

PROPOSED CAAPP PERMIT
March 26, 2014

Attention: Sherrie Suttles
Cargill, Inc.
115 South Euclid Street
Bloomington, Illinois 61701

State of Illinois

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Source:

Cargill, Inc.
115 South Euclid Street
Bloomington, Illinois 61701

I.D. No.: 113804AAR
Permit No.: 96030019

Permitting Authority:

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
217/785-1705

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

[Title I and Title V Permit]

Type of Application: Renewal
Purpose of Application: Renew Existing CAAPP Permit for 5 Years

ID No.: 113804AAR
Permit No.: 96030019
Statement of Basis No.: 96030019-2013/04

Date Application Received: December 24, 2007
Date Issued: TBD

Expiration Date: TBD
Renewal Submittal Date: 9 Months Prior to expiration date

Source Name: Cargill, Inc.
Address: 115 South Euclid Street
City: Bloomington
County: Mclean
ZIP Code: 61701

This permit is hereby granted to the above-designated source authorizing operation in accordance with this CAAPP permit, pursuant to the above referenced application. This source is subject to the conditions contained herein. For further information on the source see Section 1 and for further discussion on the effectiveness of this permit see Condition 2.3(g).

If you have any questions concerning this permit, please contact Anatoly Belogorsky at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

RWB:MTR:AB:psj

cc: IEPA, Permit Section
IEPA, FOS, Region 3
Lotus Notes Database

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Section 1 - Source Information

1. Addresses

Source

Cargill, Inc.
115 South Euclid Street
Bloomington, Illinois 61701

Owner

Cargill, Inc.
15407 McGinty Road
Minnetonka, Minnesota 55345

Operator

Cargill, Inc.
115 South Euclid Street
Bloomington, Illinois 61701

Permittee

The Owner and Operator of the source as identified in this table.

2. Contacts

Certified Officials

The source shall submit an Administrative Permit Amendment for any change in the Certified Officials, pursuant to Section 39.5(13) of the Act.

	<i>Name</i>	<i>Title</i>
<i>Responsible Official</i>	Mick Sullivan	Assistant General Plant Superintendent of Operations
<i>Delegated Authority</i>	No other individuals have been authorized by the IEPA.	N/A

Other Contacts

	<i>Name</i>	<i>Phone No.</i>	<i>Email</i>
<i>Source Contact</i>	Sherrie Suttles	(937) 497-4851	sherrie_suttles@cargill.com
<i>Technical Contact</i>	Sherrie Suttles	(937) 497-4851	sherrie_suttles@cargill.com
<i>Correspondence</i>	Sherrie Suttles	(937) 497-4851	sherrie_suttles@cargill.com
<i>Billing</i>	Sherrie Suttles	(937) 497-4851	sherrie_suttles@cargill.com

3. Single Source

The source identified in Condition 1.1 above shall be defined to include all the following additional source(s):

N/A	N/A	N/A
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Section 2 - General Permit Requirements

1. Prohibitions

- a. It shall be unlawful for any person to violate any terms or conditions of this permit issued under Section 39.5 of the Act, to operate the CAAPP source except in compliance with this permit issued by the IEPA under Section 39.5 of the Act or to violate any other applicable requirements. All terms and conditions of this permit issued under Section 39.5 of the Act are enforceable by USEPA and citizens under the Clean Air Act, except those, if any, that are specifically designated as not being federally enforceable in this permit pursuant to Section 39.5(7)(m) of the Act. [Section 39.5(6)(a) of the Act]
- b. After the applicable CAAPP permit or renewal application submittal date, as specified in Section 39.5(5) of the Act, the source shall not operate this CAAPP source without a CAAPP permit unless the complete CAAPP permit or renewal application for such source has been timely submitted to the IEPA. [Section 39.5(6)(b) of the Act]
- c. No Owner or Operator of the CAAPP source shall cause or threaten or allow the continued operation of an emission source during malfunction or breakdown of the emission source or related air pollution control equipment if such operation would cause a violation of the standards or limitations applicable to the source, unless this CAAPP permit granted to the source provides for such operation consistent with the Act and applicable Illinois Pollution Control Board regulations. [Section 39.5(6)(c) of the Act]
- d. Pursuant to Section 39.5(7)(g) of the Act, emissions from the source are not allowed to exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder, consistent with Section 39.5(17) of the Act and applicable requirements, if any.

2. Emergency Provisions

Pursuant to Section 39.5(7)(k) of the Act, the Owner or Operator of the CAAPP source may provide an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations under this CAAPP permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

- a.
 - i. An emergency occurred and the source can identify the cause(s) of the emergency.
 - ii. The source was at the time being properly operated.
 - iii. The source submitted notice of the emergency to the IEPA within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
 - iv. During the period of the emergency the source took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or requirements in this permit.
- b. For purposes of Section 39.5(7)(k) of the Act, "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, such as an act of God, that requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operation error.
- c. In any enforcement proceeding, the source seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or

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upset provision contained in any applicable requirement. This provision does not relieve the source of any reporting obligations under existing federal or state laws or regulations.

3. General Provisions

a. Duty to Comply

The source must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [Section 39.5(7)(o)(i) of the Act]

b. Need to Halt or Reduce Activity is not a Defense

It shall not be a defense for the source 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. [Section 39.5(7)(o)(ii) of the Act]

c. Duty to Maintain Equipment

The source shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements. [Section 39.5(7)(a) of the Act]

d. Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under. [Section 39.5(7)(a) of the Act]

e. Duty to Pay Fees

- i. The source must pay fees to the IEPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi) of the Act]
- ii. The IEPA shall assess annual fees based on the allowable emissions of all regulated air pollutants, except for those regulated air pollutants excluded in Section 39.5(18)(f) of the Act and insignificant activities in Section 6, at the source during the term of this permit. The amount of such fee shall be based on the information supplied by the applicant in its complete CAAPP permit application. [Section 39.5(18)(a)(ii)(A) of the Act]
- iii. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois EPA, P.O. Box 19276, Springfield, IL, 62794-9276. Include on the check: ID #, Permit #, and "CAAPP Operating Permit Fees". [Section 39.5(18)(e) of the Act]

f. Obligation to Allow IEPA Surveillance

Pursuant to Sections 4(a), 39.5(7)(a), and 39.5(7)(p)(ii) of the Act, inspection and entry requirements that necessitate that, upon presentation of credentials and other documents as may be required by law and in accordance with constitutional limitations, the source shall allow the IEPA, or an authorized representative to perform the following:

- i. Enter upon the source's premises where the emission unit(s) are located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
- iv. Sample or monitor any substances or parameters at any location at reasonable times:
 - A. As authorized by the Clean Air Act or the Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or
 - B. As otherwise authorized by the Act.
- v. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

g. Effect of Permit

- i. Pursuant to Section 39.5(7)(j)(iv) of the Act, nothing in this CAAPP permit shall alter or affect the following:
 - A. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section.
 - B. The liability of the Owner or Operator of the source for any violation of applicable requirements prior to or at the time of permit issuance.
 - C. The applicable requirements of the acid rain program consistent with Section 408(a) of the Clean Air Act.
 - D. The ability of USEPA to obtain information from the source pursuant to Section 114 (inspections, monitoring, and entry) of the Clean Air Act.
- ii. Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Sections 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements. [35 IAC 201.122 and Section 39.5(7)(a) of the Act]

h. Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the source shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force. [Section 39.5(7)(i) of the Act]

4. Testing

- a. Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of

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any tests conducted as required by this permit or as the result of a request by the IEPA shall be submitted as specified in Condition 7.1 of this permit. [35 IAC Part 201 Subpart J and Section 39.5(7)(a) of the Act]

- b. Pursuant to Section 4(b) of the Act and 35 IAC 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. **Testing by Owner or Operator:** The IEPA may require the Owner or Operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the IEPA, at such reasonable times as may be specified by the IEPA and at the expense of the Owner or Operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The IEPA shall have the right to observe all aspects of such tests.
 - ii. **Testing by the IEPA:** The IEPA shall have the right to conduct such tests at any time at its own expense. Upon request of the IEPA, the Owner or Operator of the emission source or air pollution control equipment shall provide, without charge to the IEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

5. Recordkeeping

a. Control Equipment Maintenance Records

Pursuant to Section 39.5(7)(b) of the Act, a maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates maintenance was performed and the nature of preventative maintenance activities.

b. Retention of Records

- i. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [Section 39.5(7)(e)(ii) of the Act]
- ii. Pursuant to Section 39.5(7)(a) of the Act, other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a different period is specified by a particular permit provision.

c. Availability of Records

- i. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall retrieve and provide paper copies, or as electronic media, any records retained in an electronic format (e.g., computer) in response to an IEPA or USEPA request during the course of a source inspection.
- ii. Pursuant to Section 39.5(7)(a) of the Act, upon written request by the IEPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the IEPA. For this purpose, material shall be submitted to the IEPA within 30 days unless additional time is provided by the IEPA or the Permittee believes that the volume and nature of

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requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 2.9(d))

6. Certification

a. Compliance Certification

- i. Pursuant to Section 39.5(7)(p)(v)(C) of the Act, the source shall submit annual compliance certifications by May 1 unless a different date is specified by an applicable requirement or by a particular permit condition. The annual compliance certifications shall include the following:
 - A. The identification of each term or condition of this permit that is the basis of the certification.
 - B. The compliance status.
 - C. Whether compliance was continuous or intermittent.
 - D. The method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- ii. Pursuant to Section 39.5(7)(p)(v)(D) of the Act, all compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the IEPA Compliance Section. Addresses are included in Attachment 3.
- iii. Pursuant to Section 39.5(7)(p)(i) of the Act, all compliance reports required to be submitted shall include a certification in accordance with Condition 2.6(b).

b. Certification by a Responsible Official

Any document (including reports) required to be submitted by this permit shall contain a certification by the responsible official of the source that meets the requirements of Section 39.5(5) of the Act and applicable regulations. [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included in Attachment 4 of this permit.

7. Permit Shield

- a. Pursuant to Section 39.5(7)(j) of the Act, except as provided in Condition 2.7(b) below, the source has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the IEPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit. This permit shield does not extend to applicable requirements which are promulgated after **Error! Bookmark not defined.** (date USEPA notice started), unless this permit has been modified to reflect such new requirements.
- b. Pursuant to Section 39.5(7)(j) of the Act, this permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

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- c. Pursuant to Section 39.5(7)(a) of the Act, the issuance of this permit by the IEPA does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any currently pending or future legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the IEPA or the USEPA may have against the applicant including, but not limited to, any enforcement action authorized pursuant to the provision of applicable federal and state law.

8. Title I Conditions

Pursuant to Sections 39(a), 39(f), and 39.5(7)(a) of the Act, as generally identified below, this CAAPP permit may contain certain conditions that relate to requirements arising from the construction or modification of emission units at this source. These requirements derive from permitting programs authorized under Title I of the Clean Air Act (CAA) and regulations thereunder, and Title X of the Illinois Environmental Protection Act (Act) and regulations implementing the same. Such requirements, including the New Source Review programs for both major (i.e., PSD and nonattainment areas) and minor sources, are implemented by the IEPA.

- a. This permit may contain conditions that reflect requirements originally established in construction permits previously issued for this source. These conditions include requirements from preconstruction permits issued pursuant to regulations approved or promulgated by USEPA under Title I of the CAA, as well as requirements contained within construction permits issued pursuant to state law authority under Title X of the Act. Accordingly, all such conditions are incorporated into this CAAPP permit by virtue of being either an "applicable Clean Air Act requirement" or an "applicable requirement" in accordance with Section 39.5 of the Act. These conditions are identifiable herein by a designation to their origin of authority.
- b. This permit may contain conditions that reflect necessary revisions to requirements established for this source in preconstruction permits previously issued under the authority of Title I of the CAA. These conditions are specifically designated herein as "TIR".
 - i. Revisions to original Title I permit conditions are incorporated into this permit through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.
 - ii. Revised Title I permit conditions shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the applicant's request.
- c. This permit may contain conditions that reflect new requirements for this source that would ordinarily derive from a preconstruction permit established under the authority of Title I of the CAA. These conditions are specifically designated herein as "TIN".
 - i. The incorporation of new Title I requirements into this CAAPP permit is authorized through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.
 - ii. Any Title I conditions that are newly incorporated shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the applicant's request.

