fuel oil storage tank #815, constructed in 1960, and maximum capacity of 125,000 gallons.

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

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

- (1) Paved and unpaved roads and parking lots with public access.[6-5-4]
- (2) Other categories with emissions below significant thresholds:
  - (A) Storage tanks emitting less than one (1) ton per year of a single HAP and less than fifteen (15) pounds per day of VOC.
    - (i) Two (2) hexane tanks #809 A & B, constructed in 1991 and 2002, and maximum capacity of 19,000 and 20,000 gallons, respectively and vented to the process or vented through the flame arrester.[326 IAC 12, and 40 CFR 60.112b(a)]

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]

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

### B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

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- (a) This permit, T157-5863-00038, 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 Enforceability [326 IAC 2-7-7]

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

### B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

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The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the sources existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

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

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The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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This permit does not convey any property rights of any sort or any exclusive privilege.

### B.7 Duty to Supplement and Provide Information [326 IAC 2-7-5(6)(E)]

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- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). 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)]

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- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) The "responsible official" is defined at 326 IAC 2-7-1(34).

**B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]**

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- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent 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 Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 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, IL 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 the certification by the responsible official as defined by 326 IAC 2-7-1(34).

**B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]**

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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 Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

The PMP extension notification does not require the certification by the responsible official as defined by 326 IAC 2-7-1(34).

- (b) 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 contributes to any violation. The PMPs do not require the certification by the a responsible official as defined by 326 IAC 2-7-1(34).
- (c) 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, 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 Section), or

Telephone Number: 317-233-0178 (ask for Compliance Section)  
Facsimile Number: 317-233-6865

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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)(9) 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. The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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- (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 in 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)(7)]

**B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]**

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- (a) All terms and conditions of permits established prior to T157-5863-00038 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 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

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- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. 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.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the responsible official as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

**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]**

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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 2-7-4]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) 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) Right to Operate After Application for Renewal [326 IAC 2-7-3]

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 in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAQ fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

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

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- (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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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)]**

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- (a) No Part 70 permit revision 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]**

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), 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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 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, IL 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), (c), or (e). 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), (c)(1), and (e)(2).

- (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(36)) 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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.

#### 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 and 326 IAC 2-7-10.5.

#### B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

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) Have access to and copy any records that must be kept under the conditions of this permit;

- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) 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]**

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- (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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

The application, which shall be submitted by the Permittee, does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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]**

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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.

- (a) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (Ask for OAQ, Billing, Licensing, and Training Section (BLT)), 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]**

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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 has 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), the particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which:

- (a) has a maximum process weight rate less than 100 pounds per hour, and
- (b) 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 5-1-3 (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 or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

#### 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).

#### 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.

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  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 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 by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 14-10-41, 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) **Indiana Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

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

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

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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 source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

### Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

#### C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, 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 Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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.

C.11 Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) Prior to combusting residual fuel oil (fuel oils #4, #5, and #6) in Boiler no. 2 (S-17), the Permittee shall install, calibrate, maintain, and operate a COMS for measuring the opacity of the emissions from Boiler no. 2 discharged to the atmosphere and record the output of the system when combusting residual fuel oil. In addition, prompt corrective action shall be initiated whenever indicated.
- (b) In the event that a breakdown of the continuous opacity monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (c) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup COM shall be brought online within four (4) hours of shutdown of the primary COM. If this is not possible, visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of one (1) hour beginning four (4) hours after the start of the malfunction or down time.
  - (1) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.
  - (2) Method 9 opacity readings shall be repeated for a minimum of one (1) hour at least once every four- (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.
  - (3) All of the opacity readings during this period shall be reported in the Quarterly Compliance Monitoring Reports.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, and 40 CFR 60 Subpart Db.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 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.
- (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.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on June 17, 1999.
- (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.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]**

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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.16 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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- (a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.
  - (b) 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). Corrective actions may include, but are not limited to, the following:
    - (1) initial inspection and evaluation;
    - (2) recording that operations returned 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
  - (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;
    - (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 maintain the following records:
    - (1) monitoring data;
    - (2) monitor performance data, if applicable; and

- (3) corrective actions taken.

**C.17 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 take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) 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 documents submitted pursuant to this condition do require the certification by the a responsible official as defined by 326 IAC 2-7-1(34).

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

**C.18 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]**

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
- (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

The emission statement does require the certification by the A responsible official as defined by 326 IAC 2-7-1(34).

- (c) The annual emission statement 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) The annual emission statement 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.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept 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, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-2-1(qq)) at an existing emissions unit, other than projects at a Clean Unit, which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee)), may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr)), the Permittee shall comply with the following:
- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq)) at an existing emissions unit, document and maintain the following records:
- (A) A description of the project.
- (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
- (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
- (i) Baseline actual emissions;
- (ii) Projected actual emissions;
- (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii); and
- (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
- (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by a responsible official as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the a responsible official as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. 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.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx), for that regulated NSR pollutant, and
- (2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
- (1) The name, address, and telephone number of the major stationary source.

- (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C - General Record Keeping Requirements.
- (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3).
- (4) Any other information that the Permittee deems fit to include in this report.

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management  
Air Compliance Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

- (h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

### **Stratospheric Ozone Protection**

#### **C.21 Compliance with 40 CFR 82 and 326 IAC 22-1**

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

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

**Note: After the Significant Source Modification 157-11361 becomes operational, the Permittee shall follow the conditions contained in Section D.2 instead of Section D.1. This will not have any effect on other D sections.**

## SECTION D.1 FACILITY OPERATION CONDITIONS

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

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

#### Permitted and Existing before December 3, 2001

- (1) One (1) truck soybean receiving pit, maximum capacity of 25,000 bushels per hour, controlled by a receiving area baghouse #4, and exhausting at stack Pt # S-13.
- (2) One (1) totally enclosed truck soybean receiving pit drag conveyor (DC-431), maximum capacity of 25,000 bushels per hour aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (3) One (1) totally enclosed soybean receiving pit drag conveyor (DC-432), maximum capacity of 25,000 bushels per hour aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (4) One (1) soybean receiving bucket elevator #301, maximum capacity of 25,000 bushels per hour, controlled by a baghouse #10, and exhausting at stack Pt # S-2.
- (5) Three (3) totally enclosed soybean drag conveyors (DC-441, 442, & 443) in series, maximum capacity of 25,000 bushels per hour, each aspirated to baghouse #9, and exhausting at stack Pt # S-1.
- (6) One (1) totally enclosed soybean drag conveyor (DC-434), maximum capacity of 25,000 bushels per hour aspirated to baghouse #9, and exhausting at stack Pt # S-1.
- (7) Four (4) soybean storage tanks, total capacity of 1,213,000 bushels.
- (8) Two (2) totally enclosed soybean drag conveyors (DC-436, & 437) in series, maximum capacity of 5,000 bushels per hour, each aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (9) Two (2) totally enclosed soybean drag conveyors (DC-444, & 446) in series, maximum capacity of 5,000 bushels per hour, each aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (10) One (1) soybean transfer bucket elevator #303, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #10, and exhausting at stack Pt # S-2.
- (11) One (1) Texas shaker #2 screener, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #1, and exhausting at stack Pt # S-3.
- (12) One (1) weed seed Kice, maximum capacity of 150 bushels per hour, controlled by a baghouse #1, and exhausting at stack Pt # S-3.
- (13) One (1) Kice #1 screener, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #1, and exhausting at stack Pt # S-3.
- (14) Two (2) totally enclosed soybean drag conveyors (DC-448, & 448A) in series, maximum capacity of 5,000 bushels per hour, each aspirated to baghouse #1, and exhausting at stack Pt # S-3.
- (15) One (1) totally enclosed soybean screw conveyor (SC212), maximum capacity of 150 bushels per hour.
- (16) One (1) 29 MMBtu natural gas fired soybean column dryer, maximum capacity of 5000 bushels per hour and exhausting at stack Pt # S-20.
- (17) Two (2) totally enclosed soybean drag conveyors (DC-449, & 450) in series, maximum capacity of 5,000 bushels per hour, each aspirated to baghouse #9, and exhausting at stack Pt # S-1.
- (18) One (1) dry soybean transfer bucket elevator #307, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #10, and exhausting at stack Pt # S-2.

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

- (19) One (1) totally enclosed dry soybean drag conveyor (DC-453), maximum capacity of 5,000 bushels per hour, aspirated to baghouse #9, and exhausting at stack Pt # S-1.
- (20) Eighteen (18) soybean bins (501, 502, 503, 506, 507, 508, 511, 512, 513, 516, 517, 518, 521, 522, 523, 526, 527, and 528), maximum total capacity of 261,000 bushels.
- (21) Two (2) totally enclosed soybean drag conveyors (DC-454, & 447) in series, maximum capacity of 5,000 bushels per hour each, each aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (22) One (1) dry soybean transfer bucket elevator #304, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #10, and exhausting at stack Pt # S-2.
- (23) One (1) totally enclosed dry soybean drag conveyor (DC-400A), maximum capacity of 5,000 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
- (24) One (1) soybean Thayer scale, maximum capacity of 5000 bushels per hour, controlled by a baghouse #3, and exhausting at stack Pt # S-7.
- (25) Two (2) weed seed bins (#207 & 208).
- (26) Two (2) totally enclosed soybean screw conveyors (SC 213 & 214), maximum capacity of 150 bushels per hour.
- (27) One (1) totally enclosed soybean screw conveyor (SC 215), maximum capacity of 5000 bushels per hour.
- (28) Three (3) totally enclosed soybean drag conveyors (DC-427, 428, & 429) in series, maximum capacity of 5,000 bushels per hour each.
- (29) One (1) totally enclosed dry soybean drag conveyor (DC-400), maximum capacity of 3350 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
- (30) Five (5) soybean surge bins.
- (31) Five (5) soybean cracking rolls.
- (32) Two (2) totally enclosed cracked soybean drag conveyor (DC-401 & 403), maximum capacity of 3350 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
- (33) One (1) primary Kice #1, maximum capacity of 3350 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
- (34) Two (2) totally enclosed cracked soybean screw conveyors (SC-201 & 202), in series, maximum capacity of 3350 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
- (35) One (1) triple S shaker, maximum capacity of 3350 bushels per hour, controlled by a baghouse #3, and exhausting at stack Pt # S-7.
- (36) One (1) hull grinding, maximum capacity of 150 bushels per hour, controlled by a cyclone #3, and a baghouse #3, and exhausting at stack Pt # S-7.
- (37) One (1) coarse cut aspiration, maximum capacity of 150 bushels per hour, controlled by a cyclone #1, and a baghouse #3, and exhausting at stack Pt # S-7.
- (38) One (1) fine cut aspiration, maximum capacity of 150 bushels per hour, controlled by a cyclone #2, and a baghouse #3, and exhausting at stack Pt # S-7.
- (39) One (1) rotary conditioner, maximum capacity of 3350 bushels per hour, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
- (40) Four (4) totally enclosed conditioned soybean drag conveyor (DC-404, 405, 406 & 407), maximum capacity of 3350 bushels per hour, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
- (41) Two (2) flaker banks #1 & 2, maximum capacity of 100.5 tons per hour each, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
- (42) Two (2) totally enclosed soybean flake screw conveyors (SC-206 & 207), maximum capacity of 100.5 tons per hour each, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
- (43) One (1) totally enclosed soybean flake drag conveyor (DC-409), maximum capacity 100.5 tons per hour, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
- (44) One (1) totally enclosed soybean flake drag conveyor (DC-410), maximum capacity of 100.5 tons per hour, and exhausting at steam vents.

**Facility Description {326 IAC 2-7-5(15):**

- (45) One (1) totally enclosed soybean flake drag conveyor (DC-411), maximum capacity of 100.5 tons per hour, and exhausting at safety vent.
- (46) One (1) totally enclosed soybean flake screw conveyor (SC-209), maximum capacity of 100.5 tons per hour.
- (47) One (1) dryer deck #1, maximum capacity of 100.5 tons per hour, with a material handling cyclone, and exhausting at stack Pt # S-11.
- (48) One (1) dryer deck #2, maximum capacity of 100.5 tons per hour, with a material handling cyclone, and exhausting at stack Pt # S-12.
- (49) One (1) totally enclosed soybean meal drag conveyor (DC-414), maximum capacity of 100.5 tons per hour.
- (50) One (1) meal cooler #1, maximum capacity of 100.5 tons per hour, with a material handling cyclone, and exhausting at stack Pt # S-25.
- (51) One (1) meal cooler #2, maximum capacity of 100.5 tons per hour, with a material handling cyclone, and exhausting at stack Pt # S-21.
- (52) Two (2) totally enclosed soybean meal drag conveyors (DC 414A & 415), in series, maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (53) Three (3) meal sifters.
- (54) One (1) totally enclosed oversized soybean meal drag conveyor (DC 416), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (55) One (1) totally enclosed soybean meal screw conveyor (SC 223), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (56) Three soybean meal grinders maximum total capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (57) One (1) totally enclosed soybean meal screw conveyor (SC 221), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (58) One (1) totally enclosed soybean meal drag conveyor (DC 417), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (59) One (1) dry soybean meal transfer bucket elevator (BE 300), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (60) Two (2) totally enclosed dry soybean meal drag conveyors (DC 418 & 419), in series, maximum capacity of 100.5 tons per hour aspirated to a baghouse #2, and exhausting at stack Pt # S-6.
- (61) One (1) truck soybean meal, and hull loadout system, maximum capacity of 200 tons per hour controlled by a baghouse #5, and exhausting at stack Pt # S-14.
- (62) One (1) rail soybean meal, and hull loadout system, maximum capacity of 200 tons per hour controlled by a baghouse #5, and exhausting at stack Pt # S-14.
- (63) One (1) pneumatic flake conveying system consisting of two material handling baghouses #6 and 7, maximum capacity of 31.5 tons per hour, and exhausting at stack Pts # S-22 and 23.
- (64) One (1) pneumatic reject flake conveying system consisting of one baghouse #8, maximum capacity of 9 tons per hour, and exhausting at stack Pt # S-24.
- (65) One (1) totally enclosed soybean flake screw conveyor, maximum capacity of 9 tons per hour (SC 218).
- (66) Two (2) totally enclosed soybean flake drag conveyors (DC 461 & 462), in series, maximum capacity of 200 tons per hour.
- (67) One (1) soybean flake loadout system, maximum capacity of 200 tons per hour controlled by a baghouse #7, and exhausting at stack Pt # S-23.
- (68) One (1) pneumatic hull conveying system consisting of one material handling filter separator, maximum capacity of 4.5 tons per hour, and exhausting at stack Pts # S4.
- (69) One (1) desolventizer toaster, maximum capacity of 100.5 tons per hour, controlled by a mineral oil absorber system.

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

- (70) One (1) flake desolventizer system, maximum capacity of 100.5 tons per hour, controlled by a mineral oil absorber system.
- (71) One (1) mineral oil absorber system.
- (72) One (1) 48% meal tank.
- (73) One (1) 44% meal tank.
- (74) One (1) boiler, identified as Boiler #2, constructed in 1996, with a heat input capacity of 75.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels. Emissions are exhausted to stack S-17.
- (75) One (1) boiler, identified as Boiler #1, constructed in 1955, with a heat input capacity of 60.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels. Emissions are exhausted to stack S-16.
- (76) Two (2) hexane tanks #809 A & B vented to the process or vented through the flame arrester.
- (77) Three (3) fuel oil storage tanks #860 A, B, and C, maximum capacity of 25,000 gallons each.
- (78) One (1) fuel oil storage tanks #815, maximum capacity of 125,000 gallons.

(The information describing the process contained in this facility 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 [326 IAC 2-2] [40 CFR 52.21]**

Pursuant to SSM157-11361-00038, issued on December 3, 2001,

- (a) The soybean processed by the plant shall be limited to 821,250 tons per twelve- (12) consecutive month period, with compliance demonstrated at the end of each month.
- (b) The soybean received by the dump bed trucks shall be limited to 82,125 tons per twelve- (12) -consecutive month period, with compliance demonstrated at the end of each month.
- (c) The reject flakes loadout shall be limited to 2,400 tons per twelve (12)- consecutive month period, with compliance demonstrated at the end of each month.
- (d) The following facilities' PM, and PM<sub>10</sub> emissions rates shall be limited as follows:

Facility	Control	Air Flow Rate Limit (dscfm)	Grain Loading (gr/dscf)	PM Limit (lbs/hour)	PM <sub>10</sub> Limit (lbs/hour)
Grain receiving system	Baghouse #4	14,000	0.003	0.360	0.360
Grain storage loading		infinite	0.01	15.0	8.36
Grain storage unloading	Baghouse #10	24,000	0.003	0.617	0.617
Bean screener	Baghouse #1	14,000	0.0033	0.136	0.4
Grain dryer		-	-	49.5	12.4
Grain tanks and silos loading		-	-	3.05	1.72
Grain tanks and silos unloading	Baghouse #9	16,200	0.003	0.417	0.417
Soybean cracking & hulling system	Baghouse #3	21,000	0.03	0.540	0.540



process area by flammable gas monitors. The leak check shall be conducted in conjunction with the annual maintenance shutdown of the facility.

For emergency repairs and/or maintenance completed between annual maintenance shutdowns, a leak check shall be completed on the affected system before hexane is reintroduced into the system. Any leaks detected shall be repaired prior to introducing hexane into the system.

- (1) 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 within five days and be completed within 15 days of detecting the leaking components. If the repair can not be accomplished within 15 days, then the Permittee shall send a notice of inability to repair to the OAQ within 20 days of detecting the leak. The notice must be received by the Compliance Branch, Office of Air Quality, 100 North Senate Avenue, Indianapolis, IN 46204-2251 within 20 days after the leak was detected. At a minimum the notice shall include the following:
  - (A) Equipment, operator, and instrument identification number, and date of leak detection
  - (B) Measured concentration (ppm) and background (ppm)
  - (C) Leak identification number associated with the corresponding tag
  - (D) Reason of inability to repair within 5 to 15 days of detection

**D.1.3 General Provisions Relating to NESHAP [40 CFR Part 60, Subpart GGGG 63.2850]**

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The provisions of 40 CFR 63.2850 (a) - General Provisions apply to the conventional and specialty soybean extraction processes described in this section.

**D.1.4 HAP Emissions from Solvent Extraction for Vegetable Oil Production NESHAP [40 CFR Part 60, Subpart GGGG 63.2840]**

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- (a) The conventional soybean process is subject to 40 CFR 63.2840 with a compliance date of three years after April 12, 2001, the effective date of the rule. The solvent (hexane) loss from the conventional soybean process shall not exceed 0.2 gallons per ton of soybeans processed.
- (b) The specialty soybean process is subject to 40 CFR 63.2840 upon startup. The solvent (hexane) loss from the specialty soybean process shall not exceed 1.5 gallons per ton of soybeans processed.

**D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determinations Requirements**

**D.1.6 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]**

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During the period between 6 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.1.1, and D.1.2 (a) the Permittee shall perform PM, PM<sub>10</sub>, and VOC testing for the facilities shown below utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five- (5) years from the date of this valid compliance demonstration. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. Testing shall be conducted in accordance with Section C. Performance Testing.



- | (a) | Facilities                      | <u>Pollutant/Opacity</u>     |
|-----|---------------------------------|------------------------------|
|     | Receiving area baghouse (#4)    | PM/PM <sub>10</sub> /Opacity |
|     | Receiving area baghouse (#10)   | PM/PM <sub>10</sub> /Opacity |
|     | Storage tank area baghouse (#9) | PM/PM <sub>10</sub> /Opacity |
|     | Screening area baghouse (#1)    | PM/PM <sub>10</sub> /Opacity |
|     | Mineral oil absorber            | VOC, Mineral oil flow rate   |
- (b) Cargill, Inc. shall develop a representative stack testing plan which identifies the method in which emissions from the following sources shall be evaluated to determine compliance with Condition No. D.1.1 and D.1.2(a) within 6 months after issuance of this Part 70 permit. Cargill, Inc. shall submit the stack testing plan for review and approval by IDEM. Cargill, Inc will implement the plan after approval by IDEM. The facilities listed in condition D.1.6(a) above may be proposed as representative facilities.
- |   |                      |
|---|----------------------|
| Cracking system bag house (#3)                  | PM, PM <sub>10</sub> |
| Flaking Cyclone #4                              | PM, PM <sub>10</sub> |
| DTDC meal dryer<br>(Cyclones #6 and #7)         | PM, PM <sub>10</sub> |
| DTDC meal coolers<br>(Cyclones #8 and #9)       | PM, PM <sub>10</sub> |
| Flake loadout (Baghouse #7)                     | PM, PM <sub>10</sub> |
| Meal sizing and screening<br>(Baghouse #2)      | PM, PM <sub>10</sub> |
| Truck/rail, meal/hull load out<br>(Baghouse #5) | PM, PM <sub>10</sub> |
- (c) Whenever the results of the stack test performed exceed the level specified in this permit, appropriate corrective actions shall be implemented within thirty (30) days of receipt of the test results. These corrective actions shall be implemented immediately unless notified by OAQ that they are unacceptable. The Permittee shall take reasonable steps to minimize emissions while the corrective actions are being implemented.
- (d) Whenever the results of the stack test performed exceed the level specified in this permit, a second test to demonstrate compliance shall be performed within 120 days. Failure of the second test to demonstrate compliance may be grounds for immediate revocation of this permit to operate the affected facility.

