State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

RE: FINAL PERMIT TO INSTALL
MONTGOMERY COUNTY
Application No: 08-04145

CERTIFIED MAIL

Y	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 12/5/2000

Cargill Inc - Dayton
Angie Duvall
PO Box 1400A 3201 Needmore Rd
Dayton, OH 45414-0000

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, buy 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 Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA **RAPCA**

FINAL PERMIT TO INSTALL 08-04145

Application Number: 08-04145

APS Premise Number: 0857041124

Permit Fee: **$5800**

Name of Facility: Cargill Inc - Dayton

Person to Contact: Angie Duvall

Address: PO Box 1400A 3201 Needmore Rd
Dayton, OH 45414-0000

Location of proposed air contaminant source(s) [emissions unit(s)]:
3201 Needmore Rd
Dayton, Ohio

Description of proposed emissions unit(s):
starch production operations-mod P004, P014-P017, P038, P051 Modification of PTI 08-3051 issued January 5, 1995 and 08-3290 issued June 12, 1996.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described 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

Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping 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:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. 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:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, 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 appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.11 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., 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.

iv. 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.

2. 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 appropriate Ohio EPA District Office or local air agency 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).

3. 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.

4. 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.

5. Severability Clause

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.

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. 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 reissuance, or modification, or for denial of a permit renewal application.

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, reopened, 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, reopening 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.

7. 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 this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that 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, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

a. 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:

i. 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.

ii. 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.

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. 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 appropriate Ohio EPA District Office or local air agency 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:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. 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.

10. Permit To Operate Application

a. If 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 the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be <u>obtained before</u> the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35 , the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is

granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping 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 appropriate Ohio EPA District Office or local air agency.

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 appropriate Ohio EPA District Office or local air agency. 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, i.e., 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.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. 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.

5. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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 party shows good cause for any such extension.

6. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. 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 the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install 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 prove to be inadequate or cannot meet applicable standards.

7. 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.

8. 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).

9. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

10. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

11. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
VOC	63.96
Total combined HAPs	69.48
SO2	3.42
Particulates	44.21
CO	5.74
NOx	14.93

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P004 - MH Starch modification tanks, with packed tower scrubber control (modification)	OAC rule 3745-31-05(A)(3)	0.89 lb/hour sulfur dioxide (SO2) and 3.38 TPY SO2 14.52 lbs/hour and 63.58 TPY volatile organic compounds (VOC) 15.86 lbs/hour and 69.48 TPY total combined hazardous air pollutants (HAPs) 14.52 lbs/hour volatile organic compounds (VOC) and 63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 15.86 lbs/hour total combined hazardous air pollutants (HAPs) and 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.)
	OAC rule 3745-31-05(D)	3.38 TPY SO2, as a rolling, 12-month summation 63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.)
	OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The 0.89 lb/hour SO2, 3.38 TPY SO2, 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 lbs/hour total combined HAPs, 69.48 TPY total combined HAPs limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

2.b The 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 total combined HAPs, and 69.48 TPY total combined HAP emission limitations are from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

II. Operational Restrictions

1. The pH of the scrubber liquor shall be maintained at 7.0 or above, as an average per 8-hour shift.

2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.

3. The maximum annual oxidized starch production rate for the facility shall not exceed 98,550 tons as a rolling, 12-month summation of the oxidized starch production rates. The emissions units identified in the production of oxidized starch are P004, P014, P015, P016, P017, P038, and P051.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor and record the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information each day:

   a. The pH of the scrubber liquor, on a continuous basis.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

2. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information each day:

   a. The pressure drop across the scrubber, in inches of water, on a once per day basis.

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

3. The permittee shall maintain monthly records of the following information:

a. The oxidized starch production rate, in tons.

b. The rolling, 12-month summation of the oxidized starch production rates, in tons.

c. The VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

d. The rolling, 12-month summation of the VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. All periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above.

a. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.

c. All exceedances of the rolling, 12-month oxidized starch production rate limitation.

d. All exceedances of the rolling, 12-month VOC and/or total HAP emission limitations from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under (A)(1).