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9. Reopening and Revising Permit

a. Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the source for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [Section 39.5(7)(o)(iii) of the Act]

b. Reopening and Revision

Pursuant to Section 39.5(15)(a) of the Act, this permit must be reopened and revised if any of the following occur:

- i. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- ii. Additional requirements become applicable to the source for acid deposition under the acid rain program;
- iii. The IEPA or USEPA determines that this permit contains a material mistake or that an inaccurate statement was made in establishing the emission standards or limitations, or other terms or conditions of this permit; or
- iv. The IEPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

c. Inaccurate Application

Pursuant to Sections 39.5(5)(e) and (i) of the Act, the IEPA has issued this permit based upon the information submitted by the source in the permit application referenced on page 1 of this permit. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation or reopening of this CAAPP under Section 39.5(15) of the Act.

d. Duty to Provide Information

The source shall furnish to the IEPA, within a reasonable time specified by the IEPA any information that the IEPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the source shall also furnish to the IEPA copies of records required to be kept by this permit. [Section 39.5(7)(o)(v) of the Act]

10. Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement. [Section 39.5(7)(o)(vii) of the Act]

11. Permit Renewal

- a. Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of the most recent issued CAAPP permit will remain in effect until the issuance of a renewal permit. [Sections 39.5(5)(1) and (o) of the Act]

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- b. For purposes of permit renewal, a timely application is one that is submitted no less than 9 months prior to the date of permit expiration. [Section 39.5(5)(n) of the Act]

12. Permanent Shutdown

Pursuant to Section 39.5(7)(a) of the Act, this permit only covers emission units and control equipment while physically present at the source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

13. Startup, Shutdown, and Malfunction

Pursuant to Section 39.5(7)(a) of the Act, in the event of an action to enforce the terms or conditions of this permit, this permit does not prohibit a Permittee from invoking any affirmative defense that is provided by the applicable law or rule.

Section 3 - Source Requirements

1. Applicable Requirements

Pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act, the Permittee shall comply with the following applicable requirements. These requirements are applicable to all emission units (including insignificant activities unless specified otherwise in this Section) at the source.

a. Fugitive Particulate Matter

- i. Pursuant to 35 IAC 212.301 and 35 IAC 212.314, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source unless the wind speed is greater than 25 mph.
- ii. Compliance Method (Fugitive Particulate Matter)

Upon request by the IEPA, the Permittee shall conduct observations at the property line of the source for visible emissions of fugitive particulate matter from the source to address compliance with 35 IAC 212.301. For this purpose, daily observations shall be conducted for a week for particular area(s) of concern at the source, as specified in the request, observations shall begin either within one day or three days of receipt of a written request from the IEPA, depending, respectively, upon whether observations will be conducted by employees of the Permittee or a third-party observer hired by the Permittee to conduct observations on its behalf. The Permittee shall keep records for these observations, including identity of the observer, the date and time of observations, the location(s) from which observations were made, and duration of any fugitive emissions event(s).

b. Ozone Depleting Substances

Pursuant to 40 CFR 82.150(b), the Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- i. Pursuant to 40 CFR 82.156, persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices.
- ii. Pursuant to 40 CFR 82.158, equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment.
- iii. Pursuant to 40 CFR 82.161, persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program.
- iv. Pursuant to 40 CFR 82 Subpart B, any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner shall comply with 40 CFR 82 Subpart B, Servicing of Motor Vehicle Air Conditioners.
- v. Pursuant to 40 CFR 82.166, all persons shall comply with the reporting and recordkeeping requirements of 40 CFR 82.166.

c. Asbestos Demolition and Renovation

- i. Asbestos Fees. Pursuant to Section 9.13(a) of the Act, for any site for which the Owner or Operator must file an original 10-day notice of intent to renovate or

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demolish pursuant to Condition 3.1(c)(ii) below and 40 CFR 61.145(b), the owner or operator shall pay to the IEPA with the filing of each 10-day notice a fee of \$150.

- ii. Pursuant to 40 CFR 61 Subpart M, Standard of Asbestos, prior to any demolition or renovation at this facility, the Permittee shall fulfill notification requirements of 40 CFR 61.145(b).
- iii. Pursuant to 40 CFR 61.145(c), during demolition or renovation, the Permittee shall comply with the procedures for asbestos emission control established by 40 CFR 61.145(c).

d. NESHAP Standards (40 CFR 63 Subpart DDDDD)

Pursuant to 40 CFR 63 Subpart DDDDD Table 3 Condition 4, no later than January 31, 2016, the source shall conduct a one-time energy assessment performed by a qualified energy assessor. This energy assessment shall include the following procedures:

- i. A visual inspection of each boiler system.
- ii. An evaluation of operating characteristics of each boiler system, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
- iii. An inventory of major energy use systems consuming energy from affected boilers.
- iv. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
- v. A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified.
- vi. A list of cost-effective energy conservation measures that are within the facility's control.
- vii. A list of the energy savings potential of the energy conservation measures identified.
- viii. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

e. Future Emission Standards

Pursuant to Section 39.5(15)(a) of the Act, this source shall comply with any new or revised applicable future standards of 40 CFR 60, 61, 62, or 63; or 35 IAC Subtitle B after the date issued of this permit. The Permittee shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 2.6(a). This permit may also have to be revised or reopened to address such new regulations in accordance to Condition 2.9.

2. Applicable Plans and Programs

Pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act, the Permittee shall comply with the following applicable requirements. These requirements are applicable to all emission units (including insignificant activities unless specified otherwise in this Section) at the source.

a. Compliance Demonstration Plan (40 CFR Part 63, Subpart GGGG)

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- i. Pursuant to 40 CFR 63.2851, the Permittee has to maintain and implement a written plan for demonstrating compliance with 40 CFR Part 63, Subpart GGGG, for solvent extraction operations of vegetable oil production and prepared in accordance with requirements of 40 CFR 63.2851(a)(1) through (7).
- ii. The plan for compliance demonstration, as prepared by the Permittee in the most current version from February 2004 is incorporated herein by reference. The document constitutes the formal plan for compliance demonstration required by 40 CFR 63.2851 and addresses all methods of measurements used by the Permittee to determine solvent losses and tons of soybeans processed.
- iii. Pursuant to 40 CFR 63.2862(b), the Permittee shall keep a copy of the plan on-site and be readily available as long as the source is operational. Pursuant to 40 CFR 63.2851(a), when any changes to the plan are made, the Permittee shall keep all previous versions of the plan and make them readily available for inspection for at least 5 years after each revision.

b. Fugitive PM Operating Program

Should this source become subject to 35 IAC 212.302, the Permittee shall prepare and operate under a Fugitive PM Operating Program consistent with 35 IAC 212.310 and submitted to the IEPA for its review. The Fugitive PM Operating Program shall be designed to significantly reduce fugitive particulate matter emissions, pursuant to 35 IAC 212.309(a). Any future Fugitive PM Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the Fugitive PM Operating Program is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the Fugitive PM Operating Program. In the event that the IEPA notifies the Permittee of a deficiency with any Fugitive PM Operating Program, the Permittee shall be required to revise and resubmit the Fugitive PM Operating Program within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

c. PM₁₀ Contingency Measure Plan

Should this source become subject to 35 IAC 212.700, then the Permittee shall prepare and operate under a PM₁₀ Contingency Measure Plan reflecting the PM₁₀ emission reductions as set forth in 35 IAC 212.701 and 212.703. The Permittee shall, within 90 days after the date this source becomes subject to 35 IAC 212.700, submit a request to modify this CAAPP permit in order to include a new, appropriate PM₁₀ Contingency Measure Plan.

d. Episode Action Plan

- i. Pursuant to 35 IAC 244.141, the Permittee shall have on file with the IEPA an Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Episode Action Plan shall contain the information specified in 35 IAC 244.144.
- ii. The Permittee shall immediately implement the appropriate steps described in the Episode Action Plan should an air pollution alert or emergency be declared, as required by 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D.
- iii. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the Episode Action Plan, a revised Episode Action Plan shall be submitted to the IEPA for review within 30 days of the change and is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the revision. In the event that the IEPA notifies the Permittee of a deficiency with any revision to the Episode Action Plan, the Permittee shall be required to revise and resubmit the Episode

Action Plan within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

- iv. The Episode Action Plan, as submitted by the Permittee on April 29, 2009, is incorporated herein by reference. The document constitutes the formal Episode Action Plan required by 35 IAC 244.142, addressing the actions that will be implemented to reduce SO₂, PM₁₀, NO₂, CO and VOM emissions from various emissions units in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.
- v. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep a copy of the Episode Action Plan, any amendments or revisions to the Episode Action Plan (as required by Condition 3.2(c)), and the Permittee shall also keep a record of activities completed according to the Episode Action Plan.

d. Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the Permittee shall submit a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or submit a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan, as part of the annual compliance certification required by Condition 2.6(a). This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

3. Title I Requirements

- a. Pursuant to permits 91110062, 75100047 and 02110009, total source grain (soybean) throughput shall not exceed the following limits: 60,600 bushels of grain per day, 2.02 million bushels per month and 20.2 million bushels per year. [T1]
- b. Pursuant to permit 75100047, compliance with daily grain (soybean) throughput limit shall be determined as an average per calendar month. [T1]
- c. Pursuant to permits 75100047 and 02110009, compliance with annual grain (soybean) throughput limit shall be determined from a running total of 12 months of data. [T1]
- d. Pursuant to permits 91110062, 75100047 and 02110009, the Permittee shall keep the records of grain (soybean) processed. [T1]

4. Synthetic Minor Limits

As of the date of issuance of this permit, there are no source-wide synthetic minor limits that need to be included in this Condition.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows:
 - I. Requirements in Conditions 3.1(a)(i), 3.1(b), 3.1(c), and 3.1(d).
 - II. Requirements in Condition 3.2(a).

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III. Requirements in Condition 3.3(a), (b), (c), and (d).

- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the event.
 - D. Probable cause of the deviation.
 - E. Corrective actions or preventative measures taken.
- iv. All deviation reports required in this Permit shall be identified, summarized, and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

b. Semiannual Reporting

- i. Pursuant to Section 39.5(7)(f)(i) of the Act, the Permittee shall submit Semiannual Monitoring Reports to the IEPA, Air Compliance Section, summarizing required monitoring as part of the Compliance Methods in this Permit submitted every six months as follows, unless more frequent reporting is required in other parts of this permit.

<u>Monitoring Period</u>	<u>Report Due Date</u>
January through June	July 31
July through December	January 31

- ii. The Semiannual Monitoring Report must be certified by a Responsible Official consistent with Condition 2.6(b).

c. Annual Emissions Reporting

Pursuant to 35 IAC Part 254, the Source shall submit an Annual Emission Report to the Air Quality Planning Section, due by May 1 of the year following the calendar year in which the emissions took place. All records and calculations upon which the verified and reported data are based must be retained by the source.

Section 4 - Emission Unit Requirements

4.1 Grain Handling Operations

1. Emission Units and Operations

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
Truck Receiving Pit	PM	Pre-1973	N/A	E802: Truck Dump Dust Collector (DC)	None
Rail Receiving Pit	PM	Pre-1973	N/A	E816: Bean Cleaning Dust Collector (DC)	Pressure Drop*
Elevator/Main House Collector	PM	Pre-1973	N/A	E820: Main House Dust Collector (DC)	Pressure Drop*
Bean/SMR Storage Bins	PM	Pre-1973	N/A	None	None
Bean Cleaning/Separating System	PM	Pre-1973	N/A	E816: Bean Cleaning Dust Collector (DC)	Pressure Drop
Berico Grain Dryer	PM, SO ₂ , NO _x	1994	N/A	E816: Bean Cleaning Dust Collector (DC)	Pressure Drop*

* Note that this monitoring is required pursuant to 40 CFR 64 (CAM). These units do not themselves have potential pre-control emissions in excess of major source thresholds, so are not Pollutant Specific Emission Units (PSEU) with respect to CAM. However, they route to control devices that control at least one other unit with potential pre-control emissions in excess of major source thresholds.

2. Applicable Requirements

For the emission units in Condition 4.1(1) above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7) (a), 39.5(7) (b), and 39.5(7) (d) of the Act.

a. i. Opacity Requirements

- A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122.
- B. Pursuant to 40 CFR 60.302(a)(1), the Permittee shall operate Berico Grain Dryer with no greater than 0 percent opacity from the column dryer with column plate perforation exceeding 2.4 mm diameter (ca. 0.094 inch).
- C. Pursuant to 40 CFR 60.302(b)(2), the Permittee shall operate all grain handling operations (except Berico Grain Dryer) identified in the Table 4.1(1) above with no greater than 0 percent opacity from each such operation/unit.
- D. Pursuant to 40 CFR 60.302(c), the Permittee shall not discharge into the atmosphere any fugitive emission from:
 - I. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

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II. Any grain handling operation which exhibits greater than 0 percent opacity.

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform quarterly visible emission observations of each individual stack and point of fugitive emissions of each grain handling operation identified in the Table 4.1(1) above in accordance with Method 22. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the operation, maintenance and repair, and/or adjustment of fuel usage. If corrective action was taken, the Permittee shall perform a follow up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9, the procedures in 40 CFR 60.11 and Section 7.1 of this permit shall be conducted within 48 hours in accordance with Condition 2.4.