D.1.7 VOC (BACT) Compliance [326 IAC 2-2 and 40 CFR 52.21]

Compliance with Condition D.1.2 (a) shall be demonstrated within 30 days of the end of each month by determining average of twelve (12) consecutive months period of the followings:

- (a) The amount of VOC (hexane) used per calendar month.
- (b) The amount of soybean processed by the conventional and specialty processes.

- (c) The gallons of hexane used per ton of soybean processed by the conventional and specialty processes.

D.1.8 HAP (MACT) Compliance [40 CFR 60, Subpart GGGG]

Compliance with Condition D.1.4 shall be demonstrated in the following manner:

- (a) Calculate a compliance ratio, which compares the actual HAP loss to the allowable HAP loss for the previous 12 operating months. An operating month, as defined in 40 CFR 63.2872, Subpart GGGG, is any calendar month in which a source processes soybean, excluding any calendar month in which the source operated under an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2) or a malfunction period subject to 40 CFR 63.2850(e)(2). The equation to calculate a compliance ratio follows:

(1) Compliance Ratio = (Actual HAP loss)/( Allowable HAP loss) (Eq. 1)

- (2) Equation 1 can also be expressed as a function of total solvent loss as shown in Equation 2.

(3) Compliance Ratio = [f\* Actual Solvent Loss]/

$$0.64[ \{(Soybean\ processed)_C * (SLF_C)\} + \{(Soybean\ processed)_S * (SLF_S)\}] \quad (Eq. 2)$$

f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating month, as determined in 40 CFR 63.2854, dimensionless

0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless

Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months, as determined in 40 CFR 63.2853

SLF<sub>S</sub> = 1.5 gals/ton (for new source, specialty soybean process) as listed in Table 1 of 40 CFR 63.2840

SLF<sub>C</sub> = 0.2 gals/ton (for existing source, conventional soybean process) as listed in Table 1 of 40 CFR 63.2840

- (b) When the source has processed soybean for 12 operating months, calculate the compliance ratio by the end of each calendar month following an operating month using Equation 2. When calculating the compliance ratio, consider the following conditions and exclusions in paragraphs (b)(1) through (6):
- (1) If soybean is processed in a calendar month and the process is not operating under an initial startup period or malfunction period subject to 40 CFR 60.2850, then that month is categorized as an operating month, as defined in 40 CFR 63.2872.
- (2) The 12 month compliance ratio may include operating months prior to a source shutdown and operating months that follow after the source resumes operation.
- (3) If the source shuts down and processes no soybean for an entire calendar month as a non operating month, as defined in 40 CFR 63.2872, exclude any non operating months from the compliance ratio determination.

- (4) If the source is subject to an initial startup period as defined in 40 CFR 63.2872, exclude from the compliance ratio determination any solvent and soybean information recorded for the initial startup period.
- (5) If the source is subject to a malfunction period as defined in 40 CFR 63.2872, exclude from the compliance ratio determination any solvent and soybean information recorded for the malfunction period.
- (6) The solvent loss factor to determine the compliance ratio may change each operating month depending on the tons of soybean processed during all normal operating periods in a 12 operating month period.
- (c) If the compliance ratio is less than or equal to 1.00, then the source was in compliance with the HAP emission requirements for the previous operating month.
- (d) The Permittee shall develop and implement a written plan in accordance with 40 CFR 63.2851 that provides the detailed procedures to monitor and record data necessary for demonstrating compliance with this subpart.
- (e) The Permittee shall develop a written SSM (Startup, Shutdown, and Malfunction) in accordance with 40 CFR 63.6(e)(3), and implement the plan, when applicable. The Permittee must complete the SSM plan before the compliance date for this source.
- (f) The SSM plan provides detailed procedures for operating and maintaining the source to minimize emissions during a qualifying SSM event for which the source chooses the 40 CFR 63.2850(e)(2) malfunction period, or the 40 CFR 63.2850(c)(2) or (d)(2) initial startup period. The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions.

#### D.1.9 Particulate Matter (PM) and Particulate Matter 10 (PM<sub>10</sub>)

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In order to comply with D.1.1, the baghouses and cyclones shall be in operation and control emissions from the associated facilities at all times when the associated facilities are in operation.

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

#### D.1.10 Visible Emissions Notations

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- (a) Visible emission notations of the stack exhaust S-13, S-2, S-3, S-20, S-1, S-7, S-5, S-11, S-12, S-21, S-25, S-6, S-14, S-4, S-8, S-22, S-23, and S-24 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 in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances,

shall be considered a deviation from this permit.

#### D.1.11 Parametric Monitoring

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The Permittee shall record the pressure drop across the baghouses used in conjunction with the process, at least once per day when the process is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 0.5 and 6 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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 at least once every six (6) months.

#### D.1.12 Broken or Failed Bag Detection

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

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

#### D.1.13 Cyclone Failure

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In the event that cyclone failure has been observed:

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). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

#### D.1.14 Mineral Oil Absorber

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- (a) The absorber shall operate at all times the oil extractor process is in operation at an average mineral oil flow rate as recommended by the manufacturer.
- (b) The Permittee shall monitor and record the mineral oil flow rate at least once per day. The Preventive Maintenance Plan for the absorber shall contain troubleshooting contingency and corrective actions for when the flow rate readings are outside of the normal range for any one reading.
- (c) The instruments used for determining the flow rate shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (d) The gauge employed to read the mineral oil flow across the scrubber shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within  $\pm 10\%$  of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
- (e) In the event that the absorber's failure has been observed, an inspection will be conducted. Based upon the findings of the inspection, any corrective actions will be devised within twenty-four (24) hours of discovery and will include a timetable for completion.
- (f) The mineral oil to the mineral-oil-stripping column shall be kept a minimum of 180°F for adequate stripping of the absorbed hexane from the oil. When the process is in operation, an electronic data management system (EDMS) shall record the instantaneous temperature on a frequency of not less than every two hours. As an alternate to installing an EDMS, manual readings shall be taken every two hours.

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

#### **D.1.15 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records of the following:
  - (1) visible emission notations of the stack exhaust required under Condition D.1.10.
  - (2) readings of pressure drop across the bag houses during normal operation required under Condition D.1.11.
- (b) To document compliance with Conditions D.1.2 (a) and D.1.14, the Permittee shall maintain records of the following:
  - (1) The amount of VOC (hexane) used per calendar month.
  - (2) The amounts of soybean processed by the conventional and specialty processes.
  - (3) The gallons of hexane used per ton of soybean processed by the conventional and specialty processes
  - (4) The daily record of the mineral oil flow rate to the mineral oil absorber
  - (5) The events of the absorber's failure, findings of the inspections subsequent to absorber's failure, the corrective actions taken, and the time table for completion
  - (6) The operating temperatures of the mineral oil absorber
  - (7) The temperature of the mineral oil stripping column
- (c) To document compliance with Condition D.1.2(b),
  - (1) 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.

- (2) 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 within 5 to 15 days of detection;
  - (F) Maintenance recheck if repaired-date, concentration, background; and
  - (G) Any appropriate comments.
- (d) To document compliance with Condition D.1.4, the Permittee shall maintain records of the followings:
  - (1) For the first twelve months, record the items in paragraphs 40 CFR 63.2862(c)(1) through (c)(3).
  - (2) After the source has processed soybeans for 12 operating months, and the source is not operating during an initial startup period as described in 40 CFR 63.2850(c)(2) or (d)(2), or a malfunction period as described in 40 CFR 63.2850(e)(2), record the items in 40 CFR 63.2862(d)(1) through (5) by the end of calendar month following each operating month.
  - (3) For each SSM event subject to an initial startup period as described in 40 CFR 63.2850(c)(2) or (d)(2), or a malfunction period as described in 40 CFR 63.2850(e)(2), record the items in 40 CFR 63.2862(e)(1) through (3).
  - (4) The Permittee shall keep the compliance plan and SSM plan on-site and readily available as long as the source is operational.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit, and 40 CFR 63.2862.

#### D.1.16 Reporting Requirements

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- (a) A summary of the information to document compliance with Conditions D.1.1 and D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the reporting period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) Annual compliance certification -The first annual compliance certification for NESHAP requirements of 40 CFR 63, Part GGGG, is due 12 calendar months after the source submits the notification of compliance status. Each annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. The report should include the information in paragraphs 40 CFR 63.2661(a)(1) through (6).

- (c) Deviation notification report - Submit a deviation notification report for each compliance determination in which the compliance ratio exceeds 1.0 as determined under 40 CFR 63.2840(c). Submit the deviation report by the end of the month following the calendar month in which you determined the deviation. The deviation notification report must include the items in paragraphs 40 CFR 63.2861(b)(1) through (4).
- (d) Periodic startup, shutdown, and malfunction report – If the source is operating under an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2) or a malfunction period subject to 40 CFR 63.2850(e)(2), submit the periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the items in paragraphs 40 CFR 63.2861(c)(1) through (3).
- (e) Intermediate SSM reports – If the source handles a SSM during an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2) or a malfunction period subject to 40 CFR 63.2850(e)(2) differently from procedures in SSM plan, then submit an immediate SSM report. Intermediate reports consists of a telephone call or facsimile transmission to the responsible agency within 2 working days after starting actions consistent with the SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the items in 40CFR 63.2861(d)(1) through (3).

**Note: After the Significant Source Modification 157-11361 becomes operational, the Permittee shall follow the conditions contained in Section D.2 instead of Section D.1. This will not have any effect on other D sections.**

## SECTION D.2

## FACILITY OPERATION CONDITIONS

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

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

### Emissions Units Permitted on December 3, 2001

- (1) One (1) first stage rising film evaporator associated with the solvent extraction equipment (EU-13) with a maximum capacity of 20 tons of soybean oil per hour, controlled by the mineral oil system and exhausted at stack point S-15.
- (2) One (1) Iso-hexane conversation system involving a rotocell condenser, a refrigerant type cooler with condenser and an additional cooling tower cell and pump, volatile organic compounds (VOC) emissions controlled by the mineral oil system and exhausted at stack point S-15.
- (3) One (1) column grain dryer (EU-4) with column plate perforation less than or equal to 2.4 mm diameter (0.094 inch) with a maximum capacity of 7,500 bushels per hour (225 tons per hour) exhausted at stack point S-20.
- (4) One (1) solvent/water separator with a maximum capacity of 600 gallons per minute, controlled by the mineral oil system and exhausted at stack point S-15.
- (5) Five (5) sets of cracking rolls (EU-6) with a maximum capacity of 3,350 bushels per hour (100.5 tons per hour), controlled by bag house #3 and exhausted at stack point S-7.
- (6) One (1) flaker aspiration system that collects and delivers dust from flakers (EU-11) to cyclone #4 and exhausted at stack point S-5.
- (7) Three (3) dust collection systems for bag house #4 exhausting at stack point S-13; baghouse #3 exhausting at stack point S-7; and cyclone #4 exhausting at stack point S-5.
- (8) One (1) FDS system cooler collector, exhausted at stack point S-22.
- (9) Two (2) expanders (EU-12) with a maximum capacity of 833 bushels per hour (25 ton per hour), controlled by cyclone #4 and exhausted at stack point S-5.
- (10) One (1) conveyor, DC400 with a maximum capacity of 3,350 bushels per hour, controlled by baghouse #3, and exhausted at stack point S-7.
- (11) One (1) conveyor, DC409, with a maximum capacity of 3,350 bushels per hour, controlled by cyclone #4, exhausted at stack point S-5.
- (12) Two (2) fully enclosed, sealed conveyors, DC412, and DC413, and DC seal screw with a maximum capacity of 3,350 bushels per hour.
- (13) One (1) deaerator tank with a maximum capacity of 130 gallons per minute.
- (14) One (1) rail soybean unloading system with a maximum unloading capacity of 20,000 bushels per hour; controlled by baghouse #10; and exhausted at stack point S-2.
- (15) One (1) desolventizer/toaster (EU-16) with two integral meal dryers with a maximum capacity of 3,350 bushels per hour; controlled by the mineral oil system; and exhausted at stack points S-15, S-11 and S-12.
- (16) One (1) meal cooler (EU-18) with a maximum capacity of 3,350 bushels per hour and exhausted at stack point S-21.
- (17) One (1) meal dryer (EU-17) with a maximum capacity of 3,350 bushels per hour and exhausted at stack point S-25.
- (18) Two (2) main transfer legs (north and south elevators).
- (19) One (1) second stage rising film evaporator associated with the solvent extraction process (EU-13) with a maximum capacity of 20 tons of soybean oil per hour, controlled by the mineral oil system, and exhausted at stack point S-15.
- (20) One (1) liquid brine tank.
- (21) One (1) bean truck scale with an enlarged pit.

- (22) One (1) mineral oil system with a maximum capacity of 150 pounds of hexane per hour, and exhausted at stack point S-15.
- (23) One (1) final vent condenser with a maximum capacity of 1100 pounds of hexane per hour, and exhausted at stack point S-15.
- (24) One (1) flaker (#2 Flaker) with a maximum capacity of 400 bushels per hour, controlled by cyclone #9, and exhausted at stack point S-5.
- (25) One (1) hull grinder.
- (26) One (1) pod grinder.

**Permitted and Existing before December 3, 2001**

- (1) One (1) truck soybean receiving pit, maximum capacity of 25,000 bushels per hour, controlled by a receiving area baghouse #4, and exhausting at stack Pt # S-13.
- (2) One (1) totally enclosed truck soybean receiving pit drag conveyor (DC-431), maximum capacity of 25,000 bushels per hour aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (3) One (1) totally enclosed soybean receiving pit drag conveyor (DC-432), maximum capacity of 25,000 bushels per hour aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (4) One (1) soybean receiving bucket elevator #301, maximum capacity of 25,000 bushels per hour, controlled by a baghouse #10, and exhausting at stack Pt # S-2.
- (5) Three (3) totally enclosed soybean drag conveyors (DC-441, 442, & 443) in series, maximum capacity of 25,000 bushels per hour, each aspirated to baghouse #9, and exhausting at stack Pt # S-1.
- (6) One (1) totally enclosed soybean drag conveyor (DC-434), maximum capacity of 25,000 bushels per hour aspirated to baghouse #9, and exhausting at stack Pt # S-1.
- (7) Four (4) steel soybean storage tanks, total capacity of 1,213,000 bushels.
- (8) Two (2) totally enclosed soybean drag conveyors (DC-436, & 437) in series, maximum capacity of 5,000 bushels per hour, each aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (9) Two (2) totally enclosed soybean drag conveyors (DC-444, & 446) in series, maximum capacity of 5,000 bushels per hour, each aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (10) One (1) soybean transfer bucket elevator #303, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #10, and exhausting at stack Pt # S-2.
- (11) One (1) Texas shaker #2 screener, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #1, and exhausting at stack Pt # S-3.
- (12) One (1) weed seed Kice, maximum capacity of 150 bushels per hour, controlled by a baghouse #1, and exhausting at stack Pt # S-3.
- (13) One (1) Kice #1 screener, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #1, and exhausting at stack Pt # S-3.
- (14) Two (2) totally enclosed soybean drag conveyors (DC-448, & 448A) in series, maximum capacity of 5,000 bushels per hour, each aspirated to baghouse #1, and exhausting at stack Pt # S-3.
- (15) One (1) totally enclosed soybean screw conveyor (SC212), maximum capacity of 150 bushels per hour.
- (16) One (1) 29 MMBtu natural gas fired soybean column dryer, maximum capacity of 5000 bushels per hour and exhausting at stack Pt # S-20.
- (17) Two (2) totally enclosed soybean drag conveyors (DC-449, & 450) in series, maximum capacity of 5,000 bushels per hour, each aspirated to baghouse #9, and exhausting at stack Pt # S-1.
- (18) One (1) dry soybean transfer bucket elevator #307, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #10, and exhausting at stack Pt # S-2.
- (19) One (1) totally enclosed dry soybean drag conveyor (DC-453), maximum capacity of 5,000 bushels per hour, aspirated to baghouse #9, and exhausting at stack Pt # S-1.
- (20) Eighteen (18) soybean bins (501, 502, 503, 506, 507, 508, 511, 512, 513, 516, 517, 518, 521, 522, 523, 526, 527, and 528), maximum total capacity of 261,000 bushels.
- (21) Two (2) totally enclosed soybean drag conveyors (DC-454, & 447) in series, maximum capacity of 5,000 bushels per hour each, each aspirated to baghouse #10, and exhausting at stack Pt # S-2.
- (22) One (1) dry soybean transfer bucket elevator #304, maximum capacity of 5,000 bushels per hour, controlled by a baghouse #10, and exhausting at stack Pt # S-2.
- (23) One (1) totally enclosed dry soybean drag conveyor (DC-400A), maximum capacity of 5,000 bushels

- per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
- (24) One (1) soybean Thayer scale, maximum capacity of 5000 bushels per hour, controlled by a baghouse #3, and exhausting at stack Pt # S-7.
  - (25) Two (2) weed seed bins (#207 & 208).
  - (26) Two (2) totally enclosed soybean screw conveyors (SC 213 & 214), maximum capacity of 150 bushels per hour.
  - (27) One (1) totally enclosed soybean screw conveyor (SC 215), maximum capacity of 5000 bushels per hour.
  - (28) Three (3) totally enclosed soybean drag conveyors (DC-427, 428, & 429) in series, maximum capacity of 5,000 bushels per hour each.
  - (29) One (1) totally enclosed dry soybean drag conveyor (DC-400), maximum capacity of 3350 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
  - (30) Five (5) soybean surge bins.
  - (31) Five (5) soybean cracking rolls.
  - (32) Two (2) totally enclosed cracked soybean drag conveyor (DC-401 & 403), maximum capacity of 3350 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
  - (33) One (1) primary Kice #1, maximum capacity of 3350 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
  - (34) Two (2) totally enclosed cracked soybean screw conveyors (SC-201 & 202), in series, maximum capacity of 3350 bushels per hour, aspirated to baghouse #3, and exhausting at stack Pt # S-7.
  - (35) One (1) triple S shaker, maximum capacity of 3350 bushels per hour, controlled by a baghouse #3, and exhausting at stack Pt # S-7.
  - (36) One (1) hull grinding, maximum capacity of 150 bushels per hour, controlled by a cyclone #3, and a baghouse #3, and exhausting at stack Pt # S-7.
  - (37) One (1) coarse cut aspiration, maximum capacity of 150 bushels per hour, controlled by a cyclone #1, and a baghouse #3, and exhausting at stack Pt # S-7.
  - (38) One (1) fine cut aspiration, maximum capacity of 150 bushels per hour, controlled by a cyclone #2, and a baghouse #3, and exhausting at stack Pt # S-7.
  - (39) One (1) rotary conditioner, maximum capacity of 3350 bushels per hour, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
  - (40) Four (4) totally enclosed conditioned soybean drag conveyor (DC-404, 405, 406 & 407), maximum capacity of 3350 bushels per hour, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
  - (41) Two (2) flaker banks #1 & 2, maximum capacity of 100.5 tons per hour each, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
  - (42) Two (2) totally enclosed soybean flake screw conveyors (SC-206 & 207), maximum capacity of 100.5 tons per hour each, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
  - (43) One (1) totally enclosed soybean flake drag conveyor (DC-409), maximum capacity 100.5 tons per hour, controlled by a cyclone #4, and exhausting at stack Pt # S-5.
  - (44) One (1) totally enclosed soybean flake drag conveyor (DC-410), maximum capacity of 100.5 tons per hour, and exhausting at steam vents.
  - (45) One (1) totally enclosed soybean flake drag conveyor (DC-411), maximum capacity of 100.5 tons per hour, and exhausting at safety vent.
  - (46) One (1) totally enclosed soybean flake screw conveyor (SC-209), maximum capacity of 100.5 tons per hour.
  - (47) One (1) dryer deck #1, maximum capacity of 100.5 tons per hour, with a material handling cyclone, and exhausting at stack Pt # S-11.
  - (48) One (1) dryer deck #2, maximum capacity of 100.5 tons per hour, with a material handling cyclone, and exhausting at stack Pt # S-12.
  - (49) One (1) totally enclosed soybean meal drag conveyor (DC-414), maximum capacity of 100.5 tons per hour.
  - (50) One (1) meal cooler #1, maximum capacity of 100.5 tons per hour, with a material handling cyclone, and exhausting at stack Pt # S-25.
  - (51) One (1) meal cooler #2, maximum capacity of 100.5 tons per hour, with a material handling cyclone, and exhausting at stack Pt # S-21.
  - (52) Two (2) totally enclosed soybean meal drag conveyors (DC 414A & 415), in series, maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.