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation -
0.89 lb/hour SO2

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum concentration of SO2 in the air stream (0.000000757 lb SO2/cubic foot of air flow) by the maximum air flow of this emissions unit and the conversion factor of 60 minutes/hour.

b. Emission Limitation -
3.38 TPY SO2

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum concentration of SO2 in the air stream (0.000000757 lb SO2/cubic foot of air flow) by the maximum air flow of this emissions unit and the conversion factor of 60 minutes/hour. This product is then multiplied by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton.

c. Emission Limitation -
14.52 lbs/hour VOC from emissions unit P004

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate by the facility derived VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

d. Emission Limitation -
63.58 TPY VOC from emissions unit P004

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

e. Emission Limitation -
15.86 lbs/hour total combined HAPs from emissions unit P004

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate by the facility derived HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced.

f. Emission Limitation -
69.48 TPY total combined HAPs from emissions unit P004

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

g. Emission Limitation -
14.52 lbs/hour VOC from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

h. Emission Limitation -
63.58 TPY VOC, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.3. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced and summing the monthly VOC emission rates for the rolling, 12-month period.

i. Emission Limitation -
15.86 lbs/hour total combined HAPs from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested HAP emission factor of 1.41 lbs HAP/ton oxidized starch produced.

j. Emission Limitation -
69.48 TPY total combined HAPs, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.3. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced and summing the monthly HAP emission rates for the rolling, 12-month period.

k. Operational Limitation -
98,550 tons oxidized starch production, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P004 - MH Starch modification tanks, with packed tower scrubber control (modification)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P004) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's “Review of New Sources of Air Toxic Emissions” policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the “worst case” pollutant(s):

   Pollutant: formaldehyde

   TLV STEL/C (mg/m3): 0.368

   Maximum Hourly Emission Rate (lbs/hr): 0.51

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.014

MAGLC (ug/m3): 6.46

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

   a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

   b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

   c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

   If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

   a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

   b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

   c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P014 - MH Starch dryer #1, with cyclone and tray scrubber controls (modification)	OAC rule 3745-31-05(A)(3)	5 lbs/hour particulates and 21.9 TPY particulates, as a rolling, 12-month summation 0.01 lb/hour sulfur dioxide (SO2) and 0.04 TPY SO2 3.4 lbs/hour nitrogen oxides (NOx) and 14.93 TPY NOx 1.31 lbs/hour carbon monoxide (CO) and 5.74 TPY CO 8.14 lbs/hour and 35.65 TPY volatile organic compounds (VOC) 8.81 lbs/hour and 38.59 TPY total combined hazardous air pollutants (HAPs) The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). 14.52 lbs/hour volatile organic compounds (VOC) and 63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 15.86 lbs/hour total combined hazardous air pollutants (HAPs) and 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.)

	21.9 TPY particulates, as a rolling, 12-month summation
OAC rule 3745-31-05(D)	0.04 TPY SO2
	14.93 TPY NOx
	5.74 TPY CO
	0.38 TPY VOC (from natural gas combustion)
	63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.)
	69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.)
	Opacity shall not exceed 20%, as a six-minute average except as provided by rule
OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation specified pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)(1)	

2. Additional Terms and Conditions

2.a The 5 lbs/hour particulates, 0.01 lb/hour SO2, 3.4 lbs/hour NOx, 1.31 lbs/hour CO, 8.14 lbs/hour VOC, 35.65 TPY VOC, 8.81 lbs/hour total combined HAPs, and 38.59 TPY total combined HAPs limitations were developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

2.b The 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 total combined HAPs, and 69.48 TPY total combined HAP emission limitations are from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

II. Operational Restrictions

1. The maximum annual process throughput for this emissions unit shall not exceed 100,740 tons, based upon a rolling, 12-month summation of the process throughputs.

2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 5 inches of water at all times while the emissions unit is in operation.

3. The scrubber water flow rate shall be continuously maintained at a value of not less than 250 gallons per minute at all times while the emissions unit is in operation.