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all Method 9 and Method 22 opacity measurements and visible emissions observations made in accordance with Condition 4.1.2(a)(ii)(A). These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.

b. i. Particulate Matter Requirements (PM)

- A. Pursuant to 40 CFR 60.302(b)(1), process emissions of PM from each stack associated with grain handling operation/emission unit identified in the Table 4.1(1) above (with exception of Berico Grain Dryer) shall not exceed 0.023 gr/dscm.
- B. Pursuant to construction permit 91110062, the Permittee shall not exceed the following PM emission limits: [T1]

Emission Units	PM Emissions	
	Lb/1,000 bushel processed	Tons/Yr
Truck and Rail Receiving	0.36	3.63
Elevator/Main House Collector	1.89	8.13
Bean/SMR Storage Bins	0.31	3.13
Bean Cleaning/Separating System	0.17	1.72
Berico Grain Dryer	8.40	84.84

ii. Compliance Method (PM Requirements)

Monitoring

- A. Pursuant to Permit 75100047, compliance with annual limits shall be determined from a running total of 12 months of data. [T1]
- B. Pursuant to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, certain emission units/operations identified by

Condition 4.1(1) and controlled by E816 Bean Cleaning DC and E820 Main House DC are subject to 40 CFR Part 64. The Permittee shall comply with the monitoring requirements of the CAM Plan described in Condition 7.4 and Table 7.4.1, pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the Permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, pursuant to 40 CFR 64.7(a) and (b).

C. See also Condition 4.1(2)(f) for inspection and maintenance requirements.

Testing

D. Pursuant to Section 39.5(7)(b) and (c) of the Act, if the opacity reading from any individual stack (with exception of Berico Grain Dryer), as described in Condition 4.1(2)(a)(ii), indicates opacity above zero percent, the Permittee should perform testing of PM/PM₁₀ emissions from such stack(s) within 90 days of such opacity reading event. These tests shall be performed by using Methods 5 and 202.

Recordkeeping

- E. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of PM emissions with supporting calculations (lb/1,000 bushel processed and tons/yr).
- F. Pursuant to 40 CFR 64.9(b)(1), for purposes of implementation of the CAM Plan, the Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- G. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep the records of the results of the performed stack tests.

c. i. **Sulfur Dioxide Requirements (SO₂)**

A. Pursuant to 35 IAC 214.301, for Berico Grain Dryer, no person shall cause or allow the emission of sulfur dioxide into the atmosphere to exceed 2,000 ppm.

ii. Compliance Method (SO₂ Requirements)

Monitoring

A. Pursuant to Section 39.5(7)(a) of the Act, for the units fired with natural gas, the Permittee shall use pipeline quality natural gas with a certification from the natural gas supplier that the sulfur content in the supplied natural gas that does not exceed 2000 ppm.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep the following records related to pipeline quality natural gas:
- I. Certification from the natural gas supplier that sulfur content in the supplied natural gas stays below 2000 ppm.

d. i. **Nitrogen Oxides Requirements (NO_x)**

A. Pursuant to Permits 91110062 and 75100047, emissions of NO_x from the Berico Grain Dryer shall not exceed 0.23 lb/mmBtu and 17.4 tons/yr. [T1]

ii. **Compliance Method (NO_x Requirements)**

Monitoring

A. Pursuant to Permit 75100047, compliance with annual limit shall be determined from a running total of 12 months of data. [T1]

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of NO_x emissions with supporting calculations.

e. i. **Operational and Production Requirements**

A. Pursuant to Permits 91110062 and 75100047, annual natural gas consumption for Berico Grain Dryer shall not exceed 160.0 mmscf. [T1]

ii. **Compliance Method (Operational and Production Requirements)**

Monitoring

A. Pursuant to Permit 75100047, compliance with annual limits shall be determined from a running total of 12 months of data. [T1]

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep monthly and annual records of natural gas used by the dryer (scf/mo and scf/yr).

f. i. **Work Practice Requirements**

A. Pursuant to 35 IAC 212.461(b), the following housekeeping practices shall be implemented during operations of grain handling operations:

All grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

I. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

II. Cleaning and Maintenance.

1. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

2. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

3. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

- III. Dump Pit.
1. Aspiration equipment shall be maintained and operated.
 2. Dust control devices shall be maintained and operated.
- IV. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.
- V. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.
- B. Pursuant to 35 IAC 212.462, the following work practices shall be implemented during operations of grain handling operations:
- I. Cleaning and Separating Operations.
1. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.
 2. For grain-handling sources having a grain through-put exceeding 2 million bushels per year and located within a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 98 percent by weight prior to release into the atmosphere.
- II. Major Dump-Pit Area.
1. Induced Draft.
 - Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:
$$V = Q/A$$
where:
 V = face velocity; and
 Q = induced draft volume in scfm; and
 A = effective grate area in ft²; and
 - The induced draft air stream for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 98 percent by weight; and

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4.1 - Grain Handling Operations

- Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or
- Any equivalent method, technique, system or combination thereof adequate to achieve, at a minimum, a particulate matter emission reduction equal to the reduction which could be achieved by compliance with 35 IAC 212.462 (b)(1).

2. Internal Transferring Area.

- Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.
- Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 98 percent by weight prior to release into the atmosphere.

- C. Pursuant to 35 IAC 212.463(a), the Permittee shall comply with the following design requirements for column dryer (Berico Grain Dryer):

The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Compliance Method (Work Practice Requirements)

Monitoring

- A. Pursuant to Section 39.5(7)(b) and (d) of the Act, in addition to daily inspections of air pollution control devices as discussed above, the Permittee shall conduct annual inspections of all grain handling/grain drying operations identified in Table 4.1(1).

Recordkeeping

- B. Pursuant to 35 IAC 212.461(b)(6), the Permittee shall keep the completed household check lists on the premises of the source.
- C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep drawings of grain handling/grain drying equipment identified in Condition 4.1(2)(f).
- D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of manufacturer's specification or other data with a rated PM removal

efficiency for the air pollution control equipment employed in internal transferring areas.

3. Non-Applicability Determinations

- a. Pursuant to 35 IAC 212.461(a), grain handling and grain drying operations are not subject to 35 IAC 212.302(a), 212.321, and 212.322.
- b. The Truck Receiving Pit is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because this emission unit does not have potential pre-control device emissions of any applicable regulated air pollutant that equals or exceeds major source threshold levels.
- c. The Bean/SMR Storage Bins are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because these emission units do not have any air pollution control devices used to comply with any applicable emission limits or standards.

4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
 - I. Requirements in Conditions 4.1(2)(a)(i), 4.1(2)(b)(i), 4.1(2)(c)(i), 4.1(2)(d)(i) and 4.1(2)(e)(i).
 - II. Requirements in Condition 4.1(2)(f)(i).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the event.
 - D. Probable cause of the deviation.
 - E. Corrective actions or preventative measures taken.

4.2 Material Handling and Process Emission Units

1. Emission Units and Operations

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
Primary Dehulling System	PM	Pre-1973	1986	603 Dehulling Dust Collector (DC)	Pressure Drop
Secondary Dehulling System	PM	Pre-1973	2005	603 Dehulling Dust Collector (DC)	Pressure Drop
Hull Grinding System/Ground Hull Transfer/607 Ground Hull Dust Collector	PM	Pre-1973	2004	None	
SMR/Grits Loadout	PM	Pre-1973	N/A	E816 Bean Cleaning Dust Collector (DC)	Pressure Drop*
Elevator Hull Storage	PM	Pre-1973	N/A	E820 Main House Dust Collector (DC)	Pressure Drop*
Pod Grinding	PM	1989	N/A	E816 Bean Cleaning Dust Collector (DC)	Pressure Drop*
Bean Conditioner	PM	1986	N/A	None	
Conditioner Discharge Conveyor Vent	PM	Pre-1973	N/A	None	
Flaking Mills Aspiration	PM	1998/2013	N/A	601 Flaking Mill Aspiration Cyclone	Pressure Drop
Flake Conveyor Vent	PM	Pre-1973	N/A	None	
613 Fuji Fines Cyclone	PM	2001	N/A	E820 Main House Dust Collector (DC)	Pressure Drop*
Meal Drying System (Meal and Grits)	PM	1986	N/A	None	
Meal Cooling System (Meal and Grits)	PM	1986	N/A	None	
Meal Grinding/Sifting System (Meal Only)	PM	Pre-1973	N/A	652 Meal Grinding Dust Collector (DC)	Pressure Drop
Prep Meal/Hull Storage	PM	Pre-1973	N/A	652 Meal Grinding Dust Collector (DC)	Pressure Drop*
PMI Meal Storage (Meal Only)	PM	2000	N/A	665 PMI Dust Collector (DC)	
Meal/Hull Loadout	PM	Pre-1973	N/A	659 Meal Loadout Dust Collector (DC)	
176 Grits Roller Mill	PM	1987	N/A	652 Meal Grinding Dust Collector (DC)	Pressure Drop*
Grits Cooling System	PM	1986	N/A	None	
612 Grits Bin Deck Cyclone	PM	1986	N/A	652 Meal Grinding Dust Collector (DC)	Pressure Drop
E803 Grits Sifter Receiver (Cyclone)	PM	1986	N/A	E820 Main House Dust Collector (DC)	Pressure Drop
Grits Sifter	PM	1986	1996	652 Meal Grinding Dust Collector (DC)	Pressure Drop

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**Section 4 - Emission Unit Requirements
4.2 - Material Handling and Process Emission Units**

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
Grits Aspiration	PM	1997	N/A	652 Meal Grinding Dust Collector (DC) & E820 Main House Dust Collector (DC)	Pressure Drop
Grits Storage	PM	Pre-1973	N/A	E820 Main House Dust Collector (DC)	Pressure Drop*

* Note that this monitoring is required pursuant to 40 CFR 64 (CAM). These units do not themselves have potential pre-control emissions in excess of major source thresholds, so are not Pollutant Specific Emission Units (PSEU) with respect to CAM. However, they route to control devices that control at least one other unit with potential pre-control emissions in excess of major source thresholds.

2. Applicable Requirements

For the emission units in Condition 4.2(1) above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. Opacity Requirements

A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122.

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, the Permittee shall perform semi-annual visible emissions observations of each individual stack(s) associated with emission units, as described in the table of Condition 4.2(1) above in accordance with Method 22. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the operation, maintenance and repair, and/or adjustment of fuel usage. If corrective action was taken, the Permittee shall perform a follow up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 and Section 7.1 shall be conducted within 7 days in accordance with Condition 2.4.

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all Method 9 and Method 22 opacity measurements and visible emissions observations made in accordance with Condition 4.2.2(a)(ii)(A) above. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.

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b. i. Particulate Matter Requirements (PM)

- A. Pursuant to 35 IAC 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit for which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, which, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c) (See Condition 7.2).
- B. Pursuant to 35 IAC 212.322(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit for which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced prior to April 14, 1972, which, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.322(c) (See Condition 7.2).
- C. Pursuant to Permit 75100047, PM emissions from Meal/Hull Loadout operations (controlled by 659 Meal Loadout Dust Collector) shall not exceed 0.02 gr/scf. [T1]
- D. Pursuant to Construction Permit 91110062, the Permittee shall not exceed the following PM emission limits from the certain units and operations: [T1]

Emission Units	PM Emissions	
	Lb/Hr	Ton/Yr
Meal Drying System (Meal and Grits)	2.68	11.26
Meal Cooling System (Meal and Grits)	5.35	22.47
Primary Dehulling System & Secondary Dehulling System	1.8	7.47
Grits Cooling System	0.5	2.0
Meal Grinding/Sifting System (Meal Only)	3.3	13.86
Prep Meal/Hull Storage	0.5	2.0
Meal/Hull Loadout	0.75	1.05
SMR/Grits Loadout	0.4	0.2
Grits Storage	0.1	0.4

- E. Pursuant to Construction Permit #04050053, PM emissions from Hull Grinding System/Ground Hull Transfer shall not exceed 0.2 lb/hr and 0.9 ton/yr. [T1]

ii. Compliance Method (PM Requirements)

Monitoring

- A. Pursuant to Permit 75100047 and Section 39.5(7)(b) of the Act, compliance with annual limits shall be determined from a running total of 12 months of data. [T1]
- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall conduct annual inspections of air pollution control equipment associated with operations identified by Condition 4.2(1) to ensure that no clogs have developed and air pollution control equipment has not malfunctioned. If required by results of these inspections, maintenance and repair shall be done to resolve found problems.
- C. Pursuant to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, certain emission units/operations identified by Condition 4.2(1) and controlled by 601 Flaking Mill Aspiration Cyclone, 603

Section 4 - Emission Unit Requirements
4.2 - Material Handling and Process Emission Units

Dehulling DC, 652 Meal Grinding DC, E816 Bean Cleaning DC, and E820 Main House DC are subject to 40 CFR Part 64. The Permittee shall comply with the monitoring requirements of the CAM Plan described in Condition 7.4 and Table 7.4.1, pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the Permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, pursuant to 40 CFR 64.7(a) and (b).