- (53) Three (3) meal sifters.
- (54) One (1) totally enclosed oversized soybean meal drag conveyor (DC 416), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (55) One (1) totally enclosed soybean meal screw conveyor (SC 223), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (56) Three soybean meal grinders maximum total capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (57) One (1) totally enclosed soybean meal screw conveyor (SC 221), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (58) One (1) totally enclosed soybean meal drag conveyor (DC 417), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (59) One (1) dry soybean meal transfer bucket elevator (BE 300), maximum capacity of 100.5 tons per hour controlled by a baghouse #2, and exhausting at stack Pt # S-6.
- (60) Two (2) totally enclosed dry soybean meal drag conveyors (DC 418 & 419), in series, maximum capacity of 100.5 tons per hour aspirated to a baghouse #2, and exhausting at stack Pt # S-6.
- (61) One (1) truck soybean meal, and hull loadout system, maximum capacity of 200 tons per hour controlled by a baghouse #5, and exhausting at stack Pt # S-14.
- (62) One (1) rail soybean meal, and hull loadout system, maximum capacity of 200 tons per hour controlled by a baghouse #5, and exhausting at stack Pt # S-14.
- (63) One (1) pneumatic flake conveying system consisting of two material handling baghouses #6 and 7, maximum capacity of 31.5 tons per hour, and exhausting at stack Pts # S-22 and 23.
- (64) One (1) pneumatic reject flake conveying system consisting of one baghouse #8, maximum capacity of 9 tons per hour, and exhausting at stack Pt # S-24.
- (65) One (1) totally enclosed soybean flake screw conveyor, maximum capacity of 9 tons per hour (SC 218).
- (66) Two (2) totally enclosed soybean flake drag conveyors (DC 461 & 462), in series, maximum capacity of 200 tons per hour.
- (67) One (1) soybean flake loadout system, maximum capacity of 200 tons per hour controlled by a baghouse #7, and exhausting at stack Pt # S-23.
- (68) One (1) pneumatic hull conveying system consisting of one material handling filter separator, maximum capacity of 4.5 tons per hour, and exhausting at stack Pts # S4.
- (69) One (1) desolventizer toaster, maximum capacity of 100.5 tons per hour, controlled by a mineral oil absorber system.
- (70) One (1) flake desolventizer system, maximum capacity of 100.5 tons per hour, controlled by a mineral oil absorber system.
- (71) One (1) mineral oil absorber system.
- (72) One (1) 48% meal tank.
- (73) One (1) 44% meal tank.
- (74) One (1) boiler, identified as Boiler #2, constructed in 1996, with a heat input capacity of 75.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels. Emissions are exhausted to stack S-17.
- (75) One (1) boiler, identified as Boiler #1, constructed in 1955, with a heat input capacity of 60.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels. Emissions are exhausted to stack S-16.
- (76) Two (2) hexane tanks #809 A & B vented to the process or vented through the flame arrester.
- (77) Three (3) fuel oil storage tanks #860 A, B, and C, maximum capacity of 25000 gallons each.
- (78) One (1) fuel oil storage tank #815, maximum capacity of 125000 gallons.

#### Facility Description: Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.
- (2) Propane or liquid petroleum gas, or butane fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.

- (3) Combustion source flame safety purging on startup.
- (4) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
- (5) Vessels storing lubricating oils, hydraulic oils, and machining fluids.
- (6) Cleaners and solvents characterized as follows:
  - (A) Having a vapor pressure equal to or less than 2kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or,
  - (B) Having a vapor pressure equal to or less than 0.7kPa; 5mm Hg; or 0.1 psi measured at 20 degrees C (60°F) or;The use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (7) Closed loop heating and cooling systems.
- (8) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (9) Forced and induced draft cooling tower not regulated under a NESHAP.
- (10) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (11) Heat exchanger cleaning and repair.
- (12) Process vessel degassing and cleaning to prepare for internal repairs.
- (13) Asbestos abatement projects regulated by 326 IACC 14-10.
- (14) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks temporary liquid separators, tanks, and fluid handling equipment.
- (15) Blowdown for any of the following: sight glass, boiler, compressors, pumps, and cooling tower.
- (16) Stationary fire pumps. Purge double block and bleed valves.
- (17) A laboratory as defined in 326 IAC 2-7-1(20(C)).
- (18) Other categories with emissions below insignificant thresholds:
  - (A) Storage tanks emitting less than one (1) ton per year of a single HAP and less than fifteen (15) pounds per day of VOC.
    - (i) Three (3) fuel oil storage tanks #860 A, B, and C, constructed in 1960, and maximum capacity of 25,000 gallons each.
    - (ii) One (1) fuel oil storage tank #815, constructed in 1960, and maximum capacity of 125,000 gallons.

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

#### **D.2.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]**

Pursuant to SSM157-11361-00038, issued on December 3, 2001,

- (a) The soybean processed by the plant shall be limited to 821,250 tons per twelve-(12) consecutive month period, with compliance demonstrated at the end of each month.
- (b) The soybean received by the dump bed trucks shall be limited to 82,125 tons per twelve-(12)-consecutive month period, with compliance demonstrated at the end of each month.
- (c) The reject flakes loadout shall be limited to 2,400 tons per twelve (12)- consecutive month period, with compliance demonstrated at the end of each month.
- (d) The following facilities' PM, and PM<sub>10</sub> emissions rates shall be limited as follows:

Facility	Control	Air Flow Rate Limit (dscfm)	Grain Loading (gr/dscf)	PM Limit (lbs/hour)	PM <sub>10</sub> Limit (lbs/hour)
Grain receiving system	Baghouse #4	14,000	0.003	0.360	0.360
Grain storage loading		infinite	0.01	15.0	8.36
Grain storage unloading	Baghouse #10	24,000	0.003	0.617	0.617
Bean screener	Baghouse #1	14,000	0.0033	0.136	0.4
Grain dryer		-	-	49.5	12.4
Grain tanks and silos loading		-	-	3.05	1.72
Grain tanks and silos unloading	Baghouse #9	16,200	0.003	0.417	0.417
Soybean cracking & hulling system	Baghouse #3	21,000	0.03	0.540	0.540
Soybean flaking	Cyclone #4	17,000	0.006	0.874	0.874
Hull transfer		320	0.003	0.008	0.008
DTDC meal dryers	Article II.	10,000	0.007	0.600	0.600
DTDC meal dryers		10,000	0.007	0.600	0.600
Meal coolers		8,000	0.015 (PM) 0.019 (PM <sub>10</sub> )	1.029	1.30
Meal coolers		8,000			
Meal sizing and grinding	Baghouse #2	5,500	0.005	0.236	0.236
FDS cooler collector	Baghouse #6	22,000	0.008	1.51	1.51
Meal and hull loadout	Baghouse #5	16,000	0.004	0.549	0.549
Flake loadout	Baghouse #7	10,000	0.004	0.343	0.343
Reject flake storage Based on 2400 tons of reject flake loadout	Baghouse #8	3,000	0.013	0.334	0.334
Hull blend back		320	0.01	0.027	0.027
Boiler no. 1 and 2		794.13 Million cubic feet of natural gas or equivalent		3.02 tons per year	3.02 tons per year

This soybean limitation is required to limit the potential to emit of PM, and PM<sub>10</sub> emissions of 140.2 and 72.6 tons per year, respectively.

Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable for PM and PM<sub>10</sub> emissions.

This will also satisfy the rule 326 IAC 6-3-2.

D.2.2 326 IAC 12 and 40 CFR 60, Subpart DD (New Source Performance Standards for Grain Elevators)

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Pursuant to 326 IAC 12 and 40 CFR 60, Subpart DD, on and after the date on which the performance test required to be conducted by 40 CFR Part 60.80 is completed, no gases from the following operations:

- (a) the grain receiving system baghouse (#4);
- (b) the grain storage silos vents;
- (c) the grain storage unloading baghouse (#10); and
- (d) the grain silo unloading baghouse (#9)

shall be discharged into the atmosphere, which

- (1) contain particulate matter in excess of 0.01 grains per dscf, and
- (2) exhibit greater than 0 percent opacity.

D.2.3 326 IAC 12 and 40 CFR 60 Subpart DD 60.302(c)

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Pursuant to 40 CFR 60 Subpart DD 60.302(c), and 326 IAC 12, no fugitive emissions from the truck unloading station, and grain handling operations shall exhibit greater than 5 percent, and 0 percent opacity, respectively.

D.2.4 Best Available Control Technology (BACT) [326 IAC 2-2-3] [40 CFR 52.21] [326 IAC 8-1-6]

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Pursuant to 326 IAC 2-2-3 (BACT Requirements) as determined in SSM 157-11361-00038, the Permittee shall control volatile organic compound (VOC) emissions from the conventional and the specialty soybean oil extraction processes as follows:

(a)	<u>Facility</u>	<u>Control</u>	<u>VOC (Hexane) Emission Limit</u>
	Oil extractor	Mineral oil absorber system	0.012 gal/ton soybean
	Meal dryers	None	0.0042 gal/ton soybean
	Meal cooler	None	0.0 gal/ton soybean
	FDS Cooler collector	None	0.391 gal/ton soybean
	Whole soybean extraction plant		0.503 gals/ton soybean processed
	Maximum annual soybean process throughput		821,250 tons

- (b) BACT for fugitive hexane loss shall include an annual leak check in accordance with Cargill's standard operating procedures accompanied by continuous monitoring of the process area by flammable gas monitors. The leak check shall be conducted in conjunction with the annual maintenance shutdown of the facility.

For emergency repairs and/or maintenance completed between annual maintenance shutdowns, a leak check shall be completed on the affected system before hexane is reintroduced into the system. Any leaks detected shall be repaired prior to introducing

hexane into the system.

- (1) 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 within five days and be completed within 15 days of detecting the leaking components. If the repair can not be accomplished within 15 days, then the Permittee shall send a notice of inability to repair to the OAQ within 20 days of detecting the leak. The notice must be received by the Compliance Branch, Office of Air Quality, 100 North Senate Avenue, Indianapolis, IN 46204-2251 within 20 days after the leak was detected. At a minimum the notice shall include the following:
  - (A) Equipment, operator, and instrument identification number, and date of leak detection
  - (B) Measured concentration (ppm) and background (ppm)
  - (C) Leak identification number associated with the corresponding tag
  - (D) Reason of inability to repair within 5 to 15 days of detection

**D.2.5 General Provisions Relating to NESHAP [40 CFR 60, Subpart GGGG 63.2850]**

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The provisions of 40 CFR 63.2850 (a) - General Provisions apply to the facility described in this section.

**D.2.6 HAP Emissions from Solvent Extraction for Vegetable Oil Production NESHAP [40 CFR 60, Subpart GGGG 63.2840]**

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- (a) The conventional soybean process is subject to 40 CFR 63.2840 with a compliance date of three years after April 12, 2001, the effective date of the rule. The solvent (hexane) loss from the conventional soybean process shall not exceed 0.2 gallons per ton of soybeans processed.
- (b) The specialty soybean process is subject to 40 CFR 63.2840 upon startup. The solvent (hexane) loss from the specialty soybean process shall not exceed 1.5 gallons per ton of soybeans processed.

**D.2.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

**D.2.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

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During the period between 6 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.2.1, D.2.2, and D.2.4 the Permittee shall perform PM, PM<sub>10</sub>, and VOC testing for the facilities shown below utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five- (5) years from the date of this valid compliance demonstration. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. Testing shall be conducted in accordance with Section C- Performance Testing.

- (a) Facilities            Pollutant/Opacity

Receiving area baghouse (#4)	PM/PM <sub>10</sub> /Opacity
Receiving area baghouse (#10)	PM/PM <sub>10</sub> /Opacity
Storage tank area baghouse (#9)	PM/PM <sub>10</sub> /Opacity
Screening area baghouse (#1)	PM/PM <sub>10</sub> /Opacity

- (b) Cargill, Inc. shall develop a representative stack testing plan which identifies the method in which emissions from the following sources shall be evaluated to determine compliance with Condition No. D.2.1, D.2.2 and D.2.4 within 6 months after issuance of this Part 70 permit. Cargill, Inc. shall submit the stack testing plan for review and approval by IDEM. Cargill, Inc will implement the plan after approval by IDEM. The facilities listed in condition D.2.8(a) above may be proposed as representative facilities.

Cracking system bag house (#3)	PM, PM <sub>10</sub>
Flaking Cyclone #4	PM, PM <sub>10</sub>
Mineral oil absorber	VOC, Mineral oil flow rate
DTDC meal dryer (Cyclones #6 and #7)	PM, PM <sub>10</sub> , VOC
DTDC meal coolers (Cyclones #8 and #9)	PM, PM <sub>10</sub>
Flake loadout (Baghouse #7)	PM, PM <sub>10</sub>
Meal sizing and screening (Baghouse #2)	PM, PM <sub>10</sub>
Truck/rail, meal/hull load out (Baghouse #5)	PM, PM <sub>10</sub>

- (c) Whenever the results of the stack test performed exceed the level specified in this permit, appropriate corrective actions shall be implemented within thirty (30) days of receipt of the test results. These corrective actions shall be implemented immediately unless notified by OAQ that they are unacceptable. The Permittee shall take reasonable steps to minimize emissions while the corrective actions are being implemented.
- (d) Whenever the results of the stack test performed exceed the level specified in this permit, a second test to demonstrate compliance shall be performed within 120 days. Failure of the second test to demonstrate compliance may be grounds for immediate revocation of this permit to operate the affected facility.

#### D.2.9 VOC (BACT) Compliance [326 IAC 2-2, and 40 CFR 52.21]

Compliance with Condition D.2.4 shall be demonstrated within 30 days of the end of each month by determining the average of twelve (12) consecutive month period of the followings:

- (a) The amount of VOC (hexane) used per calendar month.
- (b) The amounts of soybean processed by the conventional and specialty processes.
- (c) The gallons of hexane used per ton of soybean processed by the conventional and

specialty processes.

#### D.2.10 HAP (MACT) Compliance [[40 CFR 60, Subpart GGGG]

Compliance with Condition D.2.6 shall be demonstrated in the following manner:

- (a) Calculate a compliance ratio, which compares the actual HAP loss to the allowable HAP loss for the previous 12 operating months. An operating month, as defined in 40 CFR 63.2872, is any calendar month in which a source processes soybean, excluding any calendar month in which the source operated under an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2) or a malfunction period subject to 40 CFR 63.2850(e)(2). The equation to calculate a compliance ratio follows:

(1) Compliance Ratio = (Actual HAP loss)/( Allowable HAP loss) (Eq. 1)

- (2) Equation 1 can also be expressed as a function of total solvent loss as shown in Equation 2.

(3) Compliance Ratio =  $[f * \text{Actual Solvent Loss}] /$   
$$0.64 [ \{(\text{Soybean processed})_C * (\text{SLF}_C)\} + \{(\text{Soybean processed})_S * (\text{SLF}_S)\}]$$
 (Eq. 2)

f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating month, as determined in 40 CFR 63.2854, dimensionless

0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless

Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months, as determined in 40 CFR 63.2853

SLF<sub>S</sub> = 1.5 gals/ton (for new source, specialty soybean process) as listed in Table 1 of 40 CFR 63.2840

SLF<sub>C</sub> = 0.2 gals/ton (for existing source, conventional soybean process) as listed in Table 1 of 40 CFR 63.2840

- (b) When the source has processed soybean for 12 operating months, calculate the compliance ratio by the end of each calendar month following an operating month using Equation 2. When calculating the compliance ratio, consider the following conditions and exclusions in paragraphs (b)(1) through (6):
- (1) If soybean is processed in a calendar month and the process is not operating under an initial startup period or malfunction period subject to 40 CFR 60.2850, then that month is categorized as an operating month, as defined in 40 CFR 63.2872.
- (2) The 12 month compliance ratio may include operating months prior to a source shutdown and operating months that follow after the source resumes operation.
- (3) If the source shuts down and processes no soybean for an entire calendar month as a non operating month, as defined in 40 CFR 63.2872, exclude any non operating months from the compliance ratio determination.

- (4) If the source is subject to an initial startup period as defined in 40 CFR 63.2872, exclude from the compliance ratio determination any solvent and soybean information recorded for the initial startup period.
- (5) If the source is subject to a malfunction period as defined in 40 CFR 63.2872, exclude from the compliance ratio determination any solvent and soybean information recorded for the malfunction period.
- (6) The solvent loss factor to determine the compliance ratio may change each operating month depending on the tons of soybean processed during all normal operating periods in a 12 operating month period.
- (c) If the compliance ratio is less than or equal to 1.00, then the source was in compliance with the HAP emission requirements for the previous operating month.
- (d) The Permittee shall develop and implement a written plan in accordance with 40 CFR 63.2851 that provides the detailed procedures to monitor and record data necessary for demonstrating compliance with this subpart.
- (e) The Permittee shall develop a written SSM (Startup, Shutdown, and Malfunction) in accordance with 40 CFR 63.6(e)(3), and implement the plan, when applicable. The Permittee must complete the SSM plan before the compliance date for this source.
- (f) The SSM plan provides detailed procedures for operating and maintaining the source to minimize emissions during a qualifying SSM event for which the source chooses the 40 CFR 63.2850(e)(2) malfunction period, or the 40 CFR 63.2850(c)(2) or (d)(2) initial startup period. The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions.

#### D.2.11 Particulate Matter (PM) and Particulate Matter 10 (PM<sub>10</sub>)

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In order to comply with Conditions D.2.1, D.2.2 and D.2.3, the baghouses and cyclones shall be in operation and control emissions from the associated facilities at all times when the associated facilities are in operation.

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

#### D.2.12 Visible Emissions Notations

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- (a) Visible emission notations of the stack exhaust S-13, S-2, S-1, S-3, S-20, S-7, S-5, S-11, S-12, S-21, S-25, S-6, S-14, S-4, S-8, S-22, S-23, and S-24 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 in accordance with Section C - Response to Excursions or Exceedances. Failure to take

response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

#### D.2.13 Parametric Monitoring

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The Permittee shall record the pressure drop across the baghouses used in conjunction with the processes, at least once per day when the processes are in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 0.5 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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 at least once every six (6) months.

#### D.2.14 Broken or Failed Bag Detection

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

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

#### D.2.15 Cyclone Failure

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In the event that cyclone failure has been observed:

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). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

#### D.2.16 Mineral Oil Absorber

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- (a) The absorber shall operate at all times the oil extractor process is in operation at an average mineral oil flow rate to be determined at the time of the VOC (hexane) compliance test.
- (b) The Permittee shall monitor and record the mineral oil flow rate at least once per day. The Preventive Maintenance Plan for the absorber shall contain troubleshooting contingency and corrective actions for when the flow rate readings are outside of the normal range for any one reading.
- (c) The instruments used for determining the flow rate shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (d) The gauge employed to take the mineral oil flow across the scrubber shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and

be accurate within  $\pm 10\%$  of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.

- (e) In the event that the absorber's failure has been observed, an inspection will be conducted. Based upon the findings of the inspection, any corrective actions will be devised within twenty-four (24) hours of discovery and will include a timetable for completion.
- (f) The mineral oil to the mineral-oil-stripping column shall be kept at a minimum of 180°F for adequate stripping of the absorbed hexane from the oil. When the process is in operation, an electronic data management system (EDMS) shall record the instantaneous temperature on a frequency of not less than every two hours. As an alternate to installing an EDMS, manual readings shall be taken every two hours.

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

#### D.2.17 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1, D.2.2, and D.2.3 the Permittee shall maintain records of the following:
  - (1) visible emission notations of the stack exhaust required under Condition D.2.12.
  - (2) records of pressure drop across the bag houses during normal operation required under Condition D.2.13.
- (b) To document compliance with Condition D.2.4(a), the Permittee shall maintain records of the following as required under Conditions D.2.9 and D.2.16:
  - (1) The amount of VOC (hexane) used per calendar month
  - (2) The amounts of soybean processed by the conventional and specialty processes
  - (3) The gallons of hexane used per ton of soybean processed by the conventional and specialty processes
  - (4) The daily record of the mineral oil flow rate
  - (5) The events of the absorber's failure, findings of the inspections subsequent to absorber's failure, the corrective actions taken, and the time table for completion
  - (6) The operating temperatures of the mineral oil absorber
  - (7) The temperature of the mineral oil stripping column
- (c) To document compliance with Condition D.2.4(b),
  - (1) 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.
  - (2) 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 within 5 to 15 days of detection;
  - (F) Maintenance recheck if repaired-date, concentration, background; and
  - (G) Any appropriate comments.
- (d) To document compliance with Condition D.2.6, the Permittee shall maintain records of the followings:
- (1) For the first twelve months, record the items in paragraphs 40 CFR 63.2862(c)(1) through (c)(3).
  - (2) After the source has processed soybeans for 12 operating months, and the source is not operating during an initial startup period as described in 40 CFR 63.2850(c)(2) or (d)(2), or a malfunction period as described in 40 CFR 63.2850(e)(2), record the items in 40 CFR 63.2862(d)(1) through (5) by the end of calendar month following each operating month.
  - (3) For each SSM event subject to an initial startup period as described in 40 CFR 63.2850(c)(2) or (d)(2), or a malfunction period as described in 40 CFR 63.2850(e)(2), record the items in 40 CFR 63.2862(e)(1) through (3).
  - (4) The Permittee shall keep the compliance plan and SSM plan on-site and readily available as long as the source is operational.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit and 40 CFR 63.2862.

