



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

3/11/2016

Mr. Dennis Hale
CARGILL, INCORPORATED
2400 Industrial Drive
Sidney, OH 45365-8952

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0575010160
Permit Number: P0120298
Permit Type: Administrative Modification
County: Shelby

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

How to appeal this permit

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

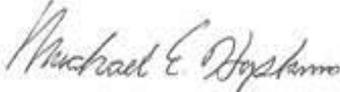
This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Ohio EPA DAPC, Southwest District Office at (937)285-6357 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA
Ohio EPA-SWDO; Indiana



FINAL

**Division of Air Pollution Control
Permit-to-Install
for
CARGILL, INCORPORATED**

Facility ID:	0575010160
Permit Number:	P0120298
Permit Type:	Administrative Modification
Issued:	3/11/2016
Effective:	3/11/2016



Division of Air Pollution Control
Permit-to-Install
for
CARGILL, INCORPORATED

Table of Contents

Authorization	1
A. Standard Terms and Conditions	3
1. Federally Enforceable Standard Terms and Conditions	4
2. Severability Clause	4
3. General Requirements	4
4. Monitoring and Related Record Keeping and Reporting Requirements.....	5
5. Scheduled Maintenance/Malfunction Reporting	6
6. Compliance Requirements	6
7. Best Available Technology	7
8. Air Pollution Nuisance	8
9. Reporting Requirements	8
10. Applicability	8
11. Construction of New Sources(s) and Authorization to Install	8
12. Permit-To-Operate Application	9
13. Construction Compliance Certification	10
14. Public Disclosure	10
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations	10
16. Fees.....	10
17. Permit Transfers	10
18. Risk Management Plans	10
19. Title IV Provisions	10
B. Facility-Wide Terms and Conditions.....	11
C. Emissions Unit Terms and Conditions	13
1. P018, VEGETABLE OIL EXTRACTION	14



Final Permit-to-Install
CARGILL, INCORPORATED
Permit Number: P0120298
Facility ID: 0575010160
Effective Date: 3/11/2016

Authorization

Facility ID: 0575010160
Facility Description: Soybean processing including: soybean oil extraction and refining
Application Number(s): M0003806
Permit Number: P0120298
Permit Description: Administrative modification permit to revise the record keeping requirements associated with the calculation of combined solvent loss from P015, P016, P018, P030, P032, P033, P901, and P902.
Permit Type: Administrative Modification
Permit Fee: \$100.00
Issue Date: 3/11/2016
Effective Date: 3/11/2016

This document constitutes issuance to:

CARGILL, INCORPORATED
2400 INDUSTRIAL DRIVE
Sidney, OH 45365-8952

of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southwest District Office
401 East Fifth Street
Dayton, OH 45402
(937)285-6357

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Final Permit-to-Install
CARGILL, INCORPORATED
Permit Number: P0120298
Facility ID: 0575010160
Effective Date:3/11/2016

Authorization (continued)

Permit Number: P0120298

Permit Description: Administrative modification permit to revise the record keeping requirements associated with the calculation of combined solvent loss from P015, P016, P018, P030, P032, P033, P901, and P902.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	P018
Company Equipment ID:	VEGETABLE OIL EXTRACTION
Superseded Permit Number:	P0112517
General Permit Category and Type:	Not Applicable



Final Permit-to-Install
CARGILL, INCORPORATED
Permit Number: P0120298
Facility ID: 0575010160
Effective Date:3/11/2016

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Southwest District Office.

- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Southwest District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Ohio EPA DAPC, Southwest District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Southwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

- a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted

local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Ohio EPA DAPC, Southwest District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Southwest District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Southwest District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a Permit-to-Install.

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the

Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.



Final Permit-to-Install
CARGILL, INCORPORATED
Permit Number: P0120298
Facility ID: 0575010160
Effective Date:3/11/2016

B. Facility-Wide Terms and Conditions



Final Permit-to-Install
CARGILL, INCORPORATED
Permit Number: P0120298
Facility ID: 0575010160
Effective Date:3/11/2016

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.