Recordkeeping

- D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of PM emissions from each material handling unit/operation or group of emission units/operations, with supporting calculations (lb/hour).
- E. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of scheduled or unscheduled inspections of air pollution control devices along with the logs of maintenance/repair performed on these control devices.
- F. Pursuant to 40 CFR 64.9(b)(1), for purposes of implementation of the CAM Plan, the Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

3. Non-Applicability Determinations

- a. Pursuant to 35 IAC 211.2670 and 211.2710, material handling and process unit operations are not the grain handling or grain drying operations and therefore not subject to 35 IAC 212.461, 212.462 and 212.463.
- b. Pursuant to 40 CFR 63.2872, material handling and process unit operations are not a vegetable oil production process and as therefore not subject to 40 CFR Part 63, Subpart GGGG.
- c. The following emission units and associated air pollution control equipment identified in the Table 4.2(1) above are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because these units either:
 - i. Do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels (emission units associated with air pollution control devices 665 PMI Dust Collector and 659 Meal Loadout DC); or
 - ii. Do not use air pollution control to comply with applicable emission standards or limits (Hull Grinding System/Ground Hull Transfer/602 Ground Hull DC, Bean Conditioner, Conditioner Discharge Conveyor Vent, Flake Conveyor Vent, Meal Drying System (Meal and Grits), Meal Cooling System (Meal and Grits), and Grits Cooling System).

4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

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5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
 - I. Requirements in Conditions 4.2(2)(a)(i) and 4.2(2)(b)(i).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the event.
 - D. Probable cause of the deviation.
 - E. Corrective actions or preventative measures taken.

4.3 Oil Extraction and Desolventizing

1. Emission Units and Operations

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
171 FDS White Flake Stripper	PM	2003	N/A	658 Vacuum Chamber DC	
White Flake Cooling System	PM	1997	2003	None	
655 White Flake Bin DC*	PM	1989	N/A	None	Pressure Drop
White Flake Storage	PM	1977	1989	655 White Flake Bin DC	Pressure Drop
White Flake Loadout	PM	1977	1989	655 White Flake Bin DC	Pressure Drop
Hexane Extraction Processes (extractor, evaporators/condensers, stripper, process vessels, tanks)	VOM, HAP	1982	1995	965 Mineral Oil Absorption Column	Scrubbant Flow Rate

* Serves as both a process and a control device.

2. Applicable Requirements

For the emission units in Condition 4.3(1) above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7) (a), 39.5(7) (b), and 39.5(7) (d) of the Act.

a. i. Opacity Requirements

A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122.

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7) (b) and (d) of the Act, the Permittee shall conduct annual visible emissions observations of each individual stack associated with emission units described in the table of Condition 4.3(1) above in accordance with Method 22. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the operation, maintenance and repair, and/or adjustment of fuel usage. If corrective action was taken, the Permittee shall perform a follow up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 and Section 7.1 shall be conducted within 7 days in accordance with Condition 2.4.

Recordkeeping

B. Pursuant to Section 39.5(7) (b) of the Act, the Permittee shall keep records for all Method 9 and Method 22 opacity measurements and visible emissions observations made in accordance with Condition 4.3.2(a) (ii) (A) above. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the

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findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.

b. i. Particulate Matter Requirements (PM/PM₁₀)

- A. Pursuant to 35 IAC 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit for which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, which, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c) (See Condition 7.2).
- B. Pursuant to Construction Permit 02110009, emissions of PM₁₀ from certain emission units shall not exceed the following limits: [T1]

Emission Unit	Lb/Ton	Particulate Matter ₁₀		
		(Lb/Hr)	(Tons/Mo)	(Ton/Yr)
171 FDS Flak Stripper	--	0.1	0.04	0.44
White Flake Cooling	--	2.5	0.93	11.10
White Flake Loadout	0.016	--	--	3.75
Total:		--	--	15.25

ii. Compliance Method (PM Requirements)

Monitoring

- A. Pursuant to Section 39.5(7)(b) of the Act, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall conduct annual inspections of air pollution control equipment associated with operations identified by Condition 4.3(1) to ensure that no clogs have developed and air pollution control equipment has not malfunctioned. If required by results of these inspections, maintenance and repair shall be done to resolve found problems.
- C. Pursuant to Construction Permit #02110009, the Permittee shall record the following information for the control units related to the white flake process at least once per shift when the white flake process is in operation:
 - I. Pressure drop across the flake stripper lock dust collector and the cooler collector;
 - II. Cooler collector fan current (amps); and
 - III. Cooler collector inlet and outlet temperature (Degrees F).
- D. Pursuant to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, certain emission units/operations identified by Condition 4.3(1) and controlled by 655 White Flake Bin DC are subject to 40 CFR Part 64. The Permittee shall comply with the monitoring requirements of the CAM Plan described in Condition 7.4 and Table 7.4.1, pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the Permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, pursuant to 40 CFR 64.7(a) and (b).

Recordkeeping

- E. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of PM/PM₁₀ emissions with supporting calculations (lb/hr and tons/yr).
- F. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of scheduled or unscheduled inspections of air pollution control devices along with the logs of maintenance/repair performed on these control devices.
- G. Pursuant to 40 CFR 64.9(b)(1), for purposes of implementation of the CAM Plan, the Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

c. i. Volatile Organic Material Requirements (VOM)

- A. Pursuant to 35 IAC 215.340, the Permittee shall not exceed the following limits from hexane extraction soybean crushing operations:
 - I. 0.0026 lbs of VOM per pound of conventional soybean crush; and
 - II. 0.0052 lbs of VOM per pound of specialty soybean crush.
- B. Pursuant to Appendix G of Consent Decree 05-CV-02037-JMR-FLN, the Permittee shall not exceed the following VOM limits:
 - I. Solvent Loss no more than 0.175 gallons/ton of conventionally processed soybeans processed; and
 - II. Solvent Loss no more than 0.9 gallons/ton of specialty processed soybeans processed.
- C. Pursuant to Construction Permit 02110009, total VOM emissions from oil extraction and desolventizing operations shall not exceed 112 tons/mo and 853 tons/yr. [T1]

ii. Compliance Method (VOM Requirements)

Monitoring

- A. Pursuant to Construction Permit 02110009, compliance with annual limit shall be determined from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- B. Pursuant to paragraph 21 of Consent Decree 05-CV-02037-JMR-FLN, solvent loss shall be calculated based on a twelve month rolling average.
- C. Pursuant to paragraph 30(d) of Consent Decree 05-CV-02037-JMR-FLN, compliance with the solvent loss ratio shall be calculated on a monthly basis and determined in accordance with 40 CFR Part 63, Subpart GGGG, with the following exceptions:
 - I. Provisions pertaining to HAP content shall not apply; and

- II. Solvent losses and quantities of oilseeds processed during startup and shutdown periods shall not be excluded in determining solvent losses.
- D. Pursuant to Appendix G of Consent Decree 05-CV-02037-JMR-FLN, the compliance ratio shall be less than or equal to 1 and calculated based on the following equation:

$$\text{Compliance Ratio} = \frac{\text{Actual Solvent Loss}}{\sum_{i=1}^n ((\text{Oilseed})_i * (\text{SLF})_i)}$$

Where:

Actual Solvent Loss = gallons of actual solvent loss during previous 12 operating months.

Oilseed = Tons of each oil seed type "i" (specialty and conventional) processed during the previous 12 operating months.

SLF = The corresponding solvent loss ratio limit (gal/ton) for oilseed "i".

- E. Pursuant to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, the Hexane Extraction Processes identified in Condition 4.3(1) and controlled the by 965 Mineral Oil Absorption Column are subject to 40 CFR Part 64. The Permittee shall comply with the monitoring requirements of the CAM Plan described in Condition 7.4 and Table 7.4.2, pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the Permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, pursuant to 40 CFR 64.7(a) and (b).

Recordkeeping

- F. Pursuant to paragraph 30(d) of Consent Decree 05-CV-02037-JMR-FLN, records of solvent loss ratio limits shall be kept in the form of the table in Attachment N (Extraction Solvent Loss Recordkeeping Template of the Consent Decree), that show total solvent losses (i.e., total solvent losses minus malfunction losses) monthly and on twelve month rolling average basis. This table is presented in Section 7.5 of this permit.
- G. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of VOM emissions with supporting calculations (tons/mo and tons/yr).
- H. Pursuant to 40 CFR 64.9(b)(1), for purposes of implementation of the CAM Plan, the Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

d. i. Hazardous Air Pollutant Requirements (HAP)

- A. Pursuant to Table 1 of 40 CFR 63.2840, allowable HAP solvent loss factors shall not exceed the following limits:
- I. 0.2 gal/ton for conventional soybeans; and
- II. 1.7 gal/ton for specialty soybeans.

- B. Pursuant to 40 CFR 63.2840(a)(1) and 63.2840(c), the compliance ratio shall stay at or below 1.0 the ratio of actual HAP loss to allowable HAP loss.
- C. Pursuant to 40 CFR 63.2855, the quantity of oilseed processed shall be determined as follows:
 - I. All oilseed measurements shall be determined on an as received basis, as defined in 40 CFR 63.2872. The as received basis refers to the oilseed chemical and physical characteristics as initially received by the source and prior to any oilseed handling and processing. By the end of each calendar month following an operating month, the Permittee shall determine the tons as received of each listed oilseed processed for the operating month. The total oilseed processed for an operating month includes the total of each oilseed processed during all normal operating periods that occur within the operating month. If the Permittee has determined the tons of oilseed processed for 12 or more operating months, then the Permittee shall also determine the 12 operating months rolling sum of each type oilseed processed by summing the tons of each type of oilseed processed for the previous 12 operating months. The 12 operating months rolling sum of each type of oilseed processed is used to calculate the compliance ratio as described in 40 CFR 63.2840.
 - II. To determine the tons as received of each type of oilseed processed at the source, the Permittee shall follow the procedures in the plan for demonstrating compliance to determine the items in 40 CFR 63.2855(a)(1) through (5).

ii. Compliance Method (HAP Requirements)

Monitoring

- A. Pursuant to 40 CFR 63.2853, the actual solvent loss shall be determined by the following procedures:
 - I. By the end of each calendar month following an operating month, the Permittee shall determine the total solvent loss in gallons for the previous operating month. The total solvent loss for an operating month includes all solvent losses that occur during normal operating periods within the operating month. If the Permittee has determined solvent losses for 12 or more operating months, then the Permittee shall also determine the 12 operating months rolling sum of actual solvent loss in gallons by summing the monthly actual solvent loss for the previous 12 operating months. The 12 operating months rolling sum of solvent loss is the "actual solvent loss," which is used to calculate compliance ratio as described in 40 CFR 63.2840.
 - II. To determine the actual solvent loss, the Permittee shall follow the procedures in the plan for demonstrating compliance to determine the items in 40 CFR 63.2853(a)(1) through (5).
 - III. Pursuant to 40 CFR 63.2853(b), the following equation shall be used to determine the actual solvent loss for all normal operating periods recorded within a calendar month:

Monthly Actual

$$\text{Solvent (gal)} = \sum_{i=1}^n (SOLV_B - SOLV_B + SOLV_R \pm SOLV_A)_i \quad (Eq. 1)$$

Where:

SOLV_B = Gallons of solvent in the inventory at the beginning of normal operating period "i" as determined in 40 CFR 63.2853(a)(3).

SOLV_E = Gallons of solvent in the inventory at the end of normal operating period "i" as determined in 40 CFR 63.2853(a)(3).

SOLV_R = Gallons of solvent received between the beginning and ending inventory dates of normal operating period "i" as determined in 40 CFR 63.2853(a)(4).

SOLV_A = Gallons of solvent added or removed from the extraction solvent inventory during normal operating period "i" as determined in 40 CFR 63.2853(a)(5).