4. The maximum annual oxidized starch production rate for the facility shall not exceed 98,550 tons as a rolling, 12-month summation of the oxidized starch production rates. The emissions units identified in the production of oxidized starch are P004, P014, P015, P016, P017, P038, and P051.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The process throughput, in tons.

   b. The rolling, 12-month summation of the process throughputs, in tons.

   c. The monthly particulates emission rate, in tons.

   d. The rolling, 12-month summation of the particulates emission rate, in tons.

   e. The oxidized starch production rate, in tons.

   f. The rolling, 12-month summation of the oxidized starch production rates, in tons.

   g. The VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

   a. The rolling, 12-month summation of the VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information each day:

   a. The pressure drop across the scrubber, in inches of water, on a once per day basis.

b. The scrubber water flow rate, in gallons per minute, on a continuous basis.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following:

   a. All exceedances of the rolling, 12-month process throughput limitation.

   b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required level.

   c. All periods of time during which the scrubber water flow rate was not maintained at or above the required levels.

   d. All exceedances of the rolling, 12-month particulates emission limitation.

   e. All exceedances of the rolling, 12-month oxidized starch production rate limitation.

   f. All exceedances of the rolling, 12-month VOC and/or total HAP emission limitations from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

   These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under (A)(1).

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation -
   5 lbs/hour particulates

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly starch capacity of this emissions unit by an emission factor of 0.14 lb particulates/ton of starch as determined during a stack test conducted on April 5, 1995. If required, compliance shall be based upon stack testing using the methods and procedures specified in OAC rule 3745-17-03(B)(10).

   b. Emission Limitation -
   21.9 TPY particulates, as a rolling, 12-month summation

   Applicable Compliance Method -
   Compliance shall be based upon record keeping as specified in A.III.1.

c. Emission Limitation -
0.01 lb/hour SO2

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly natural gas burning capacity of this emissions unit (0.0156 mm cu ft/hour) by the AP-42, Table 1.4-2 (7/98) emission factor of 0.6 lb SO2/mm cu ft.

d. Emission Limitation -
0.04 TPY SO2

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

e. Emission Limitation -
3.4 lbs/hour NOx

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly starch capacity of this emissions unit by the facility derived emission factor of 0.3 lb NOx/ton of starch.

f. Emission Limitation -
14.93 TPY NOx

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

g. Emission Limitation -
1.31 lbs/hour CO

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly natural gas burning capacity of this emissions unit (0.0156 mm cu ft/hour) by the AP-42, Table 1.4-1 (7/98) emission factor of 84 lbs CO/mm cu ft.

h. Emission Limitation -
5.74 TPY CO

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

i. Emission Limitation -
8.14 lbs/hour VOC from emissions unit P014

Applicable Compliance Method -
Compliance shall be determined by the following:

i. multiplying the maximum hourly natural gas burning capacity of this emissions unit (0.0156 mm cu ft/hour) by the AP-42, Table 1.4-2 (7/98) emission factor of 5.5 lbs VOC/mm cu ft.

ii. multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced; and

iii. the hourly VOC emission rate shall be the sum of i and ii above.

j. Emission Limitation -
35.65 TPY VOC from emissions unit P014

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

k. Emission Limitation -
8.81 lbs/hour total combined HAPs from emissions unit P014

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum oxidized starch production rate by the facility derived HAP emission factor of 1.41 lbs HAP/ton oxidized starch produced.

l. Emission Limitation -
38.59 TPY total combined HAPs from emissions unit P014

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

m. Emission Limitation -
14.52 lbs/hour VOC from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

n. Emission Limitation -
63.58 TPY VOC, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced and summing the monthly VOC emission rates for the rolling, 12-month period.

o. Emission Limitation -
15.86 lbs/hour total combined HAPs from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested HAP emission factor of 1.41 lbs HAP/ton oxidized starch produced.

p. Emission Limitation -
69.48 TPY total combined HAPs, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced and summing the monthly HAP emission rates for the rolling, 12-month period.

q. Emission Limitation -
20% opacity, as a six-minute average

Applicable Compliance Method -
Compliance shall be determined by visible emissions evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

r. Operational Limitation -
100,740 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1.

s. Operational Limitation -
98,550 tons oxidized starch production, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P014 - MH Starch dryer #1, with cyclone and tray scrubber controls (modification)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P014) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's “Review of New Sources of Air Toxic Emissions” policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the “worst case” pollutant(s):

   Pollutant: chloroform

   TLV (mg/m3): 48.83

   Maximum Hourly Emission Rate (lbs/hr): 0.51

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.8434

MAGLC (ug/m3): 1163

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

   a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

   b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

   c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

   If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

   a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

   b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

   c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P015 - Starch warehouse bulk loading #1, with baghouse control (modification)	OAC rule 3745-31-05(A)(3)	0.04 lb/hour particulates and 0.068 TPY particulates, as a rolling, 12-month summation 14.52 lbs/hour and 63.58 TPY volatile organic compounds (VOC) 15.86 lbs/hour and 69.48 TPY total combined hazardous air pollutants (HAPs) 14.52 lbs/hour volatile organic compounds (VOC) and 63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 15.86 lbs/hour total combined hazardous air pollutants (HAPs) and 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.) 0.068 TPY particulates, as a rolling, 12-month summation
	OAC rule 3745-31-05(D)	63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.)
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20% as a six-minute average, except as provided by rule.

OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The 0.04 lb/hour particulates, 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 lbs/hour total combined HAPs, and 69.48 TPY total combined HAPs limitations were developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

2.b The 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 total combined HAPs, and 69.48 TPY total combined HAP emission limitations are from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

II. Operational Restrictions

1. The maximum annual process throughput for this emissions unit shall not exceed 50,420 tons, based upon a rolling, 12-month summation of the process throughputs.

2. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 10 inches of water while the emissions unit is in operation.

3. The maximum annual oxidized starch production rate for the facility shall not exceed 98,550 tons as a rolling, 12-month summation of the oxidized starch production rates. The emissions units identified in the production of oxidized starch are P004, P014, P015, P016, P017, P038, and P051.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The process throughput, in tons.

   b. The rolling, 12-month summation of the process throughputs, in tons.

   c. The monthly particulates emission rate, in tons.

   d. The rolling, 12-month summation of the particulates emission rates, in tons.

   e. The oxidized starch production rate, in tons.

   f. The rolling, 12-month summation of the oxidized starch production rates, in tons.

g. The VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

h. The rolling, 12-month summation of the VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis. Upon installation and operation of a baghouse leak detection system, the permittee may reduce the recording of the pressure drop across the baghouse to a weekly basis.

3. The permittee shall properly install, operate, and maintain a baghouse leak detection system. Upon installation of this leak detection system, the permittee shall collect and record the following information each day:

a. All times during which the baghouse leak detection system detects a leak.

b. The cause of the detected baghouse leak.

c. The corrective measures taken to repair the baghouse leak and prevent a recurrence.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following:

a. All exceedances of the rolling, 12-month process throughput limitation.

a. All periods of time during which the pressure drop across the baghouse was not maintained at or above the required level.

b. All periods of time during which the a leak is detected by the baghouse leak detection system as well as a description of the corrective measures taken.

a. All exceedances of the rolling, 12-month particulates emission limitation.

b. All exceedances of the rolling, 12-month oxidized starch production rate limitation.

c. All exceedances of the rolling, 12-month VOC and/or total HAP emission limitations from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under (A)(1).

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation -
   0.04 lb/hour particulates

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly starch capacity of this emissions unit by the facility derived emission factor of 0.002679 lb particulates/ton of starch.

   b. Emission Limitation -
   0.068 TPY particulates, as a rolling, 12-month summation

   Applicable Compliance Method -
   Compliance shall be based upon record keeping as specified in A.III.1.

   c. Emission Limitation -
   14.52 lbs/hour VOC from emissions unit P015

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate by the facility derived VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

   d. Emission Limitation -
   63.58 TPY VOC from emissions unit P015

   Applicable Compliance Method -
   As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

   e. Emission Limitation -
   15.86 lbs/hour total combined HAPs from emissions unit P015

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate by the facility derived HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced.

   f. Emission Limitation -

69.48 TPY total combined HAPs from emissions unit P015

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

g. Emission Limitation -
14.52 lbs/hour VOC from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

h. Emission Limitation -
63.58 TPY VOC, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in Part II - A.2. and Part III - A.III.1. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced and summing the monthly VOC emission rates for the rolling, 12-month period.

i. Emission Limitation -
15.86 lbs/hour total combined HAPs from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested HAP emission factor of 1.41 lbs HAP/ton oxidized starch produced.

j. Emission Limitation -
69.48 TPY total combined HAPs, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in Part II - A.2. and Part III - A.III.1. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced and summing the monthly HAP emission rates for the rolling, 12-month period.

k. Emission Limitation -
20% opacity, as a six-minute average

Applicable Compliance Method -
Compliance shall be determined by visible emissions evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using th methods and procedures specified in USEPA Reference Method 9.

l. Operational Limitation -
50,420 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1.