#### D.2.18 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.2.1 (a), (b), (c) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, 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. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) Annual Compliance Certification -The first annual compliance certification for NESHAP requirements of 40 CFR 63, Part GGGG, is due 12 calendar months after the source submits the notification of compliance status. Each annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. The report should include the information in paragraphs 40 CFR 63.2661(a)(1) through (6).
- (c) Deviation notification report - Submit a deviation notification report for each compliance

determination in which the compliance ratio exceeds 1.0 as determined under 40 CFR 63.2840(c). Submit the deviation report by the end of the month following the calendar month in which you determined the deviation. The deviation notification report must include the items in paragraphs 40 CFR 63.2861(b)(1) through (4).

- (d) Periodic startup, shutdown, and malfunction report – If the source is operating under an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2) or a malfunction period subject to 40 CFR 63.2850(e)(2), submit the periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the items in paragraphs 40 CFR 63.2861(c)(1) through (3).
- (1) The HAP content of commercial grade hexane.
  - (2) The maximum amount of soybean process throughput.
  - (3) The amount of n-hexane loss when using commercial grade hexane.
- (e) Intermediate SSM reports – If the source handles a SSM during an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2) or a malfunction period subject to 40 CFR 63.2850(e)(2) differently from procedures in SSM plan, then submit an immediate SSM report. Intermediate reports consists of a telephone call or facsimile transmission to the responsible agency within 2 working days after starting actions consistent with the SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the items in 40CFR 63.2861(d)(1) through (3).

## SECTION D.3

## FACILITY OPERATION CONDITIONS

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

- (1) One (1) boiler, Model no. VLP, Erie City Iron Works, identified as Boiler #1, constructed in 1955, with a heat input capacity of 60.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels. Emissions are exhausted to stack S-16.
- (2) One (1) boiler, Model no. NS-C-57, Nebraska Boiler Company, identified as Boiler #2, constructed in 1996, with a heat input capacity of 75.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels. Emissions are exhausted to stack S-17.

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

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

#### D.3.1 Particulate Matter Emissions [326 IAC 6-2-3][326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-3(d) (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from Boiler #1 shall be limited to 0.447 pounds per MMBtu heat input.
- (b) Pursuant to CP 157-5397, and 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from Boiler #2 shall be limited to 0.304 pounds per MMBtu heat input.

#### D.3.2 Opacity Limitation [326 IAC 12][40 CFR 60 Subpart Dc]

Pursuant to CP 157-5397, 326 IAC 12 and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), the opacity from Boiler #2 shall be limited to twenty percent (20%) opacity (6 minute average) except for one 6 minute period per hour of not more than twenty-seven percent (27%) opacity. The opacity limits apply at all times except during periods of startup, shutdown, or malfunction. [40 CFR 60.43c]

#### D.3.3 PSD Minor Limit [326 IAC 2-2]

- (a) The input of fuel oil no.2 and no. 2 equivalents to Boiler #2 and Boiler #1 shall be limited to 1042 and 102 Kgal measured as no. 2 fuel oil per twelve (12)-consecutive month period, with compliance demonstrated at the end of each month, respectively. For compliance purposes, the following equivalencies shall be used.

1Kgal of no. 4 fuel oil = 1.00 Kgal of no.2 fuel oil  
1Kgal of no. 5 fuel oil = 1.16 Kgal of 2 fuel oil  
1Kgal of no. 6 fuel oil = 1.16 Kgal of no.2 fuel oil

This usage limit is equivalent to a potential to emit of 39.0 tons of sulfur dioxide per year.

- (b) The input of natural gas and natural gas equivalents to Boiler #2 and Boiler #1 shall be limited to 657 MMCF and 314 MMCF of natural gas per twelve (12)-consecutive month period, with compliance demonstrated at the end of each month, respectively. These usage limits are equivalent to a potential to emit of less than 46 tons of nitrogen oxides per year at Boiler #2 and less than 22 tons of nitrogen oxides per year at Boiler #1.
- (c) When burning vegetable oil, or blends of vegetable oil and distillate fuel oil, nitrogen oxide emissions shall not exceed 0.162 pounds per million Btu heat input.

- (d) When burning grease, tallow, or blends of grease or tallow and fuels other than residual fuel oil, nitrogen oxide emissions shall not exceed 0.195 pounds per million Btu heat input.
- (e) Pursuant to Conditions D.1.1 and D.2.2, the combined input of natural gas and natural gas equivalents to Boiler #2 and Boiler #1 shall be limited to 794 MMCF of natural gas per twelve (12)-consecutive month period, with compliance demonstrated at the end of each month. This usage limit is equivalent to a potential to emit of 39.7 tons of nitrogen oxides per year.

For compliance purposes, the following equivalencies shall be used.

1 Kgal of no. 2 fuel oil	= 0.143 MMCF of natural gas
1 Kgal of no. 4 fuel oil	= 0.143 MMCF of natural gas
1 Kgal of no. 5 fuel oil	= 0.393 MMCF of natural gas
1 Kgal of no. 6 fuel oil	= 0.393 MMCF of natural gas
1 Kgal of vegetable oil	= 0.209 MMCF of natural gas
1 Kgal of tallow	= 0.247 MMCF of natural gas
1 Kgal of grease	= 0.093 MMCF of natural gas

Compliance with this condition makes the Prevention of Significant Deterioration (PSD) rules (326 IAC 2-2) not applicable.

D.3.4 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1] [326 IAC 7-1.1-2] [326 IAC 12-1][40 CFR 60, Subpart Dc]

(a) Pursuant to 326 IAC 7-1.2 (SO<sub>2</sub> Emissions Limitations):

- (1) The SO<sub>2</sub> emissions from the sixty (60) MMBtu per hour Boiler #1 shall not exceed five tenths (0.5) pounds per million Btu heat input when combusting distillate fuel oil; and
- (2) The SO<sub>2</sub> emissions from the sixty (60) MMBtu per hour Boiler #1 shall not exceed one and sixth tenths (1.6) pounds per million Btu heat input when combusting residual fuel oil.

(b) Pursuant to CP 157-5397, 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations), 326 IAC 12, and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):

- (1) The SO<sub>2</sub> emissions from the seventy five (75) MMBtu per hour Boiler #2 shall not exceed five tenths (0.5) pounds per million Btu heat input; or
- (2) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight.
- (3) The SO<sub>2</sub> emission limits and fuel oil sulfur limits apply at all times, including periods of startup, shutdown, and malfunction.

D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the boilers.

## Compliance Determination Requirements

### D.3.6 Sulfur Dioxide Emissions and Sulfur Content

---

Compliance with Condition D.3.4 shall be determined utilizing one of the following options:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions from Boiler #1 do not exceed five-tenths (0.5) pound per million Btu heat input by:
  - (1) Providing vendor analysis of fuel oil delivered, if accompanied by a vendor certification, or;
  - (2) Analyzing the fuel oil sample to determine the sulfur content of the fuel oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Fuel oil samples may be collected from the fuel oil tank immediately after the fuel oil tank is filled and before any fuel oil is combusted; and
    - (B) If a partially empty fuel oil tank is refilled, a new sample and analysis would be required upon filling.
- (b) Pursuant to 326 IAC 12, and 40 CFR 60.44c(b), (d), and (g) the Permittee shall demonstrate that the sulfur dioxide emissions from Boiler #2, when burning fuel oil, do not exceed five-tenths (0.5) pound per million Btu heat input using a 30 days average by:
  - (1) Computing 30-day average by continuous emission monitoring system (CEMS).Or
  - (2) Method 19 to calculate when using daily fuel oil sampling or Method 6B;
    - (A) Fuel oil samples may be collected from the fuel oil tank immediately after the fuel oil tank is filled and before any fuel oil is combusted; and
    - (B) If a partially empty fuel oil tank is refilled, a new sample and analysis would be required upon filling.
- (c) Pursuant to 326 IAC 12, and 40 CFR 60.44c(h), the Permittee may demonstrate compliance with the SO<sub>2</sub> standard for Boiler #2, when burning distillate fuel oil, by providing vendor analysis of distillate fuel oil delivered, if accompanied by a vendor certification.
- (d) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from Boiler #1 and Boiler #2 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), (b), (c), and (d) above shall not be refuted by evidence of compliance pursuant to another method.

### D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

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In order to demonstrate compliance with Condition D.3.3:

- (a) No later than 180 days from the commencement of vegetable oil combustion, the Permittee shall conduct performance tests for nitrogen oxide emissions on either Boiler #1 or Boiler #2 during vegetable oil combustion, and furnish the Commissioner a written report of the results of such performance tests.

- (b) No later than 180 days from the commencement of tallow combustion, the Permittee shall conduct performance tests for nitrogen oxide emissions on either Boiler #1 or Boiler #2 during tallow combustion, and furnish the Commissioner a written report of the results of such performance tests.
- (c) No later than 180 days from the commencement of grease combustion, the Permittee shall conduct performance tests for nitrogen oxide emissions on either Boiler #1 or Boiler #2 during grease combustion, and furnish the Commissioner a written report of the results of such performance tests.

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

#### **D.3.8 SO<sub>2</sub> Monitoring [326 IAC 12][40 CFR 60.46c(a), (b), (c), and (d)]**

---

Cargill, Inc. shall do one of the following methods to comply with Condition D.3.6(b):

- (a) install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) for measuring SO<sub>2</sub> concentrations and either oxygen or carbon dioxide concentrations at the outlet of Boiler #2 and record the output of the system when combusting fuel oil; or
- (b) as an alternative to operating a CEMS at the outlet of Boiler #2, the Permittee may elect to determine the average SO<sub>2</sub> emission rate from Boiler #2 by using Method 6, when combusting residual fuel oil. The fuel oil sampling shall be performed as follows:
  - (1) The fuel oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according to the Method 19.
  - (2) The fuel oil samples shall be collected from the fuel oil tank for Boiler #2 immediately after the fuel oil tank is filled and before any fuel oil is combusted. The Permittee shall analyze the fuel oil sample to determine the sulfur content of the oil. If a partially empty fuel oil tank is refilled, a new sample and analysis of the fuel oil in the tank shall be performed upon filling.
- (c) The Permittee shall collect fuel oil samples daily in an as-fired condition at the inlet to the steam generating unit and analyze for sulfur content and heat content according to Method 19 when the CEMS is down for maintenance or under breakdown.
- (d) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

#### **D.3.9 Continuous Opacity Monitoring System (COMS) [40 CFR 60.47c(a)]**

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- (a) Prior to combusting residual fuel oil (fuel oils #4, #5, and #6) in Boiler #2, the Permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring and recording the opacity of the emissions from Boiler #2 discharged to the atmosphere.
- (b) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

#### D.3.10 Visible Emissions Notations

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- (a) The Permittee shall perform visible emission notations of the Boiler #1 stack exhaust once per day during normal daylight operations, when combusting fuels other than natural gas. A trained employee shall record whether emissions are normal or abnormal.
- (b) The Permittee shall perform visible emission notations of the Boiler #2 stack exhaust once per day during normal daylight operations, when combusting fuels other than natural gas, if there is no COMS installed or if the COMS is down for maintenance or under breakdown.  
  
A trained employee shall record whether emissions are normal or abnormal.
- (c) 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.
- (d) 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.
- (e) 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.
- (f) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

#### D.3.11 Record Keeping Requirements

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- (a) To document compliance with condition D.3.4(b), the Permittee shall keep record of each 30 day average SO<sub>2</sub> emission rate (lb/million Btu) or 30 day average sulfur content (weight percent) of Boiler #2, calculated during the reporting period, ending with the last 30- day period; reasons for any non compliance with the emission standards; and a description of corrective actions taken.
- (b) To document compliance with condition D.3.7 (a), the Permittee shall record the output of the continuous emission monitoring system (CEMS) for measuring SO<sub>2</sub> concentrations.  
  
Or
- (c) To document compliance with Condition D.3.8(b), the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO<sub>2</sub> emission limit established in Condition D.3.4. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.
  - (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.

- (4) 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:
  - (A) Fuel supplier certifications;
  - (B) The name of the fuel supplier; and
  - (C) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (d) To document compliance with Condition D.3.9, the Permittee shall record the output of the continuous emission monitoring system (COMS) for measuring opacity on a six (6) minute average basis, if a COMS is operated.
- (e) To document compliance with Condition D.3.10(a) and (b), the Permittee shall maintain record of visible emission notations of the Boiler #1 stack exhaust, and also the Boiler #2 stack exhaust if there is no COMS installed or if the COMS is malfunctioning or down for maintenance or repair.
- (f) To document compliance with Condition D.3.3, the Permittee shall maintain the record of all the fuels burned in Boiler #1 and Boiler #2.
- (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit. The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

#### D.3.12 Reporting Requirements

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- (a) A certification signed by the responsible official that certifies all of the fuels combusted during the period. The natural gas-fired boiler certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported.
- (c) A quarterly summary of Condition D.3.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, 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.
- (d) A summary of Condition D.3.11(a), (b), (c), and (e) for Boiler #2 only, shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by the responsible official as defined by 326 IAC 2-7-1(34). The Permittee shall submit excess emission reports for any excess emissions from Boiler #2, when burning residual fuel oil, during the reporting period.

## SECTION D.4

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)] Insignificant Activities

- (1) Paved and unpaved roads and parking lots with public access.[6-5-4]
- (2) Other categories with emissions below significant thresholds:
  - (A) Storage tanks emitting less than one (1) ton per year of a single HAP and less than fifteen (15) pounds per day of VOC.
    - (i) Two (2) hexane tanks #809 A & B, constructed in 1991 and 2002, and maximum capacity of 19,000 and 20,000 gallons, respectively and vented to the process or vented through the flame arrester.[326 IAC 12, and 40 CFR 60.112b(a)]

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

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

#### Paved and unpaved roads and parking lots with public access. [6-5-4]

##### D.4.1 Fugitive Dust Emissions [326 IAC 6-4-2]

Pursuant to 326 IAC 6-4-2 (Fugitive Dust Emission Limitation), the fugitive dust shall not be visible crossing the boundary or property line of a source.

#### Hexane Storage Tanks

D.4.2 The storage vessels shall be vented to the solvent recovery system in the extraction process or vented through the flame arrester.

### Compliance Determination Requirements

##### D.4.3 Control Measures

Fugitive particulate matter emissions resulting from paved roads, unpaved roads and parking lots shall be controlled by using one or more of the following measures:

- (a) Paved roads and parking lots:
  - (1) Cleaning by sweeping.
  - (2) Flushing.
  - (3) An equivalent alternate measure.
- (b) Unpaved roads and parking lots:
  - (1) Paving with a material such as asphalt or concrete.
  - (2) Treating with a suitable and effective oil or chemical dust suppressant approved by the commissioner. The frequency shall be as on a needed basis.
  - (3) Spraying with water, the frequency of application shall be on a needed basis.

- (4) Double chip and seal the road surface and maintain on an as needed basis.
- (5) An equivalent alternate measures.

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

**D.4.4 Record Keeping Requirements**

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Pursuant to 40 CFR 60.116b, the Permittee shall keep records showing the dimension of the storage vessels and an analysis showing the dimension and the capacity of the storage vessels for the life of the source.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

### PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Cargill, Inc. - Soybean Processing Division  
Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
Part 70 Permit No.: T157-5863-00038

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

Annual Compliance Certification Letter

Test Result (specify)

Report (specify)

Notification (specify)

Affidavit (specify)

Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
Indianapolis, IN 46204-2251  
Phone: 317-233-0178  
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Cargill, Inc. - Soybean Processing Division  
Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
Part 70 Permit No.: T157-5863-00038

**This form consists of 2 pages**

**Page 1 of 2**

This is an emergency as defined in 326 IAC 2-7-1(12)  
The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and  
The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

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

**Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: PM, PM <sub>10</sub> , SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

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

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

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

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

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Cargill, Inc. - Soybean Processing Division  
Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
Part 70 Permit No.: T157-5863-00038

<input type="checkbox"/> Natural Gas Only
<input type="checkbox"/> Alternate Fuel burned
<input type="checkbox"/> From: _____ To: _____

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:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Semi Annual Report

Source Name: Cargill, Inc. - Soybean Processing Division  
 Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Part 70 Permit No.: T157-5863-00038  
 Facility: Boiler No. 2 (Capacity 75 million Btu per hour)  
 Parameter: SO<sub>2</sub>  
 Limit: 0.5 lbs/MMBtu sulfur dioxide for distillate and residual fuel oil rolled on 30 days average.  
 Month: \_\_\_\_\_ Year: \_\_\_\_\_

Day	Type Fuel Combusted	Sulfur dioxide (this Day)	Sulfur dioxide (for the last 29 days)	Sulfur dioxide Avg. (for the last 30 days)	Day	Type Fuel Combusted	Sulfur dioxide (this Day)	Sulfur dioxide (for the last 29 days)	Sulfur dioxide Avg. (for the last 30 days)
1					17				
2					18				
3					19				
4					20				
5					21				
6					22				
7					23				
8					24				
9					25				
10					26				
11					27				
12					28				
13					29				
14					30				
15					31				
16					no. of deviations				

No deviation occurred in this month.

Deviation/s occurred in this month.

Deviation has been reported on:

Comments for Noncompliance: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

Method of Determining Sulfur Content: \_\_\_\_\_

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

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

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

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

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Semi Annual Report

Source Name: Cargill, Inc. - Soybean Processing Division  
 Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Part 70 Permit No.: T157-5863-00038  
 Facility: Boiler No. 2 (Capacity 75 million Btu per hour)  
 Parameter: SO<sub>2</sub>  
 Limit: 0.5% sulfur by weight for distillate and residual fuel oil rolled on 30 days average.

Month: \_\_\_\_\_ Year: \_\_\_\_\_

Day	Type Fuel Combusted	Wt. % Sulfur (this Day)	Wt. % Sulfur (for the last 29 days)	Wt. % Sulfur Avg. (for the last 30 days)	Day	Type Fuel Combusted	Wt. % Sulfur (this Day)	Wt. % Sulfur (for the last 29 days)	Wt. % Sulfur Avg. (for the last 30 days)
1					17				
2					18				
3					19				
4					20				
5					21				
6					22				
7					23				
8					24				
9					25				
10					26				
11					27				
12					28				
13					29				
14					30				
15					31				
16					no. of deviations				

No deviation occurred in this month.

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

Comments for Noncompliance: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

Method of Determining Sulfur Content: \_\_\_\_\_

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

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

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

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

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: Cargill, Inc. - Soybean Processing Division  
 Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Part 70 Permit No.: T157-5863-00038  
 Facility: Entire Plant / Dump Bed Truck Unloading / Reject Flakes Loadout  
 Pollutant: PM and PM<sub>10</sub>  
 Limits: Soybeans Processed by Plant: 821,250 tons per 12-month period.  
 Soybeans Received by Trucks: 82,125 tons per 12-month period.  
 Reject Flakes Loadout: 2,400 tons per 12-month period.