N = Number of normal operating periods in a calendar month

- B. Pursuant to 40 CFR 63.2854, the weighted average volume fraction of HAP in the actual solvent loss shall be determined by the following procedures established by 40 CFR 63.2854(b)(1) through (3):
- I. Record the volume fraction of each HAP comprising more than 1 percent by volume of the solvent in each delivery of solvent, including solvent recovered from off-site oil. To determine the HAP content of the material in each delivery of solvent, the reference method is EPA Method 311 of Appendix A of 40 CFR Part 60. The Permittee may use EPA Method 311, an approved alternative method, or any other reasonable means for determining the HAP content. Other reasonable means of determining HAP content include, but are not limited to, a material safety data sheet or a manufacturer's certificate of analysis. A certificate of analysis is a legal and binding document provided by a solvent manufacturer. The purpose of a certificate of analysis is to list the test methods and analytical results that determine chemical properties of the solvent and the volume percentage of all HAP components present in the solvent at quantities greater than 1 percent by volume. The Permittee is not required to test the materials it uses, but the Illinois EPA may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. However, if the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.
 - II. Determine the weighted average volume fraction of HAP in the extraction solvent each operating month. The weighted average volume fraction of HAP for an operating month includes all solvent received since the end of the last operating month, regardless of the operating status at the time of the delivery. Determine the monthly weighted average volume fraction of HAP by summing the products of the HAP volume fraction of each delivery and the volume of each delivery and dividing the sum by the total volume of all deliveries as expressed further in Equation 1. Record the result by the end of each calendar month following an operating month. Equation 1 follows:

$$\text{Monthly Weighted Average HAP Content of Extraction Solvent (volume fraction)} = \frac{\sum_{i=1}^n (\text{Received}_i * \text{Content}_i)}{\text{Total Received}} \quad (\text{Eq. 1})$$

Where:

Received_i = Gallons of extraction solvent received in delivery "i."

Content_i = The volume fraction of HAP in extraction solvent delivery "i."

Total Received = Total gallons of extraction solvent received since the end of the previous operating month.

n = Number of extraction solvent deliveries since the end of the previous operating month.

III. Determine the volume fraction of HAP in extraction solvent as a 12 operating months weighted average. When the source has processed oilseed for 12 operating months, sum the products of the monthly weighted average HAP volume fraction and corresponding volume of solvent received, and divide the sum by the total volume of solvent received for the 12 operating months, as expressed by Equation 2. Record the result by the end of each calendar month following an operating month and use it in Equation 2 of 40 CFR 63.2840 to determine the compliance ratio. Equation 2 follows:

$$\begin{aligned} & \text{12-Month Weighted} \\ \text{Average of HAP Content} &= \frac{\sum_{i=1}^{12} (\text{Received}_i * \text{Content}_i)}{\text{Total Received}} \quad (\text{Eq. 2}) \\ \text{in Solvent Received} & \\ \text{(volume fraction)} & \end{aligned}$$

Where:

Received_i = Gallons of extraction solvent received in operating month "i" as determined in accordance with 40 CFR 63.2853(a)(4).

Content_i = Average volume fraction of HAP in extraction solvent received in operating month "i" as determined in accordance with 40 CFR 63.2854(b)(1).

Total Received = Total gallons of extraction solvent received during the previous 12 operating months.

- C. Pursuant to 40 CFR 63.2855(a), to determine the tons as received of each type of oilseed processed at the source, follow the procedures in the plan for demonstrating compliance to determine the items in 40 CFR 63.2855(a)(1) through (5).
- D. Pursuant to 40 CFR 63.2855(b), the following equation shall be to determine the quantity of each oilseed type processed during normal operating periods recorded within a calendar month:

$$\begin{aligned} & \text{Monthly Quantity} \\ \text{of Each Oilseed} &= \sum_{n=1}^n (\text{SEED}_B - \text{SEED}_Y + \text{SEED}_R \pm \text{SEED}_A) \quad (\text{Eq. 1}) \\ \text{Processed (tons)} & \end{aligned}$$

Where:

SEED_B = Tons of oilseed in the inventory at the beginning of normal operating period "i" as determined in accordance with paragraph 40 CFR 63.2855(a)(3).

- SEED_E = Tons of oilseed in the inventory at the end of normal operating period "i" as determined in accordance with CFR 63.2855(a)(3).
- SEED_R = Tons of oilseed received during normal operating period "i" as determined in accordance with CFR 63.2855(a)(4).
- SEED_A = Tons of oilseed added or removed from the oilseed inventory during normal operating period "i" as determined in accordance with CFR 63.2855(a)(5).
- n = Number of normal operating periods in the calendar month during which this type oilseed was processed.

Recordkeeping

- E. Pursuant to 40 CFR 63.2862(c) and(d), the Permittee shall keep the following records:
- I. For the solvent inventory, record the following information in accordance with the plan for demonstrating compliance:
1. Dates that define each operating status period during a calendar month.
 2. The operating status of the source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval.
 3. Record the gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period.
 4. The gallons of all extraction solvent received, purchased, and recovered during each calendar month.
 5. All extraction solvent inventory adjustments, additions or subtractions. The Permittee shall document the reason for the adjustment and justify the quantity of the adjustment.
 6. The total solvent loss for each calendar month, regardless of the source operating status.
 7. The actual solvent loss in gallons for each operating month.
- II. For the weighted average volume fraction of HAP in the extraction solvent:
1. The gallons of extraction solvent received in each delivery.
 2. The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent.
 3. The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in accordance with 40 CFR 63.2854(b)(2).
- III. For each type of listed oilseed processed, record the following items in accordance with the plan for demonstrating compliance:

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4.3 - Oil Extraction and Desolventizing

1. The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory.
 2. The operating status of the source such as normal operation, nonoperating, malfunction period, or exempt operation for each recorded time interval. On the log for each type of listed oilseed that is not being processed during a normal operating period, record which type of listed oilseed is being processed in addition to the source operating status.
 3. The oilseed inventory for the type of listed oilseed being processed on the beginning and ending dates of each normal operating period.
 4. The tons of each type of listed oilseed received at the source each normal operating period.
 5. All listed oilseed inventory adjustments, additions or subtractions for normal operating periods. You must document the reason for the adjustment and justify the quantity of the adjustment.
 6. The tons of each type of listed oilseed processed during each operating month.
- IV. Pursuant to 40 CFR 63.2862(d), after the source has processed listed oilseed for 12 operating months and is not operating during a malfunction period as described in 40 CFR 63.2850(e)(2), record the following items by the end of the calendar month following each operating month:
1. The 12 operating months rolling sum of the actual solvent loss in gallons as described in 40 CFR 63.2853(c).
 2. The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months as described in 40 CFR 63.2854(b)(3).
 3. The 12 operating months rolling sum of each type of listed oilseed processed in tons as described in 40 CFR 63.2855(c).
 4. A determination of the compliance ratio. Using the values from 40 CFR 63.2853, 63.2854, 63.2855, and Table 1 of 40 CFR 63.2840, calculate the compliance ratio using Equation 2 of 40 CFR 63.2840.
 5. A statement of whether the source is in compliance with all of the requirements of 40 CFR Part 63 Subpart GGGG. This includes a determination of whether the source has met all of the applicable requirements in 40 CFR 63.2850.

e. i. Operational and Production Requirements

- A. Pursuant to Construction Permit 02110009, total organic solvent usage in the Hexane Extraction Process shall not exceed 112 tons/mo and 853 tons/yr.
[T1]

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ii. Compliance Method (Operational and Production Requirements)

Monitoring

- A. Pursuant to Permit 02110009, compliance with annual limits shall be determined from a running total of 12 months of data. [T1] Compliance with the solvent usage limit shall be determined from the amount of organic solvent added to the equipment.
- B. Pursuant to permit 02110009, compliance with daily limit shall be determined as daily average based on a calendar month operation. [T1]

Recordkeeping

- C. Pursuant to Construction Permit 02110009, the Permittee shall keep total monthly and annual records of solvent used.
- D. See also Condition 4.3(2)(d)(ii)(E).

f. i. Work Practice Requirements

- A. Pursuant to 40 CFR 63.2851, the Permittee shall implement the requirements for a written plan for demonstrating compliance with 40 CFR Part 63, Subpart GGGG and incorporated by reference into this permit in Condition 3.2(a) of this permit.
- B. Pursuant to 40 CFR 63.2852, the Permittee shall implement SSM plan that 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. 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. Some or all of the procedures may come from plans the Permittee developed for other purposes such as a Standard Operating Procedure manual or an Occupational Safety and Health Administration Process Safety Management plan. To qualify as a SSM plan, other such plans must meet all the applicable requirements of 40 CFR Part 63, Subpart GGGG.

ii. Compliance Method (Work Practice Requirements)

Recordkeeping

- A. See Condition 3.2(a) of this permit for the plan for demonstrating compliance.
- B. Pursuant to 40 CFR 63.2852, the Permittee shall keep the SSM plan on-site and readily available as long as the source is operational.
- C. Pursuant to 40 CFR 63.2862(e), for each SSM event subject to a malfunction period as described in 40 CFR 63.2850(e)(2), record the following items by the end of the calendar month following each month in which the initial startup period or malfunction period occurred:
 - I. A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction.
 - II. An estimate of the solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation.

III. A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.

g. i. Odor Requirements

A. Pursuant to Section 9(a) of the Act, no person shall cause or threaten to allow the discharge or emission of any contaminant into the environment of any state so as to cause or tend to cause air pollution in Illinois, either alone or in combination with contaminants from other sources, or so as to violate regulations or standards adopted under this Act.

ii. Compliance Method (Odor Requirements)

Monitoring

- A. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall conduct weekly inspections of oil extraction operations and evaluate releases of odors from those operations.
- B. Pursuant to Section 39.5(7)(b) of the Act, any citizens odor complaints submitted directly to the source shall be evaluated within 72 hours from the date of receipt and the Permittee shall make all the reasonable efforts to reduce or eliminate a cause of such odor accidents in the future.

Recordkeeping

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep the records of inspections, evaluation, and assessment of odors being released, along with the logs of any correction actions made.

3. Non-Applicability Determinations

- a. Pursuant to 35 IAC 211.2710, oil extraction operations are not grain handling operations and therefore not subject to 35 IAC 212.461, 212.462 and 212.463.
- b. Oil extraction operations are not subject to 35 IAC Part 215, Subpart K "Use of Organic Material". This non-applicability is based on the fact that hexane, the solvent solely used for oil extraction, is not photochemically reactive.
- c. The 171 FDS White Flake Stripper is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources because this emission unit does not have potential pre-control device emissions of any applicable regulated air pollutant that equals or exceeds major source threshold levels.
- d. The White Flake Cooling System is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources because this emission unit does not have any air pollution control devices used to comply with any applicable emission limits or standards.

4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

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- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
 - I. Requirements in Conditions 4.3(2)(a)(i), 4.3(2)(b)(i), 4.3(2)(c)(i), 4.3(2)(d)(i), and 4.3(2)(e)(i).
 - II. Requirements in Condition 4.3(2)(f)(i).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the event.
 - D. Probable cause of the deviation.
 - E. Corrective actions or preventative measures taken.

b. Federal Reporting

- i. A. Pursuant to paragraph 36 of Consent Decree 05-CV-02037-JMR-FLN, the Permittee shall submit semi-annual written reports to the USEPA and Illinois EPA. Each such report shall contain the following information:
 - I. Any deviations from emission limitations, including deviations resulting from malfunctions that have been detected by the testing, monitoring, and recordkeeping requirements specified in the Consent Decree;
 - II. The probable cause of such deviations; and
 - III. Any corrective actions or preventive measures taken.
- B. If no deviations occurred during a reporting period, the Permittee shall submit a written report which states that no deviations occurred. Each report shall be due within thirty days after the end of each semi-annual reporting period (January 1 through June 30, or July 1 through December 31).
- ii. Pursuant 40 CFR 63.2861, the Permittee shall submit the following reports to the Illinois EPA:
 - A. *Annual compliance certifications.* 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. Include the following information in the annual certification:
 - I. The name and address of the owner or operator.
 - II. The physical address of the vegetable oil production process.

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- III. Each listed oilseed type processed during the 12 calendar months period covered by the report.
- IV. Each HAP identified under 40 CFR 63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.
- V. A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source.
- VI. A compliance certification, signed by the responsible official to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, the Permittee shall include a certification of the following items:
 - 1. The Permittee follows the procedures described in the plan for demonstrating compliance.
 - 2. The compliance ratio is less than or equal to 1.00.
- B. *Deviation notification report.* Submit a deviation report for each compliance determination in which the compliance ratio exceeds 1.00 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 shall include the following:
 - I. The name and address of the owner or operator.
 - II. The physical address of the vegetable oil production process.
 - III. Each listed oilseed type processed during the 12 operating months period for which the Permittee determined the deviation.
 - IV. The compliance ratio comprising the deviation.
- C. *Periodic startup, shutdown, and malfunction report.* The Permittee shall submit a 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 following items:
 - I. The name, title, and signature of a source's responsible official who is certifying that the report accurately states that all actions taken during the initial startup or malfunction period were consistent with the SSM plan.
 - II. A description of events occurring during the time period, the date and duration of the events, and reason the time interval qualifies as an initial startup period or malfunction period.
 - III. An estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.
- D. *Immediate SSM reports.* If the Permittee handles a malfunction period subject to 40 CFR 63.2850(e)(2) differently from procedures in the SSM plan and the relevant emission requirements in 40 CFR 63.2840 are exceeded, then the Permittee shall submit an immediate SSM report. Immediate SSM reports consist of a telephone call or facsimile transmission to the Illinois EPA within 2 working days after starting actions inconsistent with the SSM plan,

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followed by a letter within 7 working days after the end of the event. The letter must include the following items:

- I. The name, title, and signature of a source's responsible official who is certifying the accuracy of the report, an explanation of the event, and the reasons for not following the SSM plan.
- II. A description and date of the SSM event, its duration, and reason it qualifies as a SSM.
- III. An estimate of the solvent loss for the duration of the SSM event with supporting documentation.