Final Permit-to-Install
CARGILL, INCORPORATED
Permit Number: P0120298
Facility ID: 0575010160
Effective Date:3/11/2016

C. Emissions Unit Terms and Conditions

1. P018, VEGETABLE OIL EXTRACTION

Operations, Property and/or Equipment Description:

4,500 tons per day soybean oil extraction, which includes the desolventizers and the mineral oil system

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month. The VOC emissions from the final process vent shall not exceed 0.045 pounds per ton of meal processed *.
b.	OAC rule 3745-31-05(D)	The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.
c.	OAC rule 3745-31-05(F) Voluntary Limits	The oilseed solvent loss factor shall not exceed 0.143 gallon per ton of soybean processed based on a 12-month rolling average.
d.	40 CFR, Part 63, Subpart GGGG	The oilseed solvent loss factor specified by this rule is less stringent than the oilseed solvent loss factor established pursuant to OAC rule 3745-31-05(F). The compliance ratio for hazardous air pollutants (HAP) shall not exceed 1.0 (effective April 12, 2004).

* This limit is based on PTI 05-06134, that was a synthetic minor, issued final on Sept. 22, 1993. This emission limitation was part of the netting out of PSD requirements for changes to emissions unit P030, 100 tons/hr meal dryer/cooler.

- (2) Additional Terms and Conditions
 - a. None.
- c) Operational Restrictions
 - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall maintain monthly records of the following:
 - a. total monthly crush, in tons;
 - b. total 12-month rolling rush, in tons;
 - c. monthly solvent loss, in gallons;
 - d. 12-month rolling solvent loss, in gallons;
 - e. 12-month rolling malfunction period solvent loss, in gallons;
 - f. monthly adjusted solvent loss (i.e., total solvent losses minus malfunction losses), in gallons; and
 - g. 12-month rolling solvent loss rate, in gallons per ton.
 - (2) The permittee shall maintain monthly records of the following information for emissions units P015, P016, P018, P030, P032, P033, P901 and P902, combined:
 - a. the amount of hexane in the inventory at the beginning of each month, in tons;
 - b. the amount of hexane added to the inventory during each month, in tons;
 - c. the amount of hexane in the inventory at the end of each month, in tons;
 - d. the decrease in hexane inventory for the month, in tons $\{(a - c) + b\}$;
 - e. the amount of in-house vegetable oil processes in the refinery (P031) for the month, in tons;
 - f. the average hexane content of the in-house vegetable oil processed in the refinery (P031) for the month, in ppm*;
 - g. The total amount of hexane sent to the refinery (P031) each month, in tons, $\{e \times (f/1,000,000)\}$;
 - h. The amount of hexane emitted for the month from P015, P016, P018, P030, P032, P033, P901, and P902, combined, in tons, (d-g); and
 - i. the rolling, 12- month rates-hexane emissions from P015, P016, P018, P030, P032, P033, P901, and P902, combined, in tons.

*The average hexane content of the soybean oil processed in P031 for the month shall be determined in accordance with PTI 05-11781.

- (3) Pursuant to 40 CFR Subpart 63.2840, at the end of each operating month, the permittee shall calculate the compliance ratio, comparing the actual HAP loss to the allowable HAP loss, as calculated in the following equations (effective April 12, 2004) [if the compliance ratio is less than or equal to 1.00, the source is in compliance with the solvent and HAP emissions requirements for the previous operating month and/or rolling, 12-months]:

- a. The following equation (Equation 1 from Subpart 63.2840) shall be used to determine each monthly compliance ratio: Compliance Ratio = actual HAP loss / allowable HAP loss. The above equation can also be expressed as a function of total solvent loss as shown in the following equation:

$$\text{Compliance Ratio} = (f) \times (\text{Actual Solvent Loss}) / (0.64) \times [(\text{Oilseed}) \times (\text{SLF})]$$

Where

f = the weighted average volume fraction of HAP in the solvent received during the operating month, dimensionless

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

Actual Solvent Loss = gallons of actual solvent loss during the operating month

oilseed = tons of soybean processed during the operating month

SLF = the allowable solvent loss factor (gallons/ton) for soybean processing; 0.143 gallon/ton (b)(1)c.)