MONTHS \_\_\_\_\_ TO \_\_\_\_\_ YEAR: \_\_\_\_\_

Soybeans Processed By Plant	This Month	Previous 11 Months	12 Month Total
Conventional: Month 1			
Conventional: Month 2			
Conventional: Month 3			
Specialty: Month 1			
Specialty: Month 2			
Specialty: Month 3			
Both Types: Month 1			
Both Types: Month 2			
Both Types: Month 3			

Soybeans Received By Trucks	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

Reject Flakes Loadout	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: Cargill, Inc. - Soybean Processing Division  
 Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Part 70 Permit No.: T157-5863-00038  
 Facility: Boiler no. 2 (75 MMBTU/HR)  
 Pollutant: SO<sub>2</sub>  
 Limit: 1042 Kgal as no. 2 fuel oil per twelve (12)- consecutive months

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Total fuel usage as No. 2 fuel oil (Kgal) This Month	Total fuel usage as No. 2 fuel oil (Kgal) Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

Conversion:      1.00 Kgal no. 4 fuel oil      =      1.00 Kgal no. 2 fuel oil  
                          1.00 Kgal no. 5 fuel oil      =      1.16 Kgal no. 2 fuel oil  
                          1.00 Kgal no. 6 fuel oil      =      1.16 Kgal no. 2 fuel oil

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: Cargill, Inc. - Soybean Processing Division  
 Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Part 70 Permit No.: T157-5863-00038  
 Facility: Boiler #1 (60 MMBTU/HR)  
 Pollutant: SO<sub>2</sub>  
 Limit: 102 Kgal as no. 2 fuel oil per twelve (12)- consecutive month period.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Fuel Usage as No. 2 Fuel Oil (Kgal) This Month	Fuel Usage as No. 2 Fuel Oil (Kgal) Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

Conversion: 1.00 Kgal no. 4 fuel oil = 1.00 Kgal no. 2 fuel oil  
 1.00 Kgal no. 5 fuel oil = 1.16 Kgal no. 2 fuel oil  
 1.00 Kgal no. 6 fuel oil = 1.16 Kgal no. 2 fuel oil

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: Cargill, Inc. - Soybean Processing Division  
 Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Part 70 Permit No.: T157-5863-00038  
 Facility: Boiler #2 (75 MMBTU/HR)  
 Pollutant: NOx  
 Limits: 657 MMCF per twelve (12)-consecutive month period. (46 tons of NOx per year.)  
 Boiler #1 and Boiler #2 must total less than 794 MMCF per twelve (12)-  
 consecutive month period. (39.7 tons of NOx per year.)

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Natural Gas Usage (MMCF) This Month	Natural Gas Usage (MMCF) Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

Conversion:

1 Kgal of no. 2 fuel oil = 0.143 MMCF of natural gas  
 1 Kgal of no. 4 fuel oil = 0.143 MMCF of natural gas  
 1 Kgal of no. 5 fuel oil = 0.393 MMCF of natural gas  
 1 Kgal of no. 6 fuel oil = 0.393 MMCF of natural gas  
 1 Kgal of vegetable oil = 0.209 MMCF of natural gas  
 1 Kgal of tallow = 0.247 MMCF of natural gas  
 1 Kgal of grease = 0.093 MMCF of natural gas

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: Cargill, Inc. - Soybean Processing Division  
 Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Part 70 Permit No.: T157-5863-00038  
 Facility: Boiler #1 (60 MMBTU/HR)  
 Pollutant: NO<sub>x</sub>  
 Limits: 314 MMCF per twelve (12)-consecutive month period. (22 tons of NO<sub>x</sub> per year.)  
 Boiler #1 and Boiler #2 must total less than 794 MMCF per twelve (12)-consecutive month period. (39.7 tons of NO<sub>x</sub> per year.)

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Natural Gas Usage (MMCF) This Month	Natural Gas Usage (MMCF) Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

Conversion:

1 Kgal of no. 2 fuel oil = 0.143 MMCF of natural gas  
 1 Kgal of no. 4 fuel oil = 0.143 MMCF of natural gas  
 1 Kgal of no. 5 fuel oil = 0.393 MMCF of natural gas  
 1 Kgal of no. 6 fuel oil = 0.393 MMCF of natural gas  
 1 Kgal of vegetable oil = 0.209 MMCF of natural gas  
 1 Kgal of tallow = 0.247 MMCF of natural gas  
 1 Kgal of grease = 0.093 MMCF of natural gas

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: Cargill, Inc. - Soybean Processing Division  
 Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Part 70 Permit No.: T157-5863-00038  
 Facility: Boiler #1 (60 MMBTU/HR) and Boiler #2 (75 MMBTU/HR)  
 Pollutant: PM and PM<sub>10</sub>  
 Limit: 794.13MMCF of natural gas per 12- consecutive month (3.02 tons of PM or PM<sub>10</sub> per year each)

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Total Natural Gas usage (MMCF) This Month	Total Natural Gas usage (MMCF) Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

Conversion:

1.00 Kgal no. 2 fuel oil = 0.434 MMCF natural gas  
 1.00 Kgal no. 4 fuel oil = 1.12 MMCF natural gas  
 1.00 Kgal no. 5 fuel oil =  $[(9.19(S)+4.72)/7.6]$  MMCF natural gas  
 1.00 Kgal no. 6 fuel oil = 1.513 MMCF natural gas

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Cargill, Inc. - Soybean Processing Division  
 Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Part 70 Permit No.: T157-5863-00038

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

<p>This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<p align="center">NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.</p>	
<p align="center">THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD</p>	
<p>Permit Requirement (specify permit condition #)</p>	
Date of Deviation:	Duration of Deviation:
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	
<p>Permit Requirement (specify permit condition #)</p>	
Date of Deviation:	Duration of Deviation:
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	

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: \_\_\_\_\_

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document (TSD) for a Significant Permit Modification to a Part 70 Operating Permit

#### Source Background and Description

<b>Source Name:</b>	<b>Cargill Inc. - Soybean Processing Division</b>
<b>Source Location:</b>	<b>1503 Wabash Avenue, Lafayette, IN 47905-1039</b>
<b>County:</b>	<b>Tippecanoe</b>
<b>SIC Code:</b>	<b>2075</b>
<b>Operation Permit No.:</b>	<b>157-5863-00038</b>
<b>Operation Permit Issuance Date:</b>	<b>May 29, 2003</b>
<b>Revision No.:</b>	<b>157-21911-00038</b>
<b>Permit Reviewer:</b>	<b>Allen R. Davidson</b>

On April 6, 2006, the Office of Air Quality (OAQ) published a notice in the *Lafayette Journal and Courier* stating that Cargill Inc. - Soybean Processing Division had applied for a Significant Permit Modification to a Part 70 Operating Permit issued on May 29, 2003. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Cargill Inc. - Soybean Processing Division to use vegetable oil, tallow, or grease as fuel in two of the plant's existing boilers. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

#### Additional Changes

Upon further review, OAQ has decided to make revisions to the permit. Bolded language has been added, and language with a line through it has been deleted. The Table of Contents has been modified to reflect these changes.

Condition B.2 has been updated to address the permit renewal process, as follows:

~~B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]~~

~~This permit 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.~~

**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, T157-5863-00038, 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.**

A typographical error in Condition B.9 has been corrected as follows:

**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 compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent 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 Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 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, IL 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 the certification by the responsible official as defined by 326 IAC 2-7-1(34).

Condition B.10 has been updated to remove a redundant requirement and to address Operation, Maintenance, and Monitoring (OMM) Plans, as follows:

**B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]**

---

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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 Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

The PMP extension notification does not require the certification by the responsible official as defined by 326 IAC 2-7-1(34).

- (b) 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 contributes to any violation. The PMPs do not require the certification by the responsible official as defined by 326 IAC 2-7-1(34).
- ~~(c) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept 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.~~
- (c) 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.**

Condition B.13 has been updated to address the issuance of source modifications under 326 IAC 2-7-10.5, as follows:

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

---

~~(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either~~

~~(1) incorporated as originally stated,~~

~~(2) revised, or~~

~~(3) deleted~~

~~by this permit.~~

~~(b) All previous registrations and permits are superseded by this permit.~~

**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 T157-5863-00038 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.**

OAQ has clarified Condition B.19(c), as follows:

**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), (c), or (e), 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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 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, IL 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), (c), or (e). 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), (c)(1), and (e)(2).

- (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(36)) 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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.

Condition C.15 has been simplified to read as follows:

**C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]**

---

~~If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:~~

- ~~(a) — A compliance schedule for meeting the requirements of 40 CFR 68; or~~
- ~~(b) — As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).~~

~~All documents submitted pursuant to this condition shall include the certification by a responsible official as defined by 326 IAC 2-7-1(34).~~

**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.**

OAQ has clarified Condition C.20(e), as follows:

**C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]**

---

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by a responsible official as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the a responsible official as defined by 326 IAC 2-7-1(34).
- ~~(e) — The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.~~

- (e) **The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. 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.**
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx), for that regulated NSR pollutant, and
  - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
- (1) The name, address, and telephone number of the major stationary source.
  - (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C - General Record Keeping Requirements.
  - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3).
  - (4) Any other information that the Permittee deems fit to include in this report.

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management  
Air Compliance Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

- (h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Condition C.22 has been deleted. The source is subject to 40 CFR 63 Subpart GGGG and the condition is now obsolete:

~~G.22 Application Requirements for Section 112(j) of the Clean Air Act [40 CFR 63.52(e)] [40 CFR 63.56(a)] [40 CFR 63.9(b)] [326 IAC 2-7-12]~~

- 
- ~~(a) The Permittee shall submit a Part 2 MACT Application in accordance with 40 CFR 63.52(e)(1). The Part 2 MACT Application shall meet the requirements of 40 CFR 63.53(b).~~
- ~~(b) Notwithstanding paragraph (a), the Permittee is not required to submit a Part 2 MACT Application if the Permittee no longer meets the applicability criteria of 40 CFR 63.50 by the application deadline in 40 CFR 63.52(e)(1). For example, the Permittee would not have to submit a Part 2 MACT Application if, by the application deadline:~~
- ~~(1) The source is no longer a major source of hazardous air pollutants, as defined in 40 CFR 63.2;~~
  - ~~(2) The source no longer includes one or more units in an affected source category for which the U.S. EPA failed to promulgate an emission standard by May 15, 2002; or~~
  - ~~(3) The MACT standard or standards for the affected source categories included at the source are promulgated.~~
- ~~(c) Notwithstanding paragraph (a), pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit with a case-by-case Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The initial notification shall be submitted to:~~

~~Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251~~

~~and~~

~~United States Environmental Protection Agency, Region V  
Director, Air and Radiation Division  
77 West Jackson Boulevard  
Chicago, IL 60604-3590~~

The reporting form required by Conditions D.1.16(a) and D.2.18(a) was included in Significant Source Modification 157-11361-00038, but it was not included with the original Part 70 permit issued on May 29, 2003. A reporting form has been added to the Part 70 permit to correct the deficiency, as follows:

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: Cargill, Inc. - Soybean Processing Division  
 Source Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Mailing Address: 1503 Wabash Avenue, Lafayette, IN 47905-1039  
 Part 70 Permit No.: T157-5863-00038  
 Facility: Entire Plant / Dump Bed Truck Unloading / Reject Flakes Loadout  
 Pollutant: PM and PM<sub>10</sub>  
 Limits: Soybeans Processed by Plant: 821,250 tons per 12-month period.  
 Soybeans Received by Trucks: 82,125 tons per 12-month period.  
 Reject Flakes Loadout: 2,400 tons per 12-month period.

MONTHS \_\_\_\_\_ TO \_\_\_\_\_ YEAR: \_\_\_\_\_

Soybeans Processed By Plant	This Month	Previous 11 Months	12 Month Total
Conventional: Month 1			
Conventional: Month 2			
Conventional: Month 3			
Specialty: Month 1			
Specialty: Month 2			
Specialty: Month 3			
Both Types: Month 1			
Both Types: Month 2			
Both Types: Month 3			

Soybeans Received By Trucks	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

Reject Flakes Loadout	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a  
Significant Permit Modification to a Part 70 Operating Permit

### Source Description and Location

<b>Source Name:</b>	<b>Cargill Inc. - Soybean Processing Division</b>
<b>Source Location:</b>	<b>1503 Wabash Avenue, Lafayette, IN 47905-1039</b>
<b>County:</b>	<b>Tippecanoe</b>
<b>SIC Code:</b>	<b>2075</b>
<b>Operation Permit No.:</b>	<b>157-5863-00038</b>
<b>Operation Permit Issuance Date:</b>	<b>May 29, 2003</b>
<b>Permit Modification No.:</b>	<b>157-21911-00038</b>
<b>Permit Reviewer:</b>	<b>Allen R. Davidson</b>

### Existing Approvals

The emission source was issued Part 70 Operating Permit 157-5863-00038 on May 29, 2003. The source has since received the following approvals:

- (a) Administrative Amendment 157-17769-00038, issued on July 16, 2003, which corrected an error in the limit for Baghouse #3.
- (b) Significant Permit Modification 157-19644-00038, issued on October 13, 2004, which changed limits for Baghouse #1.
- (c) Significant Permit Modification 157-20830-00038, issued on October 27, 2005, which changed limits for twelve emission units.

This application will be the fourth revision to the Part 70 permit.

### County Attainment Status

The emission source is located in Tippecanoe County.

Pollutant	Status
PM <sub>10</sub>	attainment
PM <sub>2.5</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
1-hour Ozone	attainment
8-hour Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) 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 NOx emissions are considered when evaluating the rule applicability relating to ozone. Tippecanoe County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) Tippecanoe County has been classified as attainment for PM<sub>2.5</sub>. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM<sub>2.5</sub> emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM<sub>2.5</sub> emissions, it has directed states to regulate PM<sub>10</sub> emissions as a surrogate for PM<sub>2.5</sub> emissions.
- (c) Tippecanoe County has been classified as attainment or unclassifiable in Indiana for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

See "Permit Level Determination – PSD" for more details regarding PSD applicability.

### Source Status

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:

Pollutant	Potential to Emit (tons/yr)
PM	limited to less than 250
PM <sub>10</sub>	limited to less than 100
SO <sub>2</sub>	greater than 100
VOC	greater than 250
CO	less than 100
NO <sub>x</sub>	greater than 100

This existing source is classified as a major stationary source under PSD (326 IAC 2-2). Although it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1), a regulated pollutant is emitted at a rate of 250 tons per year or more.

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

HAPs	Potential to Emit (tons/yr)
Hexane	greater than 10
Total	greater than 25

This existing source is a major source of HAPs, as defined in 40 CFR 63.41, 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).

### Background and Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Cargill Inc. - Soybean Processing Division on October 17, 2005, relating to the operation of a soybean processing plant located at 1503 Wabash Avenue, Lafayette, IN 47905-1039. The application involves a request to allow the combustion of vegetable oil, animal fats ("tallow"), animal oils ("grease"), or blends of these fuels with fuel oil, as fuel in two of the plant's existing boilers.

#### Permitted Emission Units and Pollution Control Equipment

This revision affects the operation of the following permitted emission units:

- (a) One (1) boiler, identified as Boiler #1, constructed in 1955, with a heat input capacity of 60.0 MMBtu per hour, presently firing natural gas, distillate fuel oil, or residual fuel oil. Emissions are exhausted to stack S-16.
- (b) One (1) boiler, identified as Boiler #2, constructed in 1996, with a heat input capacity of 75.0 MMBtu per hour, presently firing natural gas, distillate fuel oil, or residual fuel oil. Emissions are exhausted to stack S-17.

#### New Emission Units and Pollution Control Equipment

This revision does not involve any new emission units or new pollution control equipment.

#### Insignificant Activities

This revision does not involve any insignificant activities, as defined in 326 IAC 2-7-1(21):

#### Enforcement Issues

There are no enforcement actions pending against this emission source.

### **Stack Summary**

Stack information will not be affected by this revision.

### **Emission Calculations**

The emission calculations are based on various emission tests conducted in other boilers in the United States. The highest emission rates were selected for each of the fuels.

- (a) The emission calculations for vegetable oil combustion are based on emission tests conducted January 23, 2001, on the EP#26 stack at the Cargill facility in Iowa Falls, IA.
- (b) The emission calculations for tallow combustion are based on emission tests conducted September 30, 2004, at the Cargill facility in Wapello County, IA.
- (c) The emission calculations for grease combustion are based on emission tests conducted January 23, 2001, at the National By-Products facility in Des Moines, IA.

See Appendix A of this document for detailed emission calculations. (4 pages)

### **Permit Level Determination – Part 70**

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 reflects the revision's potential to emit before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential to Emit (tons/yr)
PM	0.0
PM <sub>10</sub>	0.0
SO <sub>2</sub>	0.0
VOC	0.0
CO	7.6
NO <sub>x</sub>	0.0

  

HAPs	Potential to Emit (tons/yr)
Total	0.0

This revision does not involve a change in the method of operation where the increase in potential to emit is greater than twenty-five (25) tons per year of carbon monoxide (CO). As a result, this revision does not require processing as a source modification under 326 IAC 2-7-10.5(d)(3).

#### Justification for Significant Permit Modification

The revision seeks to establish a Part 70 permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid the applicability of Prevention of Significant Deterioration (PSD), 326 IAC 2-2. As a result, this change cannot be processed as an Administrative Amendment under 326 IAC 2-7-11 and is expressly prohibited from being processed as a Minor Permit Modification under 2-7-12(b). It must be processed as a Significant Permit Modification under 326 IAC 2-7-12(d).

#### Permit Level Determination – PSD or Emission Offset

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

#### Federal Rule Applicability Determination

326 IAC 12 and 40 CFR 60 (New Source Performance Standards (NSPS))

- (a) Boiler #1 predates the applicability of the New Source Performance Standards (NSPS), 326 IAC 12 (40 CFR 60, Subpart Dc) "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units."
- (b) Boiler #2 is subject to the requirements of the New Source Performance Standards (NSPS), 326 IAC 12 (40 CFR 60, Subpart Dc) "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units." The boiler was constructed after June 9, 1989 and the maximum heat input capacity is between 10 and 100 MMBtu per hour. Pursuant to this rule:
  - (1) SO<sub>2</sub> emissions from Boiler #2 shall not exceed five tenths (0.5) pounds per million Btu heat input; or
  - (2) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]

Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

Additionally, pursuant to 40 CFR 60.43c(c), when combusting fuel oil, Boiler #2 is limited to less than twenty percent (20%) opacity (6-minute average), except for one 6-minute period per hour of not more than twenty-seven percent (27%) opacity. The boiler is subject to the CEMS monitoring requirement in 40 CFR 60.47c because the boiler burns residual oil.

There are no requirements in 40 CFR 60 Subpart Dc specifically related to vegetable oil combustion, tallow combustion or grease combustion. Pure vegetable oil does not conform to the definition of "oil" under 326 IAC 40 CFR 60.41c because it is not petroleum based. The same is true of tallow and grease. Therefore, the fuel oil limits apply only to burning fuel oil or blends of fuel oil with other fuels.

#### 326 IAC 14 and 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants (NESHAP))

The emission source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR 63, Subpart DDDDD), as of September 13, 2004.

Both boilers are classified as existing large liquid fuel boilers under this NESHAP. Pursuant to this rule, the boilers must comply with 40 CFR 63, Subpart DDDDD on and after September 13, 2007. This permit modification does not change the classification, and the applicability date remains unchanged as a result of this modification.

There are no applicable emission limits and work practice standards for existing large liquid fuel boilers.

<b>State Rule Applicability Determination – Entire Source</b>
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#### 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This modification to an existing major stationary source is not major for Prevention of Significant Deterioration (PSD) because the emissions increase of all attainment regulated pollutants is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply to this modification. However, the combustion of vegetable oil, grease and/or tallow shall be limited to comply with existing conditions on Boiler #2 and Boiler #1 as follows:

- (a) The input of natural gas and natural gas equivalents to Boiler #2 and Boiler #1 shall remain limited to 657 MMCF and 314 MMCF of natural gas per twelve (12)-consecutive month period, respectively, with compliance demonstrated at the end of each month. These usage limits are equivalent to a potential to emit of less than 46 tons of nitrogen oxides per year at Boiler #2 and less than 22 tons of nitrogen oxides per year at Boiler #1.
- (b) When burning vegetable oil, or blends of vegetable oil and distillate fuel oil, nitrogen oxide emissions shall not exceed 0.162 pounds per million Btu heat input.
- (c) When burning grease, tallow, or blends of grease or tallow and fuels other than residual fuel oil, nitrogen oxide emissions shall not exceed 0.195 pounds per million Btu heat input.
- (d) The combined input of natural gas and natural gas equivalents to Boiler #2 and Boiler #1 shall remain limited to 794 MMCF of natural gas per twelve (12)-consecutive month period, with compliance demonstrated at the end of each month. This usage limit is equivalent to a potential to emit of 39.7 tons of nitrogen dioxide per year.

For compliance purposes, the following equivalencies shall be used:

1 Kgal of no. 2 fuel oil	= 0.143 MMCF of natural gas
1 Kgal of no. 4 fuel oil	= 0.143 MMCF of natural gas
1 Kgal of no. 5 fuel oil	= 0.393 MMCF of natural gas
1 Kgal of no. 6 fuel oil	= 0.393 MMCF of natural gas
1 Kgal of vegetable oil	= 0.209 MMCF of natural gas
1 Kgal of tallow	= 0.247 MMCF of natural gas
1 Kgal of grease	= 0.093 MMCF of natural gas

Compliance with the usage limits makes the Prevention of Significant Deterioration (PSD) rules (326 IAC 2-2) not applicable.

#### 326 IAC 2-3 (Emission Offset)

This modification to an existing major stationary source is not major for Emission Offset because the emissions increase of nitrogen oxides (NOx) is less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2 3, the Emission Offset requirements do not apply.

#### 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control). The source was existing as of July 27, 1997. Also, the modification by itself does not have potential to emit HAPs.