4.4 Boilers

1. Emission Units and Operations

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
Boiler #1 (heat input 52 mmBtu/hr; primary fuels: natural gas, digester gas and landfill gas; back up: distillate oil)	CO, PM, SO ₂ , NO _x , VOM	1971	1987	None	None
Boiler #2 (heat input 25.1 mmBtu/hr; natural gas is the only fuel)	CO, NO _x	1998	N/A	None	None

2. Applicable Requirements

For the emission units in Condition 4.4(1) above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. Opacity Requirements

A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit.

ii. Compliance Method (Opacity Requirements)

- A. Pursuant to Section 39.5(7)(p) of the Act, the Permittee shall conduct annual visible emissions observations of each individual stack(s) by using Method 22. If opacity is observed, the Permittee shall conduct opacity testing by using Method 9 within one week.
- B. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall keep records of visible emissions observations and opacity testing.

b. i. Carbon Monoxide Requirements (CO)

- A. Pursuant to 35 IAC 216.121, the emissions of carbon monoxide (CO) into the atmosphere from any fuel combustion emission unit with actual heat input greater than 2.9 MW (10 mmBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air.
- B. Pursuant to Construction Permit 06100079, the Permittee shall not exceed the following CO limits from Boiler #1: 4.16 lb/hr and 18.22 ton/yr. [T1]

ii. Compliance Method (CO Requirements)

Monitoring

- A. Pursuant to Construction Permit 06100079, compliance with the annual limits shall be determined from the running total of 12 months of data.
- B. See also Condition 4.4(2)(h)(i).

Recordkeeping

- C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of CO emissions, with supporting calculations.

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c. i. Particulate Matter Requirements (PM)

- A. Pursuant to 35 IAC 212.206, the emissions of PM into the atmosphere in any one hour period from Boiler #1 shall not exceed 0.15 kg/MW-hour (0.10 lb/mmBtu) of actual heat input from liquid fuel.
- B. Pursuant to Construction Permit 06100079, the Permittee shall not exceed the following PM emission limits from Boiler #1: 1.23 lb/hr and 2.16 ton/yr. [T1]

ii. Compliance Method (PM Requirements)

Monitoring

- A. Pursuant to Construction Permit 06100079, compliance with the annual limits shall be determined from the running total of 12 months of data.

Testing

- B. Pursuant to Section 39.5(7)(a) of the Act, if Boiler #1 is fired by diesel fuel for a period that lasts longer than 48 hours per year and the firing is not the result of a gas curtailment as defined in 40 CFR 63.11237, the Permittee shall perform test of PM emissions by using USEPA Method 5 no later than 3 months from the date on which 48 hours of operation being exceeded.

Recordkeeping

- C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of PM emissions, with supporting calculations.
- D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep the records of PM test data.
- E. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep the records of the operating time when diesel fuel was in use.

d. i. Sulfur Dioxide Requirements (SO₂)

- A. Pursuant to 35 IAC 214.122(b)(2), the Permittee shall not exceed the following limits while burning distillate fuel oil exclusively in Boiler #1: 0.46 kg of sulfur dioxide per MW-hour of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- B. Pursuant to Construction Permit 06100079, the sulfur content of fuels burned in the Boiler #1, other than natural gas, shall not exceed the following limits: [T1]
 - I. Distillate fuel oil: 0.23 kg per MW-hour of actual heat input (0.15 lb/mmBtu); and
 - II. Landfill gas and digester gas: 0.775 kg per MW-hour of actual heat input (0.5 lb/mmBtu).
- C. Pursuant to Construction Permit 06100079, the Permittee shall not exceed the following SO₂ limits from Boiler #1: 14.77 lb/hr and 29.80 ton/yr. [T1]

ii. Compliance Method (SO₂ Requirements)

Monitoring

- A. Pursuant to Construction Permit 06100079, compliance with the annual limits shall be determined from the running total of 12 months of data.
- B. Pursuant to Construction Permit 06100079, during each calendar year in which digester gas or landfill gas is fired in Boiler #1, the Permittee shall have a representative sample of the gas, as supplied to or received at the source, analyzed for sulfur and heat content.
- C. Pursuant to Section 39.5(7)(b) and (d), during each calendar year in which fuel oil is fired in Boiler #1, the Permittee shall have a representative sample of the fuel oil, as supplied to or received at the source, analyzed for sulfur and heat content.

Recordkeeping

- D. Pursuant to Section 39.5(7)(b), the Permittee shall keep the records of the representative samples taken of the fuels other than natural gas used in Boiler #1.
- E. Pursuant to Section 39.5(7)(b), the Permittee shall keep the records of SO₂ emissions, with supporting calculations.

e. i. **Nitrogen Oxides Requirements (NO_x)**

- A. Pursuant to Construction Permit 06100079, the Permittee shall not exceed the following NO_x limits from Boiler #1: 7.43 lb/hr and 23.18 ton/yr. [T1]
- B. Pursuant to Construction Permit 98060058, the Permittee shall not exceed the following NO_x limits from Boiler #2: 3.51 lb/hr and 15.39 ton/yr. [T1]

ii. Compliance Method (NO_x Requirements)

Monitoring

- A. Pursuant to Permit 06100079 and Section 39.5(7)(b) of the Act, compliance with the annual limits shall be determined from the running total of 12 months of data.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of NO_x emissions, with supporting calculations.

f. i. **Volatile Organic Material Requirements (VOM)**

- A. Pursuant to Construction Permit 06100079, the Permittee shall not exceed the following VOM limits from Boiler #1: 1.12 lb/hr and 4.91 ton/yr. [T1]

ii. Compliance Method (VOM Requirements)

Monitoring

- A. Pursuant to Construction Permit 06100079, compliance with the annual limits shall be determined from the running total of 12 months of data.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of VOM emissions, with supporting calculations.

g. i. Operational and Production Requirements

- A. Pursuant to Construction Permit 06100079, operation of the Boiler #1 is only allowed with natural gas, distillate fuel oil, landfill gas, digester gas or a combination thereof.
- B. Pursuant to Construction Permit 06100079, annual fuel usage for Boiler #1 shall not exceed the following limits: [T1]
 - I. Distillate fuel oil: 445,000 gallons
 - II. Landfill gas: 911 million scf
 - III. Digester gas: 701 million scf
- C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee is allowed to burn in Boiler #1 only gases subcategory 1, as defined in 40 CFR 63.7575.

ii. Compliance Method (Operational and Production Requirements)

Monitoring

- A. Pursuant to Construction Permit 06100079, compliance with annual limits shall be based on a running total of 12 months of data.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep annual records of the amount of each fuel consumed (in mmscf and gallons).

h. i. Work Practice Requirements

- A. Pursuant to 40 CFR 63.7540(a)(10) and after January 31, 2016, the Permittee shall comply with the following tune-up requirements for each boiler and conduct such tune-ups annually, unless the boiler is equipped with an oxygen trim system that maintains and optimum air to fuel ratio:
 - I. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled unit shutdown).
 - II. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 - III. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown).
 - IV. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the boiler is subject.
 - V. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after

the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

ii. Compliance Method (Work Practice Requirements)

Recordkeeping

A. Pursuant to 40 CFR 63.7540(a)(10)(vi), the Permittee shall keep the following records:

- I. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;
- II. A description of any corrective actions taken as a part of the tune-up; and
- III. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

3. Non-Applicability Determinations

- a. Pursuant to 35 IAC 215.303, the boilers are not subject to 35 IAC 215.301 because fuel combustion emission units are not subject to 35 IAC 215.301.
- b. Pursuant to 40 CFR 60.40c(a), the Boiler #1 is not subject to 40 CFR 60 Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, because the boiler was constructed prior to June 9, 1989.
- c. The boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the boilers not use an add-on control device to achieve compliance with an emission limitation or standard.

4. Other Requirements

- a. For Boiler #1, the Permittee shall satisfy the requirements of the NESHAP for Publicly Owned Treatment Works (POTW) by combusting digester gas from the POTW that are not subject to the control requirements of the NESHAP, 40 CFR 63, Subpart VVV, as confirmed by appropriate documents maintained by the Permittee.
- b. For Boiler #1, the Permittee shall satisfy the requirements of the NSPS/NESHAP for Municipal Solid Waste Landfills by combusting gas from landfill(s) that are not subject to the control requirements of NSPS 40 CFR 60.752(b)(2)(iii)(B), as confirmed by appropriate documents maintained by the Permittee.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:

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- I. Requirements in Conditions 4.4(2)(a)(i), 4.4(2)(b)(i), 4.4(2)(c)(i), 4.4(2)(d)(i), 4.4(2)(e)(i), 4.4(2)(f)(i), 4.4(2)(g)(i), and 4.4(2)(h)(i).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the event.
 - D. Probable cause of the deviation.
 - E. Corrective actions or preventative measures taken.

b. Federal Reporting

- i. The Permittee shall submit the annual compliance reports, pursuant to 40 CFR 63.7550(b), no later than January 31 of each year following the compliance date of January 31, 2016.
- ii. The annual compliance reports shall contain the information required by 40 CFR 63.7550(c)(1) through (13).

Section 5 - Additional Title I Requirements

This Section is reserved for Title I requirements not specified in Sections 3 or 4. As of the date of issuance of this permit, there are no Title I requirements that need to be separately addressed in this Section.

Section 6 - Insignificant Activities Requirements

1. Insignificant Activities Subject to Specific Regulations

This condition is reserved for insignificant activities, as defined in 35 IAC 201.210 and 201.211, which are subject to specific standards promulgated pursuant Sections 111, 112, 165, or 173 of the Clean Air Act, see Sections 9.1(d) and 39.5(6)(a) of the Act. As of the date of issuance of this permit, there are no such insignificant activities present at the source.

2. Insignificant Activities in 35 IAC 201.210(a) and 35 IAC 201.211

In addition to any insignificant activities identified in Condition 6.1, the following additional activities at the source constitute insignificant activities pursuant to 35 IAC 201.210 and 201.211:

<i>Insignificant Activity</i>	<i>Number of Units</i>	<i>Insignificant Activity Category</i>
Splits and Seeds Storage	1	35 IAC 201.210(a) (2) or (a) (3)
Flow Agent Tank	1	35 IAC 201.210(a) (2) or (a) (3)
Cooling Tower	1	35 IAC 201.211
Aerosol Can Recycling System	1	35 IAC 201.211
Soybean Oil Storage Tanks (Crude Oil Tanks) (Any size storage tanks containing exclusively soaps, detergents, surfactants, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions where an organic solvent has not been mixed.)	5	35 IAC 201.210(a) (17)
Railcar/Truck Soybean Oil Loadout (Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions.)	2	35 IAC 201.210(a) (18)

3. Insignificant Activities in 35 IAC 201.210(b)

Pursuant to 35 IAC 201.210, the source has identified insignificant activities as listed in 35 IAC 201.210(b)(1) through (28) as being present at the source. The source is not required to individually list the activities.

4. Applicable Requirements

Insignificant activities in Conditions 6.1 and 6.2 are subject to the following general regulatory limits notwithstanding status as insignificant activities. The Permittee shall comply with the following requirements, as applicable:

- a. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122, except as provided in 35 IAC 212.123(b).
- b. Pursuant to 35 IAC 212.321 or 212.322 (see Conditions 7.2(a) and (b)), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceed the allowable emission rates specified 35 IAC 212.321 or 212.322 and 35 IAC Part 266.

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- c. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2,000 ppm, except as provided in 35 IAC Part 214.
- d. Pursuant to 35 IAC 215.301, no person shall cause or allow the discharge of more than 8 lbs/hr of organic material into the atmosphere from any emission source, except as provided in 35 IAC 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart K shall apply only to photochemically reactive material.
- e. Pursuant to 35 IAC 215.182, for each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, except as provided in 35 IAC 215.181.
- f. Pursuant to 35 IAC 215.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 250 gal, unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the IEPA according to 35 IAC Part 201 or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b)(2). Exception as provided in 35 IAC 215.122(c): If no odor nuisance exists the limitations of 35 IAC 215.122 shall only apply to the loading of volatile organic liquid with a vapor pressure of 2.5 psia or greater at 70°F.