- (4) Pursuant to 40 CFR Subpart 63.2840(b), after the source has processed the listed oilseed for 12 operating months, the permittee shall calculate the compliance ratio at the end of each calendar month for the previous 12 operating months per the following equation (Equation 2 from 40 CFR Subpart 63.2840):

$$\text{Compliance Ratio} = (f) \times (\text{Actual Solvent Loss}) / (0.64) \times [(\text{Oilseed a} \times \text{SLF}) + (\text{Oilseed b} \times \text{SLF}) + \dots (\text{Oilseed n} \times \text{SLF})]$$

Where

f = the weighted average volume fraction of HAP in the solvent received during the previous 12 operating months

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

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

Oilseed a...n = tons of soybean processed during the previous 12 operating months

SLF = the allowable solvent loss factor (gallons/ton) for soybean processing; 0.143 gallon/ton (b)(1)c.)

- (5) Pursuant to 40 CFR Subpart 63.2853, at the end of each calendar month, the permittee shall determine the actual solvent loss, in gallons, for the previous operating month (effective April 12, 2004). The actual solvent loss for an operating month includes all solvent losses that occur during normal operating periods within the operating month. After 12 or more operating months have been documented, the permittee shall also determine the rolling, 12-month summation of actual solvent loss, in gallons, by summing the monthly actual solvent loss for the previous 12 operating months. To determine the actual solvent loss from an emissions unit, the permittee shall follow the procedures in the plan for demonstrating compliance. The permittee shall maintain monthly records of the following solvent inventory and usage for the emissions unit:
- a. the dates that define each operating status period during a calendar month;
 - b. the emissions unit's operating status, categorized as described in Table 1 of Subpart 63.2853;
 - c. the beginning and ending solvent inventory (gallons of extraction solvent in the inventory on the first and last day of each normal operating period);
 - d. gallons of extraction solvent received, purchased, and recovered during the operating period;
 - e. solvent inventory adjustments with reasonable justification for the adjustment;
 - f. the total solvent loss for each calendar month, regardless of the operating status of the facility's emissions units covered by this standard;
 - g. the actual solvent loss, in gallons, for each operating month, calculated as follows:

$$\text{Actual Solvent Loss (gal)} = \text{SOLVB} - \text{SOLVE} + \text{SOLVR} \pm \text{SOLVA}$$

Where:

SOLVB = gallons of solvent in the inventory at the beginning of the operating month;

SOLVE = gallons of solvent in the inventory at the end of the operating month;

SOLVR = gallons of solvent received between the beginning and ending inventory dates of the operating month; and

SOLVA = gallons of solvent added or removed from the extraction solvent inventory during the operating month.

- h. beginning after the first 12 operating months, the rolling, 12-month summation of the actual solvent loss, in gallons.
- (6) In accordance with the procedures described in 40 CFR Subpart 63.2854, at the end of each calendar month, the permittee shall calculate the volume fraction of HAP in the extraction solvent as follows (effective April 12, 2004): a.

- a. Maintain a record of the volume fraction of each HAP comprising more than 1 percent by volume of the extraction solvent in each delivery of solvent, including solvent recovered from off-site oil, determined as follows:
 - i. EPA Method 311 of Appendix A of Part 63, a material safety data sheet, the manufacturer's certificate of analysis*, or an approved alternative method shall be used to determine the HAP content of each delivery of the extraction solvent (hexane); and/or
 - ii. the Administrator/Director may require a test using EPA Method 311 to confirm the reported HAP content in the extraction solvent.

* a certificate of analysis shall list the test method(s) and analytical results that determine the 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.