#### 326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, this source is subject to 326 IAC 2-6 (Emission Reporting). The source also has potential to emit greater than the thresholds in 326 IAC 2-6-3(a)(1). Therefore, an emission statement covering the previous calendar year must be submitted by July 1 annually. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

#### 326 IAC 2-7 (Part 70 Permit Program)

This source is subject to the provisions of 326 IAC 2-7 due to the following:

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of particulate matter (PM) is greater than 100 tons per year.
- (b) The potential to emit of volatile organic compounds is equal to or greater than 100 tons per year.
- (c) The potential to emit of sulfur dioxide (SO<sub>2</sub>) is equal to or greater than 100 tons per year.
- (d) The potential to emit of a single HAP is equal to or greater than ten (10) tons per year.
- (e) The potential to emit of a combination of HAPs is equal to or greater than twenty-five (25) tons per year.

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the 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.

<b>State Rule Applicability Determination – Boiler #1</b>
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326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating)

Boiler #1 is subject to 326 IAC 6-2-3(a) because it was constructed in 1955. Pursuant to 326 IAC 6-2-3(a) (Particulate Emission Limitations for Sources of Indirect Heating), PM emissions from the boiler shall be limited to 0.447 pounds per MMBtu heat input. See the Technical Support Document for Part 70 Operating Permit 157-5863-00038 for details regarding the calculation of this limit.

326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations)

Boiler #1 is subject to 326 IAC 7-1.1. Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations):

- (a) SO<sub>2</sub> emissions shall not exceed five tenths (0.5) pound per MMBtu heat input for distillate oil combustion and for combusting residual oil and any fuel other than coal simultaneously.
- (b) SO<sub>2</sub> emissions shall not exceed five tenths (0.5) pound per MMBtu heat input for distillate oil combustion and for combusting distillate oil and any fuel other than coal or residual oil simultaneously.

Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

<b>State Rule Applicability Determination – Boiler #2</b>
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326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating)

Boiler #2 is subject to 326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating) because it was constructed in 1996 which is after the applicability date of September 21, 1983. Pursuant to this rule, the particulate emissions from the boiler shall be limited to 0.304 pounds per million Btu heat input. See the Technical Support Document for Part 70 Operating Permit 157-5863-00038 for details regarding the calculation of this limit.

326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations)

Boiler #2 is subject to 326 IAC 7-1.1. Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations):

- (a) SO<sub>2</sub> emissions shall not exceed five tenths (0.5) pound per MMBtu heat input for distillate oil combustion and for combusting residual oil and any fuel other than coal simultaneously.
- (b) SO<sub>2</sub> emissions shall not exceed five tenths (0.5) pound per MMBtu heat input for distillate oil combustion and for combusting distillate oil and any fuel other than coal or residual oil simultaneously.

Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

### Proposed Changes

In addition to the changes directly related to the modification, OAQ will make the following revisions to the Part 70 permit:

- (a) All instances of "P.O. Box 6015" in the permit conditions will be deleted.
- (b) All instances of "Indianapolis, Indiana 46206-6015" in the permit conditions will be changed to read "Indianapolis, IN 46204-2251".
- (c) All instances of PM-10 in the permit will be changed to read PM<sub>10</sub>.
- (d) OAQ will delete Section B - Compliance with Permit Conditions. Its requirements will instead be listed on the front page of the permit.
- (e) OAQ determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request, records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, OAQ deleted paragraph (b) of Section B - Preventive Maintenance Plan, and amended Section B - Emergency Provisions.
- (f) OAQ clarified some of the language in Section B - Operational Flexibility.
- (g) OAQ updated Section C - Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour, to reflect changes in 40 CFR 52 Subpart P.
- (h) OAQ deleted Section C - Operation of Equipment, since it is redundant with conditions in Sections D of the permit.
- (i) All instances of "Pressure Gauge and Other Instrument Specifications" in the permit were replaced with "Instrument Specifications".
- (j) OAQ realizes that the instrument specifications in Section C - Instrument Specifications can only be practically applied to analog units, and clarified the condition to state that the condition only applies to analog units. OAQ also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the accuracy requirements were removed from Section C - Instrument Specifications.
- (k) OAQ reconsidered the requirement in Section C to develop and follow a Compliance Response Plan. The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. OAQ will replace the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps, to ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated.
- (l) All instances of "Compliance Response Plan - Preparation, Implementation, Records, and Reports" in the permit were replaced with "Response to Excursions or Exceedances".
- (m) OAQ updated Section C - General Record Keeping Requirements and Section C - General Reporting Requirements, to reflect changes in 326 IAC 2-2.

- (n) OAQ determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections were removed from the permit. In addition, the requirements to keep records of the inspections were removed.
- (o) All instances of "once per shift" in the permit were replaced with "once per day." OAQ determined that once per day monitoring of the control devices is generally sufficient to ensure proper operation of the control devices. OAQ also determined that monitoring of the parameters once per day is sufficient to satisfy the requirements of the Part 70 rules at 326 IAC 2-7-5 and 326 IAC 2-7-6.
- (p) All instances of "total static pressure drop" in the permit were replaced with "pressure drop."
- (q) Paragraph (a) was deleted from the Broken or Failed Baghouse conditions in Sections D. For multi-compartment baghouses, the permit will not specify what actions the Permittee needs to take in response to a broken bag. However, a requirement was added to the Particulate Control conditions in Sections D requiring the Permittee to notify OAQ if a broken bag is detected and the control device will not be repaired for more than ten (10) days. This notification allows OAQ to take any appropriate actions if the emission unit will continue to operate for a long period of time while the control device is not operating in optimum condition.
- (r) Paragraph (b) of the Broken or Failed Baghouse conditions in Sections D was revised to account for processes that operate in batch mode. The condition required an emission unit to be shut down immediately in case of baghouse failure. However, OAQ is aware there can be safety issues with shutting down a process in the middle of a batch. OAQ also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Since it is not always possible to shut down a process with material remaining in the equipment, OAQ revised the condition to state that in the case of baghouse failure, the feed to the process must be shut off immediately, and the process shall be shut down as soon as practicable.
- (s) Descriptive information will be updated in Sections A and D wherever it has become inaccurate, and it will be made more consistent wherever it refers to the same emission unit. Also, the Table of Contents will be updated to reflect new and deleted conditions.

The changes listed below are being proposed to Part 70 Operating Permit No. 157-5863-00038. Some conditions are affected by multiple changes. Deleted language appears as strikethroughs and new language appears in bold:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]

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

**Permitted on December 3, 2001**

*(Items (1) through (26) remain unchanged.)*

**Permitted and existing before December 3, 2001**

*(Items (1) through (73) remain unchanged.)*

- (74) One (1) ~~75 MMBtu per hour natural gas fired boiler, identified as Boiler #2, constructed in 1996, with a heat input capacity of 75.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels designated as S-17 with fuel oil #2, #4, #5, and #6 as available backup fuel oils. Emissions are exhausted to stack S-17.~~
- (75) One (1) ~~60 MMBtu per hour natural gas fired boiler, identified as Boiler #1, constructed in 1955, with a heat input capacity of 60.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels designated as S-16 with fuel oil #2, #4, #5, and #6 as available backup fuel oils. Emissions are exhausted to stack S-16.~~
- (Items (76) through (78) remain unchanged.)*

### Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

*(Items (1) through (18) remain unchanged.)*

### ~~B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]~~

- ~~(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:~~
- ~~(1) Enforcement action;~~
  - ~~(2) Permit termination, revocation and re-issuance, or modification; or~~
  - ~~(3) Denial of a permit renewal application.~~
- ~~(b) Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.~~
- ~~(c) 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.~~
- ~~(d) 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.~~

*(Subsequent conditions were renumbered.)*

### ~~B.14 B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]~~

- ~~(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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 Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, ~~IN Indiana~~ 46204-2251

The PMP extension notification does not require the certification by the responsible official as defined by 326 IAC 2-7-1(34).

- (b) ~~The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.~~
- ~~(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 contributes to any violation. ~~The PMP does~~ **PMPs do** not require the certification by the a responsible official as defined by 326 IAC 2-7-1(34).
- ~~(d)~~ **(c)** Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept 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.12 B.11** Emergency Provisions [326 IAC 2-7-16]

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- (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, 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 Section), or

Telephone Number: ~~317-233-5674~~ **317-233-0178** (ask for Compliance Section)

Facsimile Number: ~~317-233-5967~~ **317-233-6865**

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, ~~IN 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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)(9) 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. The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

**B-17 B.16** Permit Renewal [326 IAC 2-7-4]

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, ~~IN Indiana~~ 46204-2251

~~(a)~~ (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

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

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

(B) 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) Right to Operate After Application for Renewal [326 IAC 2-7-3]

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 in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAQ fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

~~B.20~~ **B.19** Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

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(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), 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 ~~emissions allowable~~ **under 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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, ~~IN 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 IL 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, ~~on a rolling five (5) year basis~~, all such changes and ~~emissions trading~~ **emission trades** that are subject to 326 IAC 2-7-20(b), (c), or (e). **The Permittee shall make and makes** 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), (c)(1), and (e)(2).

- (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(36)) 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade ~~increases and decreases in emissions in~~ **emissions** 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.

C.1 Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) ~~pounds~~ **Pounds** per hour ~~Hour~~ **Hour** ~~[40 CFR 52 Subpart P][326 IAC 6-3-2]~~

- ~~(a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.~~

~~(b)~~ Pursuant to 326 IAC 6-3-2(e)(2), ~~the allowable~~ particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which :

(a) has a maximum process weight rate less than 100 pounds per hour, and

(b) the methods in 326 IAC 6-3-2(b) through (d) do not apply,

shall not exceed 0.551 pounds per hour. ~~This condition is not federally enforceable.~~

~~C.6~~ Operation of Equipment ~~[326 IAC 2-7-6(6)]~~

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~~Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are operation.~~

*(Subsequent conditions were renumbered.)*

~~C.12~~ **C.11** Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

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(a) Prior to combusting residual fuel oil (fuel oils #4, #5, and #6) in Boiler ~~no. #2~~ (S-17), the Permittee shall install, calibrate, maintain, and operate a **continuous opacity monitoring system (COMS)** for measuring **and recording** the opacity of the emissions from Boiler ~~no. #2~~ discharged to the atmosphere ~~and record the output of the system when combusting residual fuel oil.~~ In addition, prompt corrective action shall be initiated whenever indicated.

(b) In the event that a breakdown of the ~~continuous opacity monitoring equipment~~ **COMS** occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(c) Whenever a ~~continuous opacity monitor (COM)~~ **COMS** is malfunctioning or will be down for calibration, maintenance, or repairs for a period of ~~four (4)~~ **twenty-four (24)** hours or more, a calibrated backup **COMS** shall be brought online within ~~four (4)~~ **twenty-four (24)** hours of shutdown of the primary **COMS**. If this is not possible, visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of ~~one (1) hour~~ **five (5) consecutive six-minute averaging periods** beginning ~~four (4)~~ **no later than twenty-four (24)** hours after the start of the malfunction or down time.

(1) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. ~~If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.~~

(2) Method 9 opacity readings shall be repeated for a minimum of ~~one (1) hour~~ **five (5) consecutive six-minute averaging periods** at least ~~once every four (4) hours~~ **twice per day** during daylight operations, until such time that the continuous opacity monitor is back in operation.

(3) **(2)** All of the opacity readings during this period shall be reported in the Quarterly Compliance Monitoring Reports.

(d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, and 40 CFR 60 Subpart Db.

~~C.14~~ **C.13** ~~Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]~~

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- (a) ~~Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed~~ **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 normal reading maximum reading for the normal range shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.**
- (b) ~~Whenever a condition in this permit requires the measurement of a flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.~~
- (c) ~~The Permittee may request that the IDEM, OAQ approve the use of a pressure gauge or other an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other the parameters.~~

~~C.17~~ **C.16** ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~  
**Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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- (a) ~~The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:~~
- (1) ~~Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.~~
- (2) ~~If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.~~
- (b) ~~For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:~~
- (1) ~~Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or~~
- (2) ~~If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.~~
- (3) ~~If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be~~

~~promptly notified of the expected date of the shut down, the status of the applicable.~~

- ~~(4) Failure to take reasonable response steps shall constitute a violation of the permit.~~
- ~~(c) The Permittee is not required to take any further response steps for any of the following reasons:~~
  - ~~(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.~~
  - ~~(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.~~
  - ~~(3) An automatic measurement was taken when the process was not operating.~~
  - ~~(4) The process has already returned or is returning to operating within normal parameters and no response steps are required.~~
- ~~(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B Deviations from Permit Requirements and Conditions.~~
- ~~(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.~~
- ~~(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.~~
- (a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.**
- (b) 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). Corrective actions may include, but are not limited to, the following:**
  - (1) initial inspection and evaluation;**
  - (2) recording that operations returned 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.**

- (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;**
  - (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 maintain the following records:**
  - (1) **monitoring data;**
  - (2) **monitor performance data, if applicable; and**
  - (3) **corrective actions taken.**

~~C.20~~ **C.19** General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] **[326 IAC 2-2]**

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- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept 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, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) **If there is a reasonable possibility that a “project” (as defined in 326 IAC 2-2-1(qq)) at an existing emissions unit, other than projects at a Clean Unit, which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee)), may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1 (rr)), the Permittee shall comply with the following:**
  - (1) **Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(qq)) at an existing emissions unit, document and maintain the following records:**
    - (A) **A description of the project.**
    - (B) **Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.**
    - (C) **A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:**
      - (i) **Baseline actual emissions;**

- (ii) **Projected actual emissions;**
  - (iii) **Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii); and**
  - (iv) **An explanation for why the amount was excluded, and any netting calculations, if applicable.**
- (2) **Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and**
- (3) **Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.**

**G.24 C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]**

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by a responsible official as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the a responsible official as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.
- (f) **If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:**

- (1) **The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx), for that regulated NSR pollutant, and**
  - (2) **The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).**
- (g) **The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:**
- (1) **The name, address, and telephone number of the major stationary source.**
  - (2) **The annual emissions calculated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements.**
  - (3) **The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3).**
  - (4) **Any other information that the Permittee deems fit to include in this report.**

**Reports required in this part shall be submitted to:**

**Indiana Department of Environmental Management  
Air Compliance Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251**

- (h) **The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.**

#### D.1.10 Visible Emissions Notations

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- (a) Visible emission notations of the stack exhaust S-13, S-2, S-3, S-20, S-1, S-7, S-5, S-11, S-12, S-21, S-25, S-6, S-14, S-4, S-8, S-22, S-23, and S-24 shall be performed once per ~~shift~~ **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) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.~~ **If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances.** Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a violation of **deviation from** this permit.

#### D.1.11 Parametric Monitoring

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The Permittee shall record the ~~total static~~ pressure drop across the ~~bag house~~ **baghouses** used in conjunction with the process, at least once per ~~shift~~ **day** when the process is in operation. When for any one reading, the pressure drop across ~~the a~~ baghouse is outside the normal range of 0.5 and 6 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a violation of **deviation from** this permit.

The instrument used for determining the pressure shall comply with Section C - ~~Pressure Gauge and Other Instrument Specifications~~, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.1.12 Bag house Inspections

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~~A baghouse inspection shall be performed once each year of all bags controlling the process. All defective bags shall be replaced.~~

#### D.1.12 D.1.13 Broken or Failed Bag Detection

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~~In the event that bag failure has been observed:~~

- (a) ~~For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B - Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.~~
- (b) ~~For single compartment bag houses, failed units and the process will be shut down immediately until the failed units have 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).~~
- (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 process line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

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

~~D.1.14 Cyclone Inspections~~

~~An inspection shall be performed once each year of all cyclones controlling the processes.~~

~~D.1.15~~ **D.1.13 Cyclone Failure Detection**

In the event that cyclone failure has been observed:

~~Failed units and the process will~~ **A failed unit and the associated process shall** be shut down immediately until the failed units ~~have~~ **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). Failure to take response steps in accordance with Section C - ~~Compliance Response Plan—Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a ~~violation of~~ **deviation from** this permit.

~~D.1.16~~ **D.1.14 Mineral Oil Absorber**

- (a) The absorber shall operate at all times the oil extractor process is in operation at an average mineral oil flow rate as recommended by the manufacturer.
- (b) The Permittee shall monitor and record the mineral oil flow rate at least once per day. The Preventive Maintenance Plan for the absorber shall contain troubleshooting contingency and corrective actions for when the flow rate readings are outside of the normal range for any one reading.
- (c) The instruments used for determining the flow rate shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (d) The gauge employed to read the mineral oil flow across the scrubber shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within  $\pm 10\%$  of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
- (e) In the event that the absorber's failure has been observed, an inspection will be conducted. Based upon the findings of the inspection, any corrective actions will be devised within ~~eight (8)~~ **twenty-four (24)** hours of discovery and will include a timetable for completion.
- (f) ~~The operating temperatures of the mineral oil absorber will be established in the Compliance Monitoring Plan. When the process is in operation, an electronic data management system (EDMS) shall record the instantaneous temperature on a frequency of not less than every two hours. As an alternate to installing an EDMS, manual readings shall be taken every two hours.~~

- ~~(g)~~ The mineral oil to the mineral-oil-stripping column shall be kept a minimum of 180°F for adequate stripping of the absorbed hexane from the oil. When the process is in operation, an electronic data management system (EDMS) shall record the instantaneous temperature on a frequency of not less than every two hours. As an alternate to installing an EDMS, manual readings shall be taken every two hours.

~~D.1.17~~ **D.1.15** Record Keeping Requirements

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- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records of the ~~followings~~ **following**:
- (1) visible emission notations of the ~~facilities~~ stack exhaust ~~once per shift~~ required under Condition D.1.10.
  - (2) ~~per shift~~ readings of total static pressure drop across the bag houses during normal operation required under Condition D.1.11.
  - ~~(3) the results of the inspections required under Condition D.1.12 and D.1.14.~~
- (b) To document compliance with ~~Condition~~ **Conditions** D.1.2 (a) and ~~D.1.16~~ **D.1.14**, the Permittee shall maintain records of the ~~followings~~ **following**:
- (1) The amount of VOC (hexane) used per calendar month.
  - (2) The amounts of soybean processed by the conventional and specialty processes.
  - (3) The gallons of hexane used per ton of soybean processed by the conventional and specialty processes
  - (4) The daily record of the mineral oil flow rate to the mineral oil absorber
  - (5) The events of the absorber's failure, findings of the inspections subsequent to absorber's failure, the corrective actions taken, and the time table for completion
  - (6) The operating temperatures of the mineral oil absorber
  - (7) The temperature of the mineral oil stripping column
- (c) To document compliance with Condition D.1.2(b),
- (1) 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.
  - (2) 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 within 5 to 15 days of detection;
  - (F) Maintenance recheck if repaired-date, concentration, background; and
  - (G) Any appropriate comments.
- (d) To document compliance with Condition D.1.4, the Permittee shall maintain records of the followings:
- (1) For the first twelve months, record the items in paragraphs 40 CFR 63.2862(c)(1) through (c)(3).
  - (2) After the source has processed soybeans for 12 operating months, and the source is not operating during an initial startup period as described in 40 CFR 63.2850(c)(2) or (d)(2), or a malfunction period as described in 40 CFR 63.2850(e)(2), record the items in 40 CFR 63.2862(d)(1) through (5) by the end of calendar month following each operating month.
  - (3) For each SSM event subject to an initial startup period as described in 40 CFR 63.2850(c)(2) or (d)(2), or a malfunction period as described in 40 CFR 63.2850(e)(2), record the items in 40 CFR 63.2862(e)(1) through (3).
  - (4) The Permittee shall keep the compliance plan and SSM plan on-site and readily available as long as the source is operational.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit, and 40 CFR 63.2862.

#### D.2.12 Visible Emissions Notations

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- (a) Visible emission notations of the stack exhaust S-13, S-2, S-1, S-3, S-20, S-7, S-5, S-11, S-12, S-21, S-25, S-6, S-14, S-4, S-8, S-22, S-23, and S-24 shall be performed once per ~~shift~~ **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) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.~~ **If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances.** Failure to take response steps in accordance with Section C - ~~Compliance Response Plan Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a violation of **deviation from** this permit.

#### D.2.13 Parametric Monitoring

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The Permittee shall record the ~~total static~~ pressure drop across the ~~bag houses~~ **baghouses** used in conjunction with the processes, at least once per ~~shift~~ **day** when the processes are in operation. ~~Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the~~ **When for any one reading, the pressure drop across a baghouse is outside the normal** range of 0.5 and 6.0 inches of water or a range established during the latest stack test, **the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances.** The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a violation of **deviation from** this permit.