5. Compliance Method

Pursuant to Section 39.5(7)(b) of the Act, the source shall maintain records of the following items for the insignificant activities in Conditions 6.1 and 6.2:

- a. List of all insignificant activities, including insignificant activities added as specified in Condition 6.6, the categories the insignificant activities fall under, and supporting calculations as needed for any insignificant activities listed in 35 IAC 201.210(a)(1) through (3).
- b. Potential to emit emission calculations before any air pollution control device for any insignificant activities listed in 35 IAC 201.210(a)(1) through (3).

6. Notification Requirements for Insignificant Activities

The source shall notify the IEPA accordingly to the addition of insignificant activities:

a. Notification 7 Days in Advance

- i. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(1) and 201.211 and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3. The notification shall include the following pursuant to 35 IAC 201.211(b):
 - A. A description of the emission unit including the function and expected operating schedule of the unit.
 - B. A description of any air pollution control equipment or control measures associated with the emission unit.
 - C. The emissions of regulated air pollutants in lb/hr and ton/yr.
 - D. The means by which emissions were determined or estimated.
 - E. The estimated number of such emission units at the source.

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- F. Other information upon which the applicant relies to support treatment of such emission unit as an insignificant activity.
- ii. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(2) through 201.210(a)(18) and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3.
- iii. Pursuant to Sections 39.5(12)(a)(i)(b) and 39.5(12)(b)(iii) of the Act, the permit shield described in Section 39.5(7)(j) of the Act (see Condition 2.7) shall not apply to any addition of an insignificant activity noted above.

b. Notification Required at Renewal

Pursuant to 35 IAC 201.212(a) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a) and is currently identified in Conditions 6.1 or 6.2, a notification is not required until the renewal of this permit.

c. Notification Not Required

Pursuant to 35 IAC 201.212(c) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(b) as described in Condition 6.3, a notification is not required.

Section 7 - Other Requirements

1. Testing

- a. Pursuant to Section 39.5(7)(a) of the Act, a written test protocol shall be submitted at least sixty (60) days prior to the actual date of testing, unless it is required otherwise in applicable state or federal statutes. The IEPA may at the discretion of the Compliance Section Manager (or designee) accept a protocol less than 60 days prior to testing provided it does not interfere with the IEPA's ability to review and comment on the protocol and does not deviate from the applicable state or federal statutes. The protocol shall be submitted to the IEPA, Compliance Section and IEPA, Stack Test Specialist for its review. Addresses are included in Attachment 3. This protocol shall describe the specific procedures for testing, including as a minimum:
 - i. The name and identification of the emission unit(s) being tested.
 - ii. Purpose of the test, i.e., permit condition requirement, IEPA or USEPA requesting test.
 - iii. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.
 - v. The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations.
 - vi. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods. Include if emission tests averaging of 35 IAC 283 will be used.
 - vii. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.
 - viii. Any proposed use of an alternative test method, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.
 - ix. Sampling of materials, QA/QC procedures, inspections, etc.
- b. The IEPA, Compliance Section shall be notified prior to these tests to enable the IEPA to observe these tests pursuant to Section 39.7(a) of the Act as follows:
 - i. Notification of the expected date of testing shall be submitted in writing a minimum of thirty (30) days prior to the expected test date, unless it is required otherwise in applicable state or federal statutes.
 - ii. Notification of the actual date and expected time of testing shall be submitted in writing a minimum of five (5) working days prior to the actual date of the test. The IEPA may at its discretion of the Compliance Section Manager (or designee) accept notifications with shorter advance notice provided such notifications will not interfere with the IEPA's ability to observe testing.
- c. Copies of the Final Report(s) for these tests shall be submitted to the IEPA, Compliance Section within fourteen (14) days after the test results are compiled and finalized but no later than ninety (90) days after completion of the test, unless it is required

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otherwise in applicable state or federal statutes or the IEPA may at the discretion of the Compliance Section Manager (or designee) an alternative date is agreed upon in advance pursuant to Section 39.7(a) of the Act. The Final Report shall include as a minimum:

- i. General information including emission unit(s) tested.
 - ii. A summary of results.
 - iii. Discussion of conditions during each test run (malfunction/breakdown, startup/shutdown, abnormal processing, etc.).
 - iv. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
 - v. Detailed description of test conditions, including:
 - A. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption.
 - B. Control equipment information, i.e., equipment condition and operating parameters during testing.
 - C. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair.
 - vi. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
 - vii. An explanation of any discrepancies among individual tests or anomalous data.
 - viii. Results of the sampling of materials, QA/QC procedures, inspections, etc.
 - ix. Discussion of whether protocol was followed and description of any changes to the protocol if any occurred.
 - x. Demonstration of compliance showing whether test results are in compliance with applicable state or federal statutes.
- d. Copies of all test reports and other test related documentation shall be kept on site as required by Condition 2.5(b) pursuant to Section 39.5(7)(e)(ii) of the Act.

2. PM Process Weight Rate Requirements

a. New Process Emission Units - 35 IAC 212.321

New Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972. [35 IAC 212.321]

- i. No person shall cause or allow the emission of PM into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of PM from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c). See Condition 7.2(a)(iii) below. [35 IAC 212.321(a)]
- ii. Interpolated and extrapolated values of the data in 35 IAC 212.321(c) shall be determined by using the equation: [35 IAC 212.321(b)]

$$E = A(P)^B$$

Where:

P = Process weight rate (T/hr)
E = Allowable emission rate (lbs/hr)

A. Process weight rates of less than 450 T/hr:

A = 2.54
B = 0.53

B. Process weight rates greater than or equal to 450 T/hr:

A = 24.8
B = 0.16

iii. Limits for New Process Emission Units [35 IAC 212.321(c)]:

<u>P</u> <u>(T/hr)</u>	<u>E</u> <u>(lbs/hr)</u>	<u>P</u> <u>(T/hr)</u>	<u>E</u> <u>(lbs/hr)</u>
0.05	0.55	25.00	14.00
0.10	0.77	30.00	15.60
0.20	1.10	35.00	17.00
0.30	1.35	40.00	18.20
0.40	1.58	45.00	19.20
0.50	1.75	50.00	20.50
0.75	2.40	100.00	29.50
1.00	2.60	150.00	37.00
2.00	3.70	200.00	43.00
3.00	4.60	250.00	48.50
4.00	5.35	300.00	53.00
5.00	6.00	350.00	58.00
10.00	8.70	400.00	62.00
15.00	10.80	450.00	66.00
20.00	12.50	500.00	67.00

b. Existing Process Emission Units - 35 IAC 212.322

Existing Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972. [35 IAC 212.322]

- i. No person shall cause or allow the emission of PM into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of PM from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.322(c)). See Condition 7.2(b)(iii) below. [35 IAC 212.322(a)]
- ii. Interpolated and extrapolated values of the data in 35 IAC 212.322(c) shall be determined by using the equation: [35 IAC 212.322(b)]

$$E = C + A(P)^B$$

Where:

P = Process weight rate (T/hr)
E = Allowable emission rate (lbs/hr)

A. Process weight rates of less than or equal to 30 T/hr:

A = 4.10
B = 0.67
C = 0

B. Process weight rates greater than 30 T/hr:

A = 55.0
B = 0.11
C = -40.0

iii. Limits for Existing Process Emission Units [35 IAC 212.322(c)]:

<u>P</u> <u>(T/hr)</u>	<u>E</u> <u>(lbs/hr)</u>	<u>P</u> <u>(T/hr)</u>	<u>E</u> <u>(lbs/hr)</u>
0.05	0.55	25.00	35.40
0.10	0.87	30.00	40.00
0.2	1.40	35.00	41.30
0.30	1.83	40.00	42.50
0.40	2.22	45.00	43.60
0.50	2.58	50.00	44.60
0.75	3.38	100.00	51.20
1.00	4.10	150.00	55.40
2.00	6.52	200.00	58.60
3.00	8.56	250.00	61.00
4.00	10.40	300.00	63.10
5.00	12.00	350.00	64.90
10.00	19.20	400.00	66.20
15.00	25.20	450.00	67.70
20.00	30.50	500.00	69.00

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3. 40 CFR 63 Subpart A Requirements (NESHAP)

a. 40 CFR 63 Subpart A and Subpart GGGG - Solvent Extraction for Vegetable Oil Production

Pursuant to 40 CFR 63 Subpart A and Subpart GGGG, the Permittee shall comply with the following applicable General Provisions as indicated:

<i>General Provision Citation</i>	<i>General Provision Applicable?</i>	<i>Subject of Citation</i>	<i>Explanation (if required)</i>
40 CFR 63.1	Yes	General Applicability of the General Provisions	
40 CFR 63.2	Yes	Definitions	Except as specifically provided in Subpart GGGG
40 CFR 63.3	Yes	Units and Abbreviations	
40 CFR 63.4	Yes	Prohibited Activities and Circumvention	
40 CFR 63.5	Yes	Preconstruction Review and Notification Requirements	Except for subsections of 40 CFR 63.5 as listed in Table 1 to 40 CFR 63.2870
40 CFR 63.6	Yes	Compliance with Standards and Maintenance Requirements	
40 CFR 63.7	Yes	Performance Testing Requirements	Subpart GGGG requires performance testing only if the source applies additional control that destroys solvent. Section 63.2850(a)(6) requires sources to follow the performance testing guidelines of the General Provisions if a control is added.
40 CFR 63.8	No	Monitoring Requirements	
40 CFR 63.9	Yes	Notification Requirements	Except for 63.9(b)(2), (f), (g), and (h)
40 CFR 63.10	Yes	Recordkeeping and Reporting Requirements	Except for subsections of 40 CFR 63.10 as listed in Table 1 to 40 CFR 63.2870
40 CFR 63.11	Yes	Control Device and Work Practice Requirements	Applies only if your source uses a flare to control solvent emissions. Subpart GGGG does not require flares.
40 CFR 63.12	Yes	State Authority and Delegations	
40 CFR 63.13	Yes	Addresses of State Air Pollution Control Agencies and EPA Regional Offices	
40 CFR 63.14	Yes	Incorporations by Reference	
40 CFR 63.15	Yes	Availability of Information and Confidentiality	
40 CFR 63.16	N/A	Performance Track Provisions	

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b. 40 CFR 63 Subpart A and Subpart DDDDD - Industrial, Commercial, and Institutional Boilers and Process Heaters

Pursuant to 40 CFR 63 Subpart A and Subpart DDDDD, the Permittee shall comply with the following applicable General Provisions as indicated:

<i>General Provision Citation</i>	<i>General Provision Applicable?</i>	<i>Subject of Citation</i>	<i>Explanation (if required)</i>
40 CFR 63.1	Yes	General Applicability of the General Provisions	
40 CFR 63.2	Yes	Definitions	
40 CFR 63.3	Yes	Units and Abbreviations	
40 CFR 63.4	Yes	Prohibited Activities and Circumvention	
40 CFR 63.5	Yes	Preconstruction Review and Notification Requirements	
40 CFR 63.6	Yes	Compliance with Standards and Maintenance Requirements	With exception of: 63.6(e)(1)(i)-(ii); (e)(3); (f)(1); and (h)(1)
40 CFR 63.7	Yes	Performance Testing Requirements	With exception of: 63.7(e)(1)
40 CFR 63.8	Yes	Monitoring Requirements	With exception of: 63.8(c)(1)(i) and (c)(1)(iii); and the last sentence of (d)(3)
40 CFR 63.9	Yes	Notification Requirements	
40 CFR 63.10	Yes	Recordkeeping and Reporting Requirements	With exception of: 63.10(b)(2)(ii); (b)(2)(iv) and (v); (b)(3); (c)(10) and (11); (c)(15); (d)(3); (d)(5)
40 CFR 63.11	No	Control Device and Work Practice Requirements	
40 CFR 63.12	Yes	State Authority and Delegations	
40 CFR 63.13	Yes	Addresses of State Air Pollution Control Agencies and EPA Regional Offices	
40 CFR 63.14	Yes	Incorporations by Reference	
40 CFR 63.15	Yes	Availability of Information and Confidentiality	
40 CFR 63.16	Yes	Performance Track Provisions	

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4. Compliance Assurance Monitoring (CAM) Requirements

a. CAM Provisions

i. Proper Maintenance

Pursuant to 40 CFR 64.7(b), at all times, the source shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

ii. Continued Operation

Pursuant to 40 CFR 64.7(c), except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the source shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit (PSEU) is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The source shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

iii. Response to Excursions or Exceedances

A. Pursuant to 40 CFR 64.7(d)(1), upon detecting an excursion or exceedance, the source shall restore operation of the PSEU (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

B. Pursuant to 40 CFR 64.7(d)(2), determination of whether the source has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device.