m. Operational Limitation -
98,550 tons oxidized starch production, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P015 - Starch warehouse bulk loading #1, with baghouse control (modification)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P016 - Starch warehouse conveying and storage, with baghouse control (modification)	OAC rule 3745-31-05(A)(3)	0.088 lb/hour particulates and 0.238 TPY particulates, as a rolling, 12-month summation 14.52 lbs/hour and 63.58 TPY volatile organic compounds (VOC) 15.86 lbs/hour and 69.48 TPY total combined hazardous air pollutants (HAPs) 14.52 lbs/hour volatile organic compounds (VOC) and 63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 15.86 lbs/hour total combined hazardous air pollutants (HAPs) and 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.) 0.238 TPY particulates, as a rolling, 12-month summation
	OAC rule 3745-31-05(D)	63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.)
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20% as a six-minute average, except as provided by rule

OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The 0.088 lb/hour particulates, 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 lbs/hour total combined HAPs, and 69.48 TPY total combined HAPs limitations were developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

2.b The 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 total combined HAPs, and 69.48 TPY total combined HAP emission limitations are from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

II. Operational Restrictions

1. The maximum annual process throughput for this emissions unit shall not exceed 124,950 tons, based upon a rolling, 12-month summation of the process throughputs.

2. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 10 inches of water while the emissions unit is in operation.

3. The maximum annual oxidized starch production rate for the facility shall not exceed 98,550 tons as a rolling, 12-month summation of the oxidized starch production rates. The emissions units identified in the production of oxidized starch are P004, P014, P015, P016, P017, P038, and P051.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The process throughput, in tons.

   b. The rolling, 12-month summation of the process throughputs, in tons.

   c. The monthly particulates emission rate, in tons.

   d. The rolling, 12-month summation of the particulates emission rate, in tons.

   e. The oxidized starch production rate, in tons.

   f. The rolling, 12-month summation of the oxidized starch production rates, in tons.

g. The VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

a. The rolling, 12-month summation of the VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis. Upon installation and operation of a baghouse leak detection system, the permittee may reduce the recording of the pressure drop across the baghouse to a weekly basis.

3. The permittee shall properly install, operate, and maintain a baghouse leak detection system. Upon installation of this leak detection system, the permittee shall collect and record the following information each day:

a. All times during which the baghouse leak detection system detects a leak.

b. The cause of the detected baghouse leak.

c. The corrective measures taken to repair the baghouse leak and prevent a recurrence.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following:

a. All exceedances of the rolling, 12-month process throughput limitation.

b. All periods of time during which the pressure drop across the baghouse was not maintained at or above the required level.

c. All periods of time during which the a leak is detected by the baghouse leak detection system as well as a description of the corrective measures taken.

a. All exceedances of the rolling, 12-month particulates emission limitation.

b. All exceedances of the rolling, 12-month oxidized starch production rate limitation.

c. All exceedances of the rolling, 12-month VOC and/or total HAP emission limitations from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under (A)(1).

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation -
   0.088 lb/hour particulates

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly starch capacity of this emissions unit by the facility derived emission factor of 0.003808 lb particulates/ton of starch.

   b. Emission Limitation -
   0.238 TPY particulates, as a rolling, 12-month summation

   Applicable Compliance Method -
   Compliance shall be based upon record keeping as specified in A.III.1.

   c. Emission Limitation -
   14.52 lbs/hour VOC from emissions unit P016

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate by the facility derived VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

   d. Emission Limitation -
   63.58 TPY VOC from emissions unit P016

   Applicable Compliance Method -
   As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

   e. Emission Limitation -
   15.86 lbs/hour total combined HAPs from emissions unit P016

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate by the facility derived HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced.

   f. Emission Limitation -

69.48 TPY total combined HAPs from emissions unit P016

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

g. Emission Limitation -
14.52 lbs/hour VOC from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

h. Emission Limitation -
63.58 TPY VOC, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced and summing the monthly VOC emission rates for the rolling, 12-month period.

i. Emission Limitation -
15.86 lbs/hour total combined HAPs from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested HAP emission factor of 1.41 lbs HAP/ton oxidized starch produced.

j. Emission Limitation -
69.48 TPY total combined HAPs, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced and summing the monthly HAP emission rates for the rolling, 12-month period.

k Emission Limitation -
20% opacity, as a six-minute average

Applicable Compliance Method -
Compliance shall be determined by visible emissions evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using th methods and procedures specified in USEPA Reference Method 9.