The instrument used for determining the pressure shall comply with Section C - ~~Pressure Gauge and Other Instrument Specifications~~, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.2.14 ~~Bag house Inspections~~

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~~An inspection shall be performed once each year of all bags controlling the processes. All defective bags shall be replaced.~~

#### D.2.15 **D.2.14** Broken or Failed Bag Detection

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~~In the event that bag failure has been observed:~~

- ~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B - Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.~~
- ~~(b) For single compartment bag houses, failed units and the associated process will be shut down immediately until the failed units have 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).~~
- (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 process line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

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

~~D.2.16 Cyclone Inspections~~

~~An inspection shall be performed once each year of all cyclones controlling the processes.~~

~~D.2.17~~ **D.2.15 Cyclone Failure Detection**

In the event that cyclone failure has been observed:

~~Failed units and the process will~~ **A failed unit and the associated process shall** be shut down immediately until the failed ~~units have~~ **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). Failure to take response steps in accordance with Section C - ~~Compliance Response Plan—Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a ~~violation of~~ **deviation from** this permit.

~~D.2.18~~ **D.2.16 Mineral Oil Absorber**

- (a) The absorber shall operate at all times the oil extractor process is in operation at an average mineral oil flow rate to be determined at the time of the VOC (hexane) compliance test.
- (b) The Permittee shall monitor and record the mineral oil flow rate at least once per day. The Preventive Maintenance Plan for the absorber shall contain troubleshooting contingency and corrective actions for when the flow rate readings are outside of the normal range for any one reading.
- (c) The instruments used for determining the flow rate shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (d) The gauge employed to take the mineral oil flow across the scrubber shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within  $\pm 10\%$  of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
- (e) In the event that ~~a Absorber's~~ **the absorber's** failure has been observed, an inspection will be conducted. Based upon the findings of the inspection, any corrective actions will be devised within ~~eight (8)~~ **twenty-four (24)** hours of discovery and will include a timetable for completion.
- (f) ~~The operating temperatures of the mineral oil absorber will be established in the Compliance Monitoring Plan. When the process is in operation, an electronic data management system (EDMS) will record the instantaneous temperature on a frequency of not less that every two hours. As an alternate to installing an EDMS, manual readings shall be taken every two hours.~~

- ~~(g)~~ The mineral oil to the mineral-oil-stripping column shall be kept at a minimum of 180°F for adequate stripping of the absorbed hexane from the oil. When the process is in operation, an electronic data management system (EDMS) shall record the instantaneous temperature on a frequency of not less than every two hours. As an alternate to installing an EDMS, manual readings shall be taken every two hours.

~~D.2.19~~ **D.2.17** Record Keeping Requirements

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- (a) ~~In order to comply with operation condition nos.~~ **To document compliance with Conditions D.2.1, D.2.2, and D.2.3 the Permittee shall maintain records of the followings following:**
- ~~(1) visible emission notations of the facilities stack exhaust once per shift required under Condition D.2.12.~~
  - ~~(2) per shift records of total static pressure drop across the bag houses during normal operation required under Condition D.2.13.~~
  - ~~(3) the results of the inspections required under Condition D.2.14 and D.1.16.~~
- (b) To document compliance with Condition D.2.4(a), the Permittee shall maintain records of the followings **following** as required under Conditions D.2.9 and ~~D.2.18~~ **D.2.16**:
- (1) The amount of VOC (hexane) used per calendar month
  - (2) The amounts of soybean processed by the conventional and specialty processes
  - (3) The gallons of hexane used per ton of soybean processed by the conventional and specialty processes
  - (4) The daily record of the mineral oil flow rate
  - (5) The events of the absorber's failure, findings of the inspections subsequent to absorber's failure, the corrective actions taken, and the time table for completion
  - (6) The operating temperatures of the mineral oil absorber
  - (7) The temperature of the mineral oil stripping column
- (c) To document compliance with Condition D.2.4(b),
- (1) 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.
  - (2) 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 within 5 to 15 days of detection;
  - (F) Maintenance recheck if repaired-date, concentration, background; and
  - (G) Any appropriate comments.
- (d) To document compliance with Condition D.2.6, the Permittee shall maintain records of the followings:
- (1) For the first twelve months, record the items in paragraphs 40 CFR 63.2862(c)(1) through (c)(3).
  - (2) After the source has processed soybeans for 12 operating months, and the source is not operating during an initial startup period as described in 40 CFR 63.2850(c)(2) or (d)(2), or a malfunction period as described in 40 CFR 63.2850(e)(2), record the items in 40 CFR 63.2862(d)(1) through (5) by the end of calendar month following each operating month.
  - (3) For each SSM event subject to an initial startup period as described in 40 CFR 63.2850(c)(2) or (d)(2), or a malfunction period as described in 40 CFR 63.2850(e)(2), record the items in 40 CFR 63.2862(e)(1) through (3).
  - (4) The Permittee shall keep the compliance plan and SSM plan on-site and readily available as long as the source is operational.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit and 40 CFR 63.2862.

**~~D.2.20~~ D.2.18 Reporting Requirements**

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- (a) A quarterly summary of the information to document compliance with Condition D.2.1 (a), (b), (c) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, 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. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) Annual Compliance Certification -The first annual compliance certification for NESHAP requirements of 40 CFR 63, Part GGGG, is due 12 calendar months after the source submits the notification of compliance status. Each annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. The report should include the information in paragraphs 40 CFR 63.2661(a)(1) through (6).
- (c) Deviation notification report - Submit a deviation notification report for each compliance determination in which the compliance ratio exceeds 1.0 as determined under 40 CFR 63.2840(c). Submit the deviation report by the end of the month following the calendar month in which you determined the deviation. The deviation notification report must include the items in paragraphs 40 CFR 63.2861(b)(1) through (4).

- (d) Periodic startup, shutdown, and malfunction report – If the source is operating under an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2) or a malfunction period subject to 40 CFR 63.2850(e)(2), submit the periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the items in paragraphs 40 CFR 63.2861(c)(1) through (3).
- (1) The HAP content of commercial grade hexane.
  - (2) The maximum amount of soybean process throughput.
  - (3) The amount of n-hexane loss when using commercial grade hexane.
- (e) Intermediate SSM reports – If the source handles a SSM during an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2) or a malfunction period subject to 40 CFR 63.2850(e)(2) differently from procedures in SSM plan, then submit an immediate SSM report. Intermediate reports consists of a telephone call or facsimile transmission to the responsible agency within 2 working days after starting actions consistent with the SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the items in 40CFR 63.2861(d)(1) through (3).

D.3.1 Particulate Matter Emissions [326 IAC 6-2-3][326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-3(d) (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from Boiler ~~no. #1~~ shall be limited to 0.447 pounds per MMBtu heat input.
- (b) Pursuant to CP 157-5397, and 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from Boiler ~~no. #2~~ shall be limited to 0.304 pounds per MMBtu heat input.

D.3.2 Opacity Limitation [326 IAC 12][40 CFR 60 Subpart Dc]

Pursuant to CP 157-5397, 326 IAC 12 and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), the opacity from ~~the 75 million Btu/hr Boiler no. #2~~ shall be limited to **twenty percent (20%) opacity** (6 minute average) except for one 6 minute period per hour of not more than ~~27~~ **twenty-seven percent (27%) opacity**. **The opacity limits apply at all times** except during periods of startup, ~~Shutdown~~, or malfunction. [40 CFR 60.43c]

D.3.3 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The input of fuel oil no.2 and no. 2 equivalents to ~~the boiler identified as Boiler no. #2 rated at maximum capacity of 75 million British thermal units per hour (MMBtu/hr) and the boiler identified as Boiler no. #1 rated at maximum capacity of 60 million British thermal units per hour (MMBtu/hr)~~ shall be limited to 1042 and 102 Kgal measured as no. 2 fuel oil per twelve (12)- consecutive month period, with compliance demonstrated at the end of each month, respectively. For compliance purposes, the following equivalencies shall be used.

1Kgal of no. 4 fuel oil = 1.00 Kgal of no.2 fuel oil  
1Kgal of no. 5 fuel oil = 1.16 Kgal of 2 fuel oil  
1Kgal of no. 6 fuel oil = 1.16 Kgal of no.2 fuel oil

This usage limit is equivalent to a potential to emit of 39.0 tons of sulfur dioxide per year.

- (b) The input of natural gas and natural gas equivalents to ~~the Boiler no. #2 rated at a maximum capacity of 75 million British thermal units per hour (MMBtu/hr) and Boiler no. #1 rated at maximum capacity of 60 million British thermal units per hour (MMBtu/hr)~~ shall be limited to 657 MMCF and 314 MMCF of natural gas per twelve (12)- consecutive month period, with compliance demonstrated at the end of each month, respectively. **These usage limits are equivalent to a potential to emit of less than 46 tons of nitrogen oxides per year at Boiler #2 and less than 22 tons of nitrogen oxides per year at Boiler #1.**
- (c) **When burning vegetable oil, or blends of vegetable oil and distillate fuel oil, nitrogen oxide emissions shall not exceed 0.162 pounds per million Btu heat input.**
- (d) **When burning grease, tallow, or blends of grease or tallow and fuels other than residual fuel oil, nitrogen oxide emissions shall not exceed 0.195 pounds per million Btu heat input.**
- (e) Pursuant to **Conditions D.1.1 and D.2.2**, the combined input of natural gas and natural gas equivalents to ~~the Boiler no. #2 and Boiler no. #1~~ shall be limited to 794 MMCF of natural gas per twelve (12)- consecutive month period, with compliance demonstrated at the end of each month. **This usage limit is equivalent to a potential to emit of 39.7 tons of nitrogen oxides per year.**

For compliance purposes, the following equivalencies shall be used.

1 Kgal of no. 2 fuel oil	= 0.143 MMCF of natural gas
1 Kgal of no. 4 fuel oil	= 0.143 MMCF of natural gas
1 Kgal of no. 5 fuel oil	= 0.393 MMCF of natural gas
1 Kgal of no. 6 fuel oil	= 0.393 MMCF of natural gas
<b>1 Kgal of vegetable oil</b>	<b>= 0.209 MMCF of natural gas</b>
<b>1 Kgal of tallow</b>	<b>= 0.247 MMCF of natural gas</b>
<b>1 Kgal of grease</b>	<b>= 0.093 MMCF of natural gas</b>

~~This usage limit is required to limit the potential to emit of nitrogen oxides to less than 46 and 22 tons per year at the boilers identified as Boiler no. 2 and Boiler no. 1.~~

~~This usage limit is equivalent to a potential to emit of 39.0 tons of nitrogen dioxide per year.~~

Compliance with ~~Conditions (a) and (b)~~ **this condition** makes the Prevention of Significant Deterioration (PSD) rules (326 IAC 2-2) ~~and 40 CFR 52.24~~ not applicable.

D.3.4 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1] [326 IAC 7-1.1-2] [326 IAC 12-1][40 CFR 60, Subpart Dc]

- (a) Pursuant to 326 IAC 7-1.2 (SO<sub>2</sub> Emissions Limitations):
- (1) The SO<sub>2</sub> emissions from the sixty (60) MMBtu per hour ~~boiler no.~~ **Boiler #1** shall not exceed five tenths (0.5) pounds per million Btu heat input, when combusting ~~the~~ distillate fuel oil; and
  - (2) The SO<sub>2</sub> emissions from the sixty (60) MMBtu per hour Boiler ~~no. #1~~ shall not exceed one and sixth tenths (1.6) pounds per million Btu heat input, when combusting ~~the~~ residual fuel oil.
- (b) Pursuant to CP 157-5397, 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations), 326 IAC 12, and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):

- (1) The SO<sub>2</sub> emissions from the seventy five (75) MMBtu per hour boiler ~~no. Boiler #2~~ shall not exceed five tenths (0.5) pounds per million Btu heat input; or
- (2) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight.
- (3) The SO<sub>2</sub> emission limits and fuel oil sulfur limits apply at all times, including periods of startup, shutdown, and malfunction.

#### D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the boilers.

#### D.3.6 Sulfur Dioxide Emissions and Sulfur Content

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Compliance with Condition D.3.4 shall be determined utilizing one of the following options:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions from Boiler ~~no. #1~~ do not exceed five-tenths (0.5) pound per million Btu heat input by:
  - (1) Providing vendor analysis of fuel **oil** delivered, if accompanied by a vendor certification, or;
  - (2) Analyzing the **fuel** oil sample to determine the sulfur content of the **fuel** oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) ~~Oil~~ **Fuel oil** samples may be collected from the fuel **oil** tank immediately after the fuel **oil** tank is filled and before any **fuel** oil is combusted; and
    - (B) If a partially empty fuel **oil** tank is refilled, a new sample and analysis would be required upon filling.
- (b) Pursuant to 326 IAC 12, and 40 CFR 60.44c(b), (d), and (g) the Permittee shall demonstrate that the sulfur dioxide emissions from Boiler ~~no. #2~~, when burning **fuel** oil, do not exceed five-tenths (0.5) pound per million Btu heat input using a 30 days average by:
  - (1) Computing 30-day average by continuous emission monitoring system (CEMS).  
Or
  - (2) Method 19 to calculate when using daily fuel **oil** sampling or Method 6B;
    - (A) ~~Oil~~ **Fuel oil** samples may be collected from the fuel **oil** tank immediately after the fuel **oil** tank is filled and before any **fuel** oil is combusted; and
    - (B) If a partially empty fuel **oil** tank is refilled, a new sample and analysis would be required upon filling.
- (c) Pursuant to 326 IAC 12, and 40 CFR 60.44c(h), the Permittee may demonstrate compliance with the SO<sub>2</sub> standard ~~from~~ for Boiler ~~no. #2~~, when burning distillate **fuel** oil, by providing vendor analysis of **distillate** fuel **oil** delivered, if accompanied by a vendor certification.

- (d) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from ~~the boiler nos.~~ **Boiler #1** and **Boiler #2** 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), (b), (c), and (d) above shall not be refuted by evidence of compliance pursuant to ~~the other~~ **another** method.

### **D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]**

**In order to demonstrate compliance with Condition D.3.3:**

- (a) **No later than 180 days from the commencement of vegetable oil combustion, the Permittee shall conduct performance tests for nitrogen oxide emissions on either Boiler #1 or Boiler #2 during vegetable oil combustion, and furnish the Commissioner a written report of the results of such performance tests.**
- (b) **No later than 180 days from the commencement of tallow combustion, the Permittee shall conduct performance tests for nitrogen oxide emissions on either Boiler #1 or Boiler #2 during tallow combustion, and furnish the Commissioner a written report of the results of such performance tests.**
- (c) **No later than 180 days from the commencement of grease combustion, the Permittee shall conduct performance tests for nitrogen oxide emissions on either Boiler #1 or Boiler #2 during grease combustion, and furnish the Commissioner a written report of the results of such performance tests.**

### **D.3.7 D.3.8 SO<sub>2</sub> Monitoring [326 IAC 12][40 CFR 60.46c(a), (b), (c), and (d)]**

Cargill, Inc. shall do one of the following methods to comply with ~~condition no.~~ **Condition D.3.6(b)**:

- (a) install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) for measuring SO<sub>2</sub> concentrations and either oxygen or carbon dioxide concentrations at the outlet of ~~the steam generating unit (Boiler no. #2)~~ and record the output of the system when combusting ~~residual~~ **fuel** oil; or
- (b) as an alternative to operating a CEMS at the outlet of ~~the steam generating unit (Boiler no. #2)~~, the Permittee may elect to determine the average SO<sub>2</sub> emission rate from Boiler ~~no. #2~~ by using Method 6, when combusting residual fuel oil. The fuel **oil** sampling shall be performed as follows:
- (1) The **fuel** oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according to the Method 19.
  - (2) The **fuel** oil samples shall be collected from the fuel **oil** tank for Boiler ~~no. #2~~ immediately after the fuel **oil** tank is filled and before any **fuel** oil is combusted. The Permittee shall analyze the **fuel** oil sample to determine the sulfur content of the oil. If a partially empty fuel **oil** tank is refilled, a new sample and analysis of the fuel **oil** in the tank shall be performed upon filling.
- (c) The Permittee shall collect **fuel** oil samples daily in an as-fired condition at the inlet to the steam generating unit and analyze for sulfur content and heat content according to ~~the~~ **Method 19**; when the ~~CEMS~~ **CEMS** is down for maintenance or under breakdown.

- (d) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.~~ **If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances.** Failure to take response steps in accordance with Section C - ~~Compliance Response Plan—Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a violation of **deviation from** this permit.

~~D.3.8~~ **D.3.9** Continuous Opacity Monitoring System (COMS) [40 CFR 60.47c(a)]

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- (a) Prior to combusting residual fuel oil (fuel oils #4, #5, and #6) in Boiler ~~no. #2~~, the Permittee shall install, calibrate, maintain, and operate a **continuous opacity monitoring system (COMS)** for measuring **and recording** the opacity of the emissions from Boiler ~~no. #2~~ discharged to the atmosphere ~~and record the output of the system when combusting residual fuel oil.~~
- (b) ~~The Permittee shall perform visible emission notations of the Boiler no. #2 stack exhaust once per shift during normal daylight operations, when the COMS is down for maintenance or under breakdown.~~
- (c) ~~The Compliance Response Plan for this COMS shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.~~ **If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances.** Failure to take response steps in accordance with Section C - ~~Compliance Response Plan—Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a violation of **deviation from** this permit.

~~D.3.9~~ **D.3.10** Visible Emissions Notations

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- (a) The Permittee shall perform visible emission notations of the Boiler ~~no. #1~~ stack exhaust once per ~~shift~~ **day** during normal daylight operations, when combusting ~~fuel oil~~ **fuels other than natural gas**. A trained employee shall record whether emissions are normal or abnormal.
- (b) The Permittee shall perform visible emission notations of the Boiler ~~no. #2~~ stack exhaust once per ~~shift~~ **day** during normal daylight operations, when combusting ~~distillate fuel oil~~ **fuels other than natural gas, if there is no COMS installed or when if the COMS is down for maintenance or under breakdown.**
- A trained employee shall record whether emissions are normal or abnormal.
- (c) 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.
- (d) 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.
- (e) 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.
- (f) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.~~ **If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances.** Failure to take response

steps in accordance with Section C - ~~Compliance Response Plan Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a violation of **deviation from** this permit.

**D.3.10 D.3.11** Record Keeping Requirements

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- (a) To document compliance with condition D.3.4(b), the Permittee shall keep record of each 30 day average SO<sub>2</sub> emission rate (lb/million Btu) or 30 day average sulfur content (weight percent) of Boiler ~~no. #2~~, calculated during the reporting period, ending with the last 30- day period; reasons for any non compliance with the emission standards; and a description of corrective actions taken.
- (b) To document compliance with condition D.3.7 (a), the Permittee shall record the output of the continuous emission monitoring system (CEMS) for measuring SO<sub>2</sub> concentrations.
- Or
- (c) To document compliance with ~~condition D.3.7~~ **Condition D.3.8**(b), the Permittee shall maintain records in accordance with (1) through ~~(6)~~ **(4)** below. Records maintained for (1) through ~~(6)~~ **(4)** shall be taken monthly and shall be complete and sufficient to establish compliance with the SO<sub>2</sub> emission limit established in ~~Conditions~~ **Condition** D.3.4. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.
- (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.
  - (4) 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:
    - (A) Fuel supplier certifications;
    - (B) The name of the fuel supplier; and
    - (C) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (d) To document compliance with ~~condition D.3.8~~ **Condition D.3.9**, the Permittee shall record the output of the continuous emission monitoring system (COMS) for measuring opacity on a six (6) minute average basis, **if a COMS is operated when burning residual fuel oil.**
- (e) To document compliance with ~~Condition D.3.9~~ **D.3.10**(a) and (b), the Permittee shall maintain record of visible emission notations of the Boiler ~~no. #1~~ **stack exhaust**, and **also the Boiler #2 stack exhaust if there is no COMS installed or if the COMS is malfunctioning or down for maintenance or repair while combusting fuel oils, and distillate oil respectively.**
- (f) To document compliance with ~~condition~~ Condition D.3.3, the Permittee shall maintain the record of all the fuels burned in ~~Boiler nos.~~ **Boiler #1 and Boiler #2.**

- (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit. The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

~~D.3.11~~ **D.3.12** Reporting Requirements

- (a) A certification signed by the responsible official that certifies all of the fuels combusted during the period. The natural gas-fired boiler certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported.
- (c) A quarterly summary of ~~condition no. 3.3~~ **Condition D.3.3** shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, 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.
- (d) A summary of ~~condition no. 3.10~~ **Condition D.3.11**(a), (b), (c), and (e) for Boiler ~~no. #2~~ only, shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by the responsible official as defined by 326 IAC 2-7-1(34). The Permittee shall submit excess emission reports for any excess emissions from ~~the~~ Boiler ~~no. #2~~, when burning residual fuel oil, during the reporting period.