- b. Calculate the weighted average volume fraction of HAP in the extraction solvent each operating month:
 - i. the weighted average volume fraction of HAP for an operating month shall include all solvent received since the end of the last operating month, regardless of the operating status at the time of the delivery; and
 - ii. the monthly weighted average volume fraction of HAP shall be determined 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 in the following equation:

$$\text{HAPavg} = (\text{Ra} \times \text{Ca}) + (\text{Rb} \times \text{Cb}) + \dots (\text{Rn} \times \text{Cn}) / (\text{total received})$$

Where:

HAPavg = Monthly weighted average HAP content of extraction solvent (volume fraction);

a...n = gallons of extraction solvent received in each delivery a...n;

Ca...n = the volume fraction of HAP in extraction solvent delivery a...n;
 and

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

- c. Calculate the volume fraction of HAP in the extraction solvent, as a weighted average, for the previous 12 operating months; calculated by summing the products of the monthly weighted average HAP volume fraction and corresponding volume of solvent received, and dividing by the total volume of solvent received for the 12 operating months, using the following formula:

$$\text{HAP}_{\text{avg}} = (\text{Ra} \times \text{Ca}) + (\text{Rb} \times \text{Cb}) + \dots (\text{Rn} \times \text{Cn}) / (\text{total received})$$

Where:

HAP_{avg} = 12-month weighted average HAP content of extraction solvent (volume fraction);

$\text{Ra} \dots \text{Rn}$ = gallons of extraction solvent received in each delivery $a \dots n$; and

$\text{Ca} \dots \text{Cn}$ = the volume fraction of HAP in extraction solvent delivery $a \dots n$ total received = total gallons of extraction solvent received during the previous 12 operating months.

- (7) In accordance with the procedures described in 40 CFR Subpart 63.2855, at the end of each calendar month, the permittee shall determine the quantity of oilseed processed, in tons, for the previous operating month (effective April 12, 2004). The quantity of oilseed processed shall be determined on an as received basis as defined in Subpart 63.2855. After 12 or more operating months have been documented, the permittee shall also determine the rolling, 12-month summation of the quantity of oilseed processed, in tons, by summing the monthly quantity of oilseed processed figures for the previous 12 operating months. To determine the quantity of oilseed processed, the permittee shall follow the procedures in the plan for demonstrating compliance. The permittee shall maintain monthly records of the following:

- a. the dates that defines each operating status period during a calendar month;
- b. the source operating status, categorized as described in Table 1 of Subpart 63.2853;
- c. the beginning and ending inventory for each oilseed, (tons of oilseed in the inventory on the first and last day of each normal operating period);
- d. the tons of each oilseed received;
- e. oilseed inventory adjustments with reasonable justification for the adjustment;
- f. the total quantity of each oilseed type processed during a normal operating period recorded within a calendar month, calculated as follows:

Monthly Quantity of Each Oilseed = SEEDB - SEEDE + SEEDR +/- SEEDA
Processed (tons)

Where:

SEEDB = tons of oilseed in the inventory at the beginning of normal operating month;

SEEDE = tons of oilseed in the inventory at the end of normal operating month;

SEEDR = tons of oilseed received during the operating month;

SEEDA = tons of oilseed added or removed from the oilseed inventory during the operating month; and

the rolling, 12-month summation of the quantities of oilseed processed, in tons.