l. Operational Limitation -
124,950 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1.

m Operational Limitation -
98,550 tons oxidized starch production, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P016 - Starch warehouse conveying and storage, with baghouse control (modification)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P017 - Starch warehouse starch bag packing, with baghouse control (modification)	OAC rule 3745-31-05(A)(3)	0.051 lb/hour particulates and 0.032 TPY particulates, as a rolling, 12-month summation 14.52 lbs/hour and 63.58 TPY volatile organic compounds (VOC) 15.86 lbs/hour and 69.48 TPY total combined hazardous air pollutants (HAPs) 14.52 lbs/hour volatile organic compounds (VOC) and 63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 15.86 lbs/hour total combined hazardous air pollutants (HAPs) and 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.) 0.032 TPY particulates, as a rolling, 12-month summation
	OAC rule 3745-31-05(D)	63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.)
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20% as a six-minute average, except as provided by rule

OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The 0.051 lb/hour particulates, 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 lbs/hour total combined HAPs, and 69.48 TPY total combined HAPs limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

2.b The 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 total combined HAPs, and 69.48 TPY total combined HAP emission limitations are from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

II. Operational Restrictions

1. The maximum annual process throughput for this emissions unit shall not exceed 25,210 tons, based upon a rolling, 12-month summation of the process throughputs.

2. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 10 inches of water while the emissions unit is in operation.

3. The maximum annual oxidized starch production rate for the facility shall not exceed 98,550 tons as a rolling, 12-month summation of the oxidized starch production rates. The emissions units identified in the production of oxidized starch are P004, P014, P015, P016, P017, P038, and P051.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The process throughput, in tons.

   b. The rolling, 12-month summation of the process throughputs, in tons.

   c. The monthly particulates emission rate, in tons.

   d. The rolling, 12-month summation of the particulates emission rates, in tons.

   e. The oxidized starch production rate, in tons.

   f. The rolling, 12-month summation of the oxidized starch production rates, in tons.

g. The VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

a. The rolling, 12-month summation of the VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis. Upon installation and operation of a baghouse leak detection system, the permittee may reduce the recording of the pressure drop across the baghouse to a weekly basis.

3. The permittee shall properly install, operate, and maintain a baghouse leak detection system. Upon installation of this leak detection system, the permittee shall collect and record the following information each day:

a. All times during which the baghouse leak detection system detects a leak.

b. The cause of the detected baghouse leak.

c. The corrective measures taken to repair the baghouse leak and prevent a recurrence.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following:

a. All exceedances of the rolling, 12-month process throughput limitation.

a. All periods of time during which the pressure drop across the baghouse was not maintained at or above the required level.

b. All periods of time during which the a leak is detected by the baghouse leak detection system as well as a description of the corrective measures taken.

a. All exceedances of the rolling, 12-month particulates emission limitation.

b. All exceedances of the rolling, 12-month oxidized starch production rate limitation.

c. All exceedances of the rolling, 12-month VOC and/or total HAP emission limitations from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under (A)(1).

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation -
   0.051 lb/hour particulates

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly starch capacity of this emissions unit by the facility derived emission factor of 0.00254 lb particulates/ton of starch.

   b. Emission Limitation -
   0.032 TPY particulates, as a rolling, 12-month summation

   Applicable Compliance Method -
   Compliance shall be based upon record keeping as specified in A.III.1.

   c. Emission Limitation -
   14.52 lbs/hour VOC from emissions unit P017

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate by the facility derived VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

   d. Emission Limitation -
   63.58 TPY VOC from emissions unit P017

   Applicable Compliance Method -
   As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

   e. Emission Limitation -
   15.86 lbs/hour total combined HAPs from emissions unit P017

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate by the facility derived HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced.

   f. Emission Limitation -
   69.48 TPY total combined HAPs from emissions unit P017

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

g. Emission Limitation -
14.52 lbs/hour VOC from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

h. Emission Limitation -
63.58 TPY VOC, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced and summing the monthly VOC emission rates for the rolling, 12-month period.

i. Emission Limitation -
15.86 lbs/hour total combined HAPs from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested HAP emission factor of 1.41 lbs HAP/ton oxidized starch produced.

j. Emission Limitation -
69.48 TPY total combined HAPs, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced and summing the monthly HAP emission rates for the rolling, 12-month period.