Furthermore, the facility description in Section D.1 is hereby amended as follows:

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

**Permitted and Existing before December 3, 2001**

*(Items (1) through (73) remain unchanged.)*

(74) One (1) ~~75 MMBtu per hour natural gas fired boiler~~, **identified as Boiler #2, constructed in 1996, with a heat input capacity of 75.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels designated as S-17 with fuel oil #2, #4, #5, and #6 as available backup fuel oils. Emissions are exhausted to stack S-17.**

(75) One (1) ~~60 MMBtu per hour natural gas fired boiler~~, **identified as Boiler #1, constructed in 1955, with a heat input capacity of 60.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels designated as S-16 with fuel oil #2, #4, #5, and #6 as available backup fuel oils. Emissions are exhausted to stack S-16.**

*(Items (76) through (78) remain unchanged.)*

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

The facility description in Section D.2 is hereby amended as follows:

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

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

**Emission Units Permitted on December 3, 2001**

*(Items (1) through (73) remain unchanged.)*

(74) One (1) ~~75 MMBtu per hour natural gas fired boiler~~, identified as **Boiler #2**, constructed in 1996, with a heat input capacity of 75.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels designated as S-17 with fuel oil #2, #4, #5, and #6 as available backup fuel oils. Emissions are exhausted to stack S-17.

(75) One (1) ~~60 MMBtu per hour natural gas fired boiler~~, identified as **Boiler #1**, constructed in 1955, with a heat input capacity of 60.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels designated as S-16 with fuel oil #2, #4, #5, and #6 as available backup fuel oils. Emissions are exhausted to stack S-16.

*(Items (76) through (78) remain unchanged.)*

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

The facility description in Section D.3 is hereby amended as follows:

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

(1) One (1) ~~fuel oil/natural gas fired boiler~~, Model no. VLP, Erie City Iron Works, identified as Boiler #1, constructed in 1955, with a heat input capacity of 60.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels. Emissions are exhausted and exhausting to stack S-16.

(2) One (1) ~~fuel oil/natural gas fired boiler~~, Model no. NS-C-57, Nebraska Boiler Company, identified as Boiler #2, constructed in 1996, with a heat input capacity of 75.0 MMBtu per hour, firing natural gas, distillate fuel oil, residual fuel oil, vegetable oil, animal fats ("tallow"), animal oils ("grease") or blends of these fuels. Emissions are exhausted and exhausting to stack S-17.

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

**Conclusion and Recommendation**

The operation of this source shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification 157-21911-00038. The staff recommend to the Commissioner that this Part 70 Significant Permit Modification be approved.

**Appendix A: Emissions Calculations**

**Company Name:** Cargill Inc. - Vegetable Processing Division  
**Address City IN Zip:** 1503 Wabash Ave, Lafayette IN 47902  
**ID:** 157-21911-00038  
**Reviewer:** Allen R. Davidson  
**Date:** 01/26/06

1st Boiler	44 MMBtu/hr
V.O. Flow rate:	2603.5503 lb/hr
Density:	7.657 lb/gal
Fuel Use:	340.02224 gal/hr
Heat Value:	129403.3 Btu/gal
Heat by V.O.:	44000000 Btu/hr

Maximum % veg. oil: 100.00%

Linear scaling of test data:

$$\frac{100.00\% \text{ maximum}}{85.78\% \text{ as tested}} = 1.17 \text{ (scaling factor)}$$

	NG / #2 oil / #6 oil emission factor	NG / #2 oil / #6 oil ton / year	85.8% veg. oil emission factor	100.0% veg. oil emission factor	100.0% veg. oil ton / year	Change in emissions ton / year
PM:	0.0562 lb/MMBtu	10.84 tons/year	0.0185 lb/MMBtu	0.0122 lb/MMBtu	2.36 tons/year	0.00 tons/year
PM <sub>10</sub> :	0.0562 lb/MMBtu	10.84 tons/year	0.0185 lb/MMBtu	0.0122 lb/MMBtu	2.36 tons/year	0.00 tons/year
SO <sub>2</sub> :	0.5000 lb/MMBtu	96.36 tons/year	0.0250 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year
NOx:	0.3381 lb/MMBtu	65.16 tons/year	0.1618 lb/MMBtu	0.1326 lb/MMBtu	25.55 tons/year	0.00 tons/year
VOC:	0.0055 lb/MMBtu	1.06 tons/year	0.0024 lb/MMBtu	0.0019 lb/MMBtu	0.36 tons/year	0.00 tons/year
CO:	0.0840 lb/MMBtu	16.19 tons/year	0.0965 lb/MMBtu	0.0986 lb/MMBtu	19.00 tons/year	2.81 tons/year

2nd Boiler	75 MMBtu/hr
V.O. Flow rate:	4441.2751 lb/hr
Density:	7.702 lb/gal
Fuel Use:	576.63919 gal/hr
Heat Value:	130064 Btu/gal
Heat by V.O.:	75000000 Btu/hr

Maximum % vegetable oil: 100.00%

Linear scaling of test data:

$$\frac{100.00\% \text{ maximum}}{85.78\% \text{ as tested}} = 1.17 \text{ (scaling factor)}$$

	NG / #2 oil / #6 oil emission factor	NG / #2 oil / #6 oil ton / year	85.8% veg. oil emission factor	100.0% veg. oil emission factor	100.0% veg. oil ton / year	Change in emissions ton / year
PM:	0.0562 lb/MMBtu	18.47 tons/year	0.0185 lb/MMBtu	0.0122 lb/MMBtu	4.02 tons/year	0.00 tons/year
PM <sub>10</sub> :	0.0562 lb/MMBtu	18.47 tons/year	0.0185 lb/MMBtu	0.0122 lb/MMBtu	4.02 tons/year	0.00 tons/year
SO <sub>2</sub> :	0.5000 lb/MMBtu	164.25 tons/year	0.0250 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year
NOx:	0.3381 lb/MMBtu	111.08 tons/year	0.1618 lb/MMBtu	0.1326 lb/MMBtu	43.55 tons/year	0.00 tons/year
VOC:	0.0055 lb/MMBtu	1.81 tons/year	0.0024 lb/MMBtu	0.0019 lb/MMBtu	0.62 tons/year	0.00 tons/year
CO:	0.0840 lb/MMBtu	27.59 tons/year	0.0965 lb/MMBtu	0.0986 lb/MMBtu	32.39 tons/year	4.79 tons/year

The vegetable oil emission calculations are based on emission tests conducted January 18 and January 23, 2001 on the EP#26 stack at the Cargill facility in Iowa Falls, IA. Baseline emission factors are from EPA document AP-42.

Methodology:

$$(\text{baseline emission at 0\% vegetable oil}) + ((\text{change in emission between 0\% and tested \% vegetable oil}) * (\text{scaling factor})) = (\text{emission at the desired \% vegetable oil})$$

TOTAL:

	Change in emissions ton / year
PM:	0.00 tons/year
PM <sub>10</sub> :	0.00 tons/year
SO <sub>2</sub> :	0.00 tons/year
NOx:	0.00 tons/year
VOC:	0.00 tons/year
CO:	7.60 tons/year

Note: In cases where linear scaling of an emission decrease results in a negative emission factor, the emission factor is listed as zero lb/MMBtu.

**Appendix A: Emissions Calculations**

**Company Name:** Cargill Inc. - Vegetable Processing Division  
**Address City IN Zip:** 1503 Wabash Ave, Lafayette IN 47902  
**ID:** 157-21911-00038  
**Reviewer:** Allen R. Davidson  
**Date:** 01/26/06

1st Boiler 44 MMBtu/hr

T. Flow rate:	2603.5503 lb/hr
Density:	7.51 lb/gal
Fuel Use:	346.6778 gal/hr
Heat Value:	126919 Btu/gal
Heat by T.:	44000000 Btu/hr

Maximum % tallow: 100.00%

Linear scaling of test data:

$$\frac{100.00\% \text{ maximum}}{50.00\% \text{ assumed}} = 2.00 \text{ (scaling factor)}$$

	NG / #2 oil / #6 oil emission factor	NG / #2 oil / #6 oil ton / year	50.0% tallow emission factor	100.0% tallow emission factor	100.0% tallow ton / year	Change in emissions ton / year
PM:	0.0562 lb/MMBtu	10.84 tons/year	0.0540 lb/MMBtu	0.0518 lb/MMBtu	9.98 tons/year	0.00 tons/year
PM <sub>10</sub> :	0.0562 lb/MMBtu	10.84 tons/year	0.0540 lb/MMBtu	0.0518 lb/MMBtu	9.98 tons/year	0.00 tons/year
SO <sub>2</sub> :	0.5000 lb/MMBtu	96.36 tons/year	0.0000 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year
NOx:	0.3381 lb/MMBtu	65.16 tons/year	0.1950 lb/MMBtu	0.0519 lb/MMBtu	10.00 tons/year	0.00 tons/year
VOC:	0.0055 lb/MMBtu	1.06 tons/year	0.0050 lb/MMBtu	0.0045 lb/MMBtu	0.87 tons/year	0.00 tons/year
CO:	0.0840 lb/MMBtu	16.19 tons/year	0.0160 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year

2nd Boiler 75 MMBtu/hr

T. Flow rate:	4437.8698 lb/hr
Density:	7.51 lb/gal
Fuel Use:	590.92807 gal/hr
Heat Value:	126919 Btu/gal
Heat by T.:	75000000 Btu/hr

Maximum % tallow: 100.00%

Linear scaling of test data:

$$\frac{100.00\% \text{ maximum}}{50.00\% \text{ estimated}} = 2.00 \text{ (scaling factor)}$$

	NG / #2 oil / #6 oil emission factor	NG / #2 oil / #6 oil ton / year	50.0% tallow emission factor	100.0% tallow emission factor	100.0% tallow ton / year	Change in emissions ton / year
PM:	0.0562 lb/MMBtu	18.47 tons/year	0.0540 lb/MMBtu	0.0518 lb/MMBtu	17.01 tons/year	0.00 tons/year
PM <sub>10</sub> :	0.0562 lb/MMBtu	18.47 tons/year	0.0540 lb/MMBtu	0.0518 lb/MMBtu	17.01 tons/year	0.00 tons/year
SO <sub>2</sub> :	0.5000 lb/MMBtu	164.25 tons/year	0.0000 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year
NOx:	0.3381 lb/MMBtu	111.08 tons/year	0.1950 lb/MMBtu	0.0519 lb/MMBtu	17.04 tons/year	0.00 tons/year
VOC:	0.0055 lb/MMBtu	1.81 tons/year	0.0050 lb/MMBtu	0.0045 lb/MMBtu	1.48 tons/year	0.00 tons/year
CO:	0.0840 lb/MMBtu	27.59 tons/year	0.0160 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year

The tallow emission calculations are based on emission tests conducted in Wapello County, IA, which indicated the highest emission results for tallow combustion. Baseline emission factors are from EPA document AP-42.

**Methodology:**

$$\text{(baseline emission at 0\% tallow) + ((change in emission between 0\% and tested \% tallow) * (scaling factor))} \\ = \text{(emission at the desired \% tallow)}$$

Note: In cases where linear scaling of an emission decrease results in a negative emission factor, the emission factor is listed as zero lb/MMBtu.

**TOTAL:**

	Change in emissions ton / year
PM:	0.00 tons/year
PM <sub>10</sub> :	0.00 tons/year
SO <sub>2</sub> :	0.00 tons/year
NOx:	0.00 tons/year
VOC:	0.00 tons/year
CO:	0.00 tons/year

**Appendix A: Emissions Calculations**

**Company Name:** Cargill Inc. - Vegetable Processing Division  
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**ID:** 157-21911-00038  
**Reviewer:** Allen R. Davidson  
**Date:** 01/26/06

1st Boiler	44 MMBtu/hr
G. Flow rate:	2518.6033 lb/hr
Density:	7.506 lb/gal
Fuel Use:	335.54534 gal/hr
Heat Value:	131129.82 Btu/gal
Heat by G.:	44000000 Btu/hr

Maximum % grease: 100.00%

Linear scaling of test data:

$$\frac{100.00\% \text{ maximum}}{50.00\% \text{ assumed}} = 2.00 \text{ (scaling factor)}$$

	NG / #2 oil / #6 oil emission factor	NG / #2 oil / #6 oil ton / year	50.0% grease emission factor	100.0% grease emission factor	100.0% grease ton / year	Change in emissions ton / year
PM:	0.0562 lb/MMBtu	10.84 tons/year	0.0410 lb/MMBtu	0.0258 lb/MMBtu	4.97 tons/year	0.00 tons/year
PM <sub>10</sub> :	0.0562 lb/MMBtu	10.84 tons/year	0.0410 lb/MMBtu	0.0258 lb/MMBtu	4.97 tons/year	0.00 tons/year
SO <sub>2</sub> :	0.5000 lb/MMBtu	96.36 tons/year	0.0020 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year
NOx:	0.3381 lb/MMBtu	65.16 tons/year	0.0710 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year
VOC:	0.0055 lb/MMBtu	1.06 tons/year	0.0020 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year
CO:	0.0840 lb/MMBtu	16.19 tons/year	0.0220 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year

2nd Boiler	75 MMBtu/hr
G. Flow rate:	4293.0738 lb/hr
Density:	7.506 lb/gal
Fuel Use:	571.95228 gal/hr
Heat Value:	131129.82 Btu/gal
Heat by G.:	75000000 Btu/hr

Maximum % grease: 100.00%

Linear scaling of test data:

$$\frac{100.00\% \text{ maximum}}{50.00\% \text{ estimated}} = 2.00 \text{ (scaling factor)}$$

	NG / #2 oil / #6 oil emission factor	NG / #2 oil / #6 oil ton / year	50.0% grease emission factor	100.0% grease emission factor	100.0% grease ton / year	Change in emissions ton / year
PM:	0.0562 lb/MMBtu	18.47 tons/year	0.0410 lb/MMBtu	0.0258 lb/MMBtu	8.47 tons/year	0.00 tons/year
PM <sub>10</sub> :	0.0562 lb/MMBtu	18.47 tons/year	0.0410 lb/MMBtu	0.0258 lb/MMBtu	8.47 tons/year	0.00 tons/year
SO <sub>2</sub> :	0.5000 lb/MMBtu	164.25 tons/year	0.0020 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year
NOx:	0.3381 lb/MMBtu	111.08 tons/year	0.0710 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year
VOC:	0.0055 lb/MMBtu	1.81 tons/year	0.0020 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year
CO:	0.0840 lb/MMBtu	27.59 tons/year	0.0220 lb/MMBtu	0.0000 lb/MMBtu	0.00 tons/year	0.00 tons/year

The grease emission calculations are based on emission tests conducted in Wapello County, IA, which indicated the highest emission results for grease combustion. Baseline emission factors are from EPA document AP-42.

Methodology:

$$(\text{baseline emission at 0\% grease}) + ((\text{change in emission between 0\% and tested \% grease}) * (\text{scaling factor})) = (\text{emission at the desired \% grease})$$

Note: In cases where linear scaling of an emission decrease results in a negative emission factor, the emission factor is listed as zero lb/MMBtu.

TOTAL:

	Change in emissions ton / year
PM:	0.00 tons/year
PM <sub>10</sub> :	0.00 tons/year
SO <sub>2</sub> :	0.00 tons/year
NOx:	0.00 tons/year
VOC:	0.00 tons/year
CO:	0.00 tons/year

**Appendix A: Emissions Calculations**

**Company Name:** Cargill Inc. - Vegetable Processing Division  
**Address City IN Zip:** 1503 Wabash Ave, Lafayette IN 47902  
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Veg. Oil:  $\frac{0.161818 \text{ lb NOx}^*}{\text{MMBtu}} \frac{129403.3 \text{ Btu}^*}{\text{gal}} \frac{\text{MM gal}}{1000 \text{ Kgal}} = \frac{20.93981 \text{ lb NOx}}{\text{Kgal}}$  NG:  $\frac{100 \text{ lb NOx}}{\text{MMcf}}$

1 Kgal =  $\frac{20.93981 \text{ lb/NOx}}{100 \text{ lb/NOx}} = 0.209398 \text{ MMcf}$

$\frac{657 \text{ MMcf}^*}{\text{yr}} \frac{1000 \text{ gal}^*}{0.209398 \text{ MMcf}} \frac{129403.3 \text{ Btu}^*}{\text{gal}} \frac{0.161818 \text{ lb NOx}^*}{1000000 \text{ Btu}} \frac{\text{ton}}{2000 \text{ lb}} = \frac{32.85 \text{ ton NOx}}{\text{yr}}$

$\frac{314 \text{ MMcf}^*}{\text{yr}} \frac{1000 \text{ gal}^*}{0.209398 \text{ MMcf}} \frac{129403.3 \text{ Btu}^*}{\text{gal}} \frac{0.161818 \text{ lb NOx}^*}{1000000 \text{ Btu}} \frac{\text{ton}}{2000 \text{ lb}} = \frac{15.7 \text{ ton NOx}}{\text{yr}}$

$\frac{794 \text{ MMcf}^*}{\text{yr}} \frac{1000 \text{ gal}^*}{0.209398 \text{ MMcf}} \frac{129403.3 \text{ Btu}^*}{\text{gal}} \frac{0.161818 \text{ lb NOx}^*}{1000000 \text{ Btu}} \frac{\text{ton}}{2000 \text{ lb}} = \frac{39.7 \text{ ton NOx}}{\text{yr}}$

Tallow:  $\frac{0.195 \text{ lb NOx}^*}{\text{MMBtu}} \frac{126919 \text{ Btu}^*}{\text{gal}} \frac{\text{MM gal}}{1000 \text{ Kgal}} = \frac{24.74921 \text{ lb NOx}}{\text{Kgal}}$  NG:  $\frac{100 \text{ lb NOx}}{\text{MMcf}}$

1 Kgal =  $\frac{24.74921 \text{ lb/NOx}}{100 \text{ lb/NOx}} = 0.247492 \text{ MMcf}$

$\frac{657 \text{ MMcf}^*}{\text{yr}} \frac{1000 \text{ gal}^*}{0.247492 \text{ MMcf}} \frac{126919 \text{ Btu}^*}{\text{gal}} \frac{0.195 \text{ lb NOx}^*}{1000000 \text{ Btu}} \frac{\text{ton}}{2000 \text{ lb}} = \frac{32.85 \text{ ton NOx}}{\text{yr}}$

$\frac{314 \text{ MMcf}^*}{\text{yr}} \frac{1000 \text{ gal}^*}{0.247492 \text{ MMcf}} \frac{126919 \text{ Btu}^*}{\text{gal}} \frac{0.195 \text{ lb NOx}^*}{1000000 \text{ Btu}} \frac{\text{ton}}{2000 \text{ lb}} = \frac{15.7 \text{ ton NOx}}{\text{yr}}$

$\frac{794 \text{ MMcf}^*}{\text{yr}} \frac{1000 \text{ gal}^*}{0.247492 \text{ MMcf}} \frac{126919 \text{ Btu}^*}{\text{gal}} \frac{0.195 \text{ lb NOx}^*}{1000000 \text{ Btu}} \frac{\text{ton}}{2000 \text{ lb}} = \frac{39.7 \text{ ton NOx}}{\text{yr}}$

Grease:  $\frac{0.071 \text{ lb NOx}^*}{\text{MMBtu}} \frac{131129.8 \text{ Btu}^*}{\text{gal}} \frac{\text{MM gal}}{1000 \text{ Kgal}} = \frac{9.310217 \text{ lb NOx}}{\text{Kgal}}$  NG:  $\frac{100 \text{ lb NOx}}{\text{MMcf}}$

1 Kgal =  $\frac{9.310217 \text{ lb/NOx}}{100 \text{ lb/NOx}} = 0.093102 \text{ MMcf}$

$\frac{657 \text{ MMcf}^*}{\text{yr}} \frac{1000 \text{ gal}^*}{0.093102 \text{ MMcf}} \frac{131129.8 \text{ Btu}^*}{\text{gal}} \frac{0.071 \text{ lb NOx}^*}{1000000 \text{ Btu}} \frac{\text{ton}}{2000 \text{ lb}} = \frac{32.85 \text{ ton NOx}}{\text{yr}}$

$\frac{314 \text{ MMcf}^*}{\text{yr}} \frac{1000 \text{ gal}^*}{0.093102 \text{ MMcf}} \frac{131129.8 \text{ Btu}^*}{\text{gal}} \frac{0.071 \text{ lb NOx}^*}{1000000 \text{ Btu}} \frac{\text{ton}}{2000 \text{ lb}} = \frac{15.7 \text{ ton NOx}}{\text{yr}}$

$\frac{794 \text{ MMcf}^*}{\text{yr}} \frac{1000 \text{ gal}^*}{0.093102 \text{ MMcf}} \frac{131129.8 \text{ Btu}^*}{\text{gal}} \frac{0.071 \text{ lb NOx}^*}{1000000 \text{ Btu}} \frac{\text{ton}}{2000 \text{ lb}} = \frac{39.7 \text{ ton NOx}}{\text{yr}}$