- (8) For each operating month, the permittee shall maintain records of the following information (effective April 12, 2004):
- a. the gallons of extraction solvent received in each delivery;
 - b. the calculated volume fraction of HAP, as a weighted average, in the extraction solvent;
 - c. beginning after the first 12 operating months, the calculated volume fraction of HAP, as weighted average, in the extraction solvent for the previous 12 operating months;
 - d. the actual solvent loss, as calculated;
 - e. beginning after the first 12 operating months, the actual solvent loss, as calculated, for the previous 12 operating months;
 - f. the amount of soybean material processed, in tons;
 - g. beginning after the first 12 operating months, the rolling, 12-month summation of soybean material processed, in tons. Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative soybean throughput, in tons, for each calendar month;
 - h. the monthly compliance ratio;
 - i. beginning after the first 12 operating months, the compliance ratio for the previous 12 operating months; and
 - j. the oilseed solvent loss factor, i.e., (e) / (g).
- (9) The permittee shall maintain monthly records of the following information on this emissions unit:
- a. the amount of soybean meal processed, in tons;
 - b. the amount of solvent (hexane) added, in tons;

- c. the estimated solvent (hexane) loss soybean extraction, in tons, (the sum of: ["b" x 80%¹]); and
- d. VOC emission rate, in pounds per ton of meal processed, (the sum of: [{"a" x 2000})/"c"}]).*

¹. The 80% is based on information provided to Ohio EPA SWDO by Mr. Keith Kuhlman, of Cargill, in June 1993.

* (Based on netting out of PSD in PTI 05-06134, issued for emissions unit P030 on Sept. 22, 1993).

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. the combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 50 tons per month;
 - b. The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 340 tons per rolling 12 month period;
 - c. all exceedances of the oilseed solvent loss factor of 0.143 gallon/ton of soybean processed; and
 - d. all exceedances of the VOC emissions rate of 0.045 pounds per ton of meal processed*.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

* (Based on netting out of PSD in PTI 05-06134, issued for emissions unit P030 on Sept. 22, 1993).

- (3) Prior to performing a significant modification as defined in Subpart 63.2872, the permittee must submit the following:
 - a. Pursuant to Subpart 63.2860(c), the permittee shall submit an initial notification to Ohio EPA Southwest District Office 30 days prior to initial startup of the significantly modified source. The initial notification must demonstrate that the proposed changes qualify as a significant modification, and include the following:
 - i. the expected startup date of the modified source; and
 - ii. a description of the significant modification including a list of the equipment that will be replaced or modified. If the significant modification involves changes other than adding or replacing extractors,

desolventizertoasters, and meal dryer coolers, then you must also include the fixed capital cost of the new components, expressed as a percentage of the fixed capital cost to build a comparable new vegetable oil production process; supporting documentation for the cost estimate; and documentation that the proposed changes will significantly affect solvent losses.

- b. Pursuant to Subpart 63.2860(c), the permittee shall submit a notification of actual startup date within 15 days after initial startup of the modified source. The notification must include the following:
 - i. the initial startup date of the modified source;
 - ii. an indication whether you have elected to operate under an initial startup period subject to Subpart 63.2850(d)(2);
 - iii. the anticipated duration of any initial startup period; and
 - iv. a justification for the anticipated duration of any initial startup period.

- (4) Pursuant to 40 CFR Subpart 63.2860(d), the permittee shall submit a notification of compliance status to the Ohio EPA, Southwest District Office no later than 60 days after determining the initial 12 operating months compliance ratio. For existing sources, the notification shall be due no later than 50 calendar months after the effective date of these NESHAP or June 12, 2005. For new or modified sources, the notification shall be due no later than 20 calendar months after initial startup. It shall be signed by the official responsible for facility compliance, who shall certify its accuracy, attesting to whether the affected emissions units are in compliance. This notification shall include the following:
 - a. the name and address of the permittee;
 - b. the physical address of the vegetable oil production process;
 - c. each listed oilseed type processed during the previous 12 operating months;
 - d. each HAP identified under Subpart 63.2854(a), as being present in concentrations greater than 1 percent by volume, in each delivery of solvent received during the 12 operating months period used for the initial compliance determination;
 - e. a statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source; and
 - f. a compliance certification indicating whether the facility was in compliance with all of the requirements of this subpart, throughout the 12 operating months used for the initial compliance determination. This notification must include the following:
 - i. certification that the plan for demonstrating compliance (as described in Subpart 63.2851) and SSM plan (as described in Subpart 63.2852) are complete and available on-site for inspection;