k. Emission Limitation -
20% opacity, as a six-minute average

Applicable Compliance Method -
Compliance shall be determined by visible emissions evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using th methods and procedures specified in USEPA Reference Method 9.

l. Operational Limitation -
25,210 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1.

m. Operational Limitation -
98,550 tons oxidized starch production, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P017 - Starch warehouse starch bag packing, with baghouse control (modification)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P038 - MH Starch dryer #2, with cyclone and scrubber controls (modification)	OAC rule 3745-31-05(A)(3)	5 lbs/hour particulates and 21.9 TPY particulates, as a rolling, 12-month summation Opacity shall not exceed 10%, as a six-minute average 6.45 lbs/hour and 28.25 TPY volatile organic compounds (VOC) 7.05 lbs/hour and 30.88 TPY total combined hazardous air pollutants (HAPs) 14.52 lbs/hour volatile organic compounds (VOC) and 63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 15.86 lbs/hour total combined hazardous air pollutants (HAPs) and 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.)
	OAC rule 3745-31-05(D)	21.9 TPY particulates, as a rolling, 12-month summation 63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.)

OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The 5 lbs/hour particulates, 6.45 lbs/hour VOC, 28.25 TPY VOC, 7.05 lbs/hour total combined HAPs, and 30.88 TPY total combined HAPs limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

2.b The 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 total combined HAPs, and 69.48 TPY total combined HAP emission limitations are from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

II. Operational Restrictions

1. The maximum annual process throughput for this emissions unit shall not exceed 100,740 tons, based upon a rolling, 12-month summation of the process throughputs.

2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 6 inches of water at all times while the emissions unit is in operation.

3. The scrubber water flow rate shall be continuously maintained at a value of not less than 350 gallons per minute at all times while the emissions unit is in operation.

4. The maximum annual oxidized starch production rate for the facility shall not exceed 98,550 tons as a rolling, 12-month summation of the oxidized starch production rates. The emissions units identified in the production of oxidized starch are P004, P014, P015, P016, P017, P038, and P051.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The process throughput, in tons.

   b. The rolling, 12-month summation of the process throughputs, in tons.

   c. The monthly particulates emission rate, in tons.

   d. The rolling, 12-month summation of the particulates emission rates, in tons.

   e. The oxidized starch production rate, in tons.

f. The rolling, 12-month summation of the oxidized starch production rates, in tons.

g. The VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

h. The rolling, 12-month summation of the VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

2. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

a. The pressure drop across the scrubber, in inches of water, on a once per day basis.

b. The scrubber water flow rate, in gallons per minute, on a continuous basis.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following:

a. All exceedances of the rolling, 12-month process throughput limitation.

a. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required level.

a. All periods of time during which the scrubber water flow rate was not maintained at or above the required levels.

d. All exceedances of the rolling, 12-month particulates emission limitation.

e. All exceedances of the rolling, 12-month oxidized starch production rate limitation.

f. All exceedances of the rolling, 12-month VOC and/or total HAP emission limitations from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under (A)(1).

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation -
   5 lbs/hour particulates

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly starch capacity of this emissions unit by the facility derived emission factor of 0.21 lb particulates/ton of starch.

   b. Emission Limitation -
   21.9 TPY particulates, as a rolling, 12-month summation

   Applicable Compliance Method -
   Compliance shall be based upon record keeping as specified in A.III.1.

   c. Emission Limitation -
   10% opacity, as a six-minute average

   Applicable Compliance Method -
   Compliance shall be determined by visible emissions evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using th methods and procedures specified in USEPA Reference Method 9.

   d. Emission Limitation -
   6.45 lbs/hour VOC from emissions unit P038

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate by the facility derived VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

   e. Emission Limitation -
   28.25 TPY VOC from emissions unit P038

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

f. Emission Limitation -
7.05 lbs/hour total combined HAPs from emissions unit P038

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate by the facility derived HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced.

g. Emission Limitation -
30.88 TPY total combined HAPs from emissions unit P038

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

h. Emission Limitation -
14.52 lbs/hour VOC from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

i. Emission Limitation -
63.58 TPY VOC, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced and summing the monthly VOC emission rates for the rolling, 12-month period.

j. Emission Limitation -
15.86 lbs/hour total combined HAPs from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested HAP emission