A. Pursuant to 40 CFR 64.8, if a Quality Improvement Plan threshold specified in Tables 7.4.1 and 7.4.2, as appropriate, is exceeded then the source shall develop according to the requirements in 40 CFR 64.8(b)(2) and implement a Quality Improvement Plan (QIP) as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined. Implementation of a QIP shall not excuse the source from compliance with any existing emission limitation

or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Clean Air Act.

b. Monitoring - Monitoring

Pursuant to 40 CFR 64.7(a), the source shall comply with the monitoring requirements of the CAM Plans as described in 7.4.4(e) below, pursuant to 40 CFR Part 64 as submitted in the source's CAM plan application.

c. Monitoring - Recordkeeping

Pursuant to 40 CFR 64.9(b)(1), the source shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, any written quality improvement plan (QIP) and any activities undertaken to implement a quality improvement plan, and other supporting information related to the monitoring requirements established for CAM.

d. Monitoring - Reporting

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the source shall submit the following reporting requirements:

i. Semiannual Reporting

As part of the required Semiannual Monitoring Reports, the source shall submit a CAM report including the following at a minimum:

- A. Summary information on the number, duration, and cause of excursions or exceedances, and the corrective actions taken pursuant to 40 CFR 64.6(c)(3) and 64.9(a)(2)(i).
- B. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks pursuant to 40 CFR 64.6(c)(3) and 64.9(a)(2)(ii).
- A. A description of the actions taken to implement a QIP during the reporting period. Upon completion of a QIP, include documentation that the implementation of the QIP has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

e. CAM Plans

The following tables contain the CAM Plans in this CAAPP permit:

Table	Emission Unit Section	PSEU Designation	Control Device	Pollutant
7.4.1	4.1	Bean Cleaning/Separating System	E816: Bean Cleaning Dust Collector (DC)	PM
7.4.1	4.2	Primary Dehulling System	603 Dehulling DC	PM
7.4.1	4.2	Secondary Dehulling System	603 Dehulling DC	PM
7.4.1	4.2	Flaking Mills Aspiration	601 Flaking Mill Aspiration Cyclone	PM
7.4.1	4.2	Meal Grinding/Sifting System	652 Meal Grinding DC	PM
7.4.1	4.2	612 Grits Bin Deck Cyclone	652 Meal Grinding DC	PM
7.4.1	4.2	E803 Grits Sifter Receiver (Cyclone)	E820 Main House DC	PM

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Section 7 - Other Requirements
7.4 - CAM Requirements

Table	Emission Unit Section	PSEU Designation	Control Device	Pollutant
7.4.1	4.2	Grits Sifter	652 Meal Grinding DC	PM
7.4.1	4.2	Grits Aspiration	652 Meal Grinding Dust DC& E820 Main House DC	PM
7.4.1	4.3	White Flake Storage	655 White Flake Bin DC	PM
7.4.1	4.3	White Flake Loadout	655 White Flake Bin DC	PM
7.4.2	4.3	Hexane Extraction Processes	965 Mineral Oil Absorption Column	VOM

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Table 7.4.1 - CAM Plan

Emission Unit Section:	4.1 and 4.2,
PSEU Designation:	See 7.4(e)
Pollutant:	PM

Indicators:	#1) Pressure Drop	#2) N/A
General Criteria		
The Monitoring Approach Used to Measure the Indicators:	Static pressure drop will be monitored by using a gauge or electronic transmitter	
The Indicator Range Which Provides a Reasonable Assurance of Compliance:	0.5 to 8.0 inches H ₂ O	
Quality Improvement Plan (QIP) Threshold Levels:	Exceeding 5 of 90 days outside of an indicator range	
Performance Criteria		
The Specifications for Obtaining Representative Data:	Control device manufacturers typically conduct exhaustive performance testing on the baghouse equipment in order to develop a recommended pressure drop range that ensures normal device operation. Manufacturer's specifications are sufficient to justify the proposed indicator monitoring range.	
Verification Procedures to Confirm the Operational Status of the Monitoring:	Cargill performs daily checks of the operational status of the monitoring equipment.	
Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data:	The instrumentation for determining pressure drop across the control devices use a gauge or transmitter with a scale such that the expected normal reading shall be no less than 20% of full scale and shall be accurate within +/-2% of full scale reading. The gauge shall be calibrated or replaced at least once every six (6) months.	
The Monitoring Frequency:	Daily	
The Data Collection Procedures That Will Be Used:	Daily pressure readings will be recorded in a facility database.	
The Data Averaging Period For Determining Whether an Excursion or Exceedance Has Occurred:	N/A (pressure drop monitoring is not continuous)	

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Table 7.4.2 - CAM Plan

Emission Unit Section:	4.3	
PSEU Designation:	See 7.4(e)	
Pollutant:	VOM	
Indicators:	#1) Scrubbant (mineral oil) flow rate	#2) N/A
General Criteria		
The Monitoring Approach Used to Measure the Indicators:	A flow meter (vortex shedding meter) will be used to measure scrubbant flow to the absorber.	
The Indicator Range Which Provides a Reasonable Assurance of Compliance:	Greater than 5.0 gal/min	
Quality Improvement Plan (QIP) Threshold Levels:	Exceeding 5 of 90 days outside of an indicator range	
Performance Criteria		
The Specifications for Obtaining Representative Data:	The flow meter has been installed at the inlet to the absorber and is operated according to manufacturer's specifications.	
Verification Procedures to Confirm the Operational Status of the Monitoring:	Cargill performs daily checks of the operational status of the monitoring equipment.	
Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data:	The instrumentation for determining flow through the control device uses a gauge or transmitter with a scale such that the expected normal reading shall be no less than 20% of full scale and shall be accurate within +/-2% of full scale reading. The flow meter shall be calibrated or replaced at least once every six (6) months.	
The Monitoring Frequency:	Continuous monitoring	
The Data Collection Procedures That Will Be Used:	Scrubbant usage rate is continuously monitored and automatically recorded.	
The Data Averaging Period For Determining Whether an Excursion or Exceedance Has Occurred:	Daily average	

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Section 8 - State Only Requirements

1. Permitted Emissions for Fees

The annual emissions from the source for purposes of "Duties to Pay Fees" of Condition 2.3(e), not considering insignificant activities as addressed by Section 6, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. The Permittee shall maintain records with supporting calculations of how the annual emissions for fee purposes were calculated. This Condition is set for the purpose of establishing fees and is not federally enforceable. See Section 39.5(18) of the Act.

<i>Pollutant</i>		<i>Tons/Year</i>
Volatile Organic Material	(VOM)	859.06
Sulfur Dioxide	(SO ₂)	26.99
Particulate Matter	(PM)	90.73
Nitrogen Oxides	(NO _x)	44.08
HAP, not included in VOM or PM	(HAP)	---
Total		1,020.86

2. Odor Requirements

Pursuant to Section 39.5(7)(a) of the Act, upon reasonable request by the Illinois EPA, the Permittee shall inspect and evaluate the oil extraction and desolventizing operations, consistent with the requirements of Condition 4.3, to determine whether any upset or emergency conditions may have occurred within the prior 24-hour period so as to have resulted in an odor that caused an unreasonable interference with the enjoyment of life or property beyond the property boundaries of the source. Consistent with Condition 2.5, the Permittee shall maintain a record of the inspection and evaluation, including an identification of affected emission units, duration of the conditions, probable cause of the conditions and any corrective action or preventative measures taken. The Permittee shall report the findings of the inspection and evaluation to the Illinois EPA, either by phone or in writing, within 7 days of receipt of the Illinois EPA's request.

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Attachment 1 - List of Emission Units at This Source

<i>Section</i>	<i>Emission Units</i>	<i>Description</i>
4.1	Grain Handling Operations	Soybeans are transported to the source by either trucks or rail cars. The wet beans are unloaded into subgrade pits and conveyed to the wet bean storage bins. From storage, whole wet beans are gravity fed to a cleaner to remove foreign materials prior to further processing and drying.
4.2	Material Handling and Process Emission Units	Miscellaneous emission units used to transfer, store, and process commodities for extraction process.
4.3	Oil Extraction and Desolventizing	The extraction process removes oil from the soybean flakes in an extractor with a mixture of solvent and soybean oil called miscella. As miscella is removed from the extractor, it is distilled to separate and recover hexane from the soybean oil for reuse.
4.4	Boilers	The boilers are used for producing process steam. Natural gas is primary fuel for both boilers. Digester gas, landfill gas and distillate oil are back-up fuels for Boiler #1.

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Attachment 2 - Acronyms and Abbreviations

acfm	Actual cubic feet per minute
ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment trading unit
BACT	Best Available Control Technology
BAT	Best Available Technology
BTU	British Thermal Units
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CISWI	Commercial Industrial Solid Waste Incinerator
CO	Carbon monoxide
CO ₂	Carbon dioxide
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parameter Monitoring System
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
EAF	Electric arc furnace
ERMS	Emissions Reduction Market System
°F	Degrees Fahrenheit
GHG	Greenhouse gas
gr	Grains
HAP	Hazardous air pollutant
Hg	Mercury
HMIWI	Hospital medical infectious waste incinerator
HP	Horsepower
hr	Hour
H ₂ S	Hydrogen sulfide
I.D. No.	Identification number of source, assigned by IEPA
IAC	Illinois Administrative Code
ILCS	Illinois Compiled Statutes
IEPA	Illinois Environmental Protection Agency
KW	Kilowatts
LAER	Lowest Achievable Emission Rate

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lb	Pound
m	Meter
MACT	Maximum Achievable Control Technology
mm	Million
mon	Month
MSDS	Material Safety Data Sheet
MSSCAM	Major Stationary Sources Construction and Modification (Non-attainment New Source Review)
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen oxides
NSPS	New Source Performance Standards
NSR	New Source Review
PM	Particulate matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
ppm	Parts per million
ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration
PSEU	Pollutant-Specific Emission Unit
psia	Pounds per square inch absolute
PTE	Potential to emit
RACT	Reasonable Available Control Technology
RMP	Risk Management Plan
scf	Standard cubic feet
SCR	Selective catalytic reduction
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile organic material

Attachment 3 - Contact and Reporting Addresses

<p style="text-align: center;">IEPA Compliance Section</p> <p style="text-align: center;">IEPA Stack Test Specialist</p> <p style="text-align: center;">IEPA Air Quality Planning Section</p> <p style="text-align: center;">IEPA Air Regional Field Operations Regional Office #3</p> <p style="text-align: center;">IEPA Permit Section</p>	<p>Illinois EPA, Bureau of Air Compliance & Enforcement Section (MC 40) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276</p> <p>Phone No.: 217/782-2113</p>
	<p>Illinois EPA, Bureau of Air Compliance Section Source Monitoring - Third Floor 9511 Harrison Street Des Plaines, Illinois 60016</p> <p>Phone No.: 847/294-4000</p>
	<p>Illinois EPA, Bureau of Air Air Quality Planning Section (MC 39) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276</p> <p>Phone No.: 217/782-2113</p>
	<p>Illinois EPA, Bureau of Air Regional Office #3 2009 Mall Street Collinsville, Illinois 62234</p> <p>Phone No.: 618/346-5120</p>
	<p>Illinois EPA, Bureau of Air Permit Section (MC 11) 1021 North Grand Avenue East P.O. Box 19506 Springfield, Illinois 62794-9506</p> <p>Phone No.: 217/785-1705</p>
<p style="text-align: center;">USEPA Region 5 - Air Branch</p>	<p>USEPA (AR - 17J) Air and Radiation Division 77 West Jackson Boulevard Chicago, Illinois 60604</p> <p>Phone No.: 312/353-2000</p>

Attachment 4 - Example Certification by a Responsible Official

SIGNATURE BLOCK	
NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.	
I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE. ANY PERSON WHO KNOWINGLY MAKES A FALSE, FICTITIOUS, OR FRAUDULENT MATERIAL STATEMENT, ORALLY OR IN WRITING, TO THE ILLINOIS EPA COMMITS A CLASS 4 FELONY. A SECOND OR SUBSEQUENT OFFENSE AFTER CONVICTION IS A CLASS 3 FELONY. (415 ILCS 5/44(H))	
AUTHORIZED SIGNATURE:	
BY: _____	_____
AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
_____	_____/_____/_____
TYPED OR PRINTED NAME OF SIGNATORY	DATE

Cargill, Inc.
 I.D. No.: 113804AAR
 Permit No.: 96030019

Date Received: 12/24/07
 Date Issued: TBD