- ii. certification that procedures are being followed as described in the plan for demonstrating compliance; and
 - iii. certification that the compliance ratio is less than or equal to 1.00.
- (5) Pursuant to 40 CFR Subpart 63.2861(a), the permittee shall submit an annual compliance certification to the Ohio EPA, Southwest District Office 12 calendar months after the submission of the notification of compliance status. The annual compliance certification provides the compliance status for each operating month during the 12 calendar month period. The report shall be due 60 days after the end of each 12-month period. This notification shall include the following:
 - a. the name and address of the permittee;
 - b. the physical address of the vegetable oil production process;
 - c. each listed oilseed type processed during the 12 calendar months period covered by the report;
 - d. each HAP identified under Subpart 63.2854(a), as being present in concentrations greater than 1 percent by volume, in each delivery of extraction solvent received during the 12 calendar months period covered by the report;
 - e. a statement designating the facility as a major source of HAP or a demonstration that the source qualifies as an area source; and
 - f. a compliance certification to indicate whether the facility was in compliance for each compliance determination made during the 12 calendar months period covered by the report, which shall include the following:
 - g. certification that the procedures described in the plan for demonstrating compliance have been followed during the reporting period; and
 - h. certification that the compliance ratio was less than or equal to 1.00.
- (6) Pursuant to 40 CFR Subpart 63.2861(b), the permittee shall submit deviation notification reports, to Ohio EPA Southwest District Office, for each compliance determination in which the compliance ratio exceeds 1.00 (effective April 12, 2004). The deviation notification report shall be submitted by the end of the month following the calendar month in which it is determined the deviation occurred. This deviation report shall include the following:
 - a. the name and address of the permittee;
 - b. the physical address of the vegetable oil production process;
 - c. each listed oilseed type processed during the 12 operating months period in which the deviation occurred; and
 - d. the ratio comprising the deviation, as calculated in Section A.III.1.

- (7) Pursuant to 40 CFR Subpart 63.2861(c), if the permittee chooses to operate the emissions unit under an initial startup period subject to Subpart 63.2850(c)(2) or (d)(2) or a malfunction period subject to Subpart 63.2850(e)(2), the permittee shall submit a periodic Startup, Shutdown, and Malfunction (SSM) report, to Ohio EPA, Southwest District Office, by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The SSM report must include the following:
- a. 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;
 - b. 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; and
 - c. an estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.
- (8) Pursuant to 40 CFR Subpart 63.2861(d), the permittee shall submit an Immediate Startup, Shutdown, and Malfunction (SSM) report, to Ohio EPA Southwest, District Office, if a startup, shutdown, and/or malfunction event is not conducted as specified in the facility's SSM plan. The Immediate SSM report consists of a telephone call or facsimile transmission to Ohio EPA, Southwest District Office within 2 working days after starting actions inconsistent with the facility SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the following:
- a. 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;
 - b. a description and date of the SSM event, its duration, and reason it qualifies as a SSM; and
 - c. an estimate of the solvent loss for the duration of the SSM event with supporting documentation.

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:

50 tons OC per month.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements established in section in d) of the terms and conditions of this permit.



b. Emission Limitation:

340 tons OC per rolling, 12-month summation (for emissions units P015, P016, P018, P030, P032, P033, P901 and P902, combined).

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements established in section in d) of the terms and conditions of this permit.

c. Emission Limitations:

The oilseed solvent loss factor shall not exceed 0.143 gallon per ton of soybean processed.

The compliance ratio for HAPs shall not exceed 1.0.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements established in sections in d) of the terms and conditions of this permit.

d. Emission Limitations:

The VOC emissions shall not exceed 0.045 pounds per ton of meal processed*.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements established in sections in d) of the terms and conditions of this permit.

* (Based on netting out of PSD in PTI 05-06134, issued for emissions unit P030 on Sept. 22, 1993).

g) Miscellaneous Requirements

(1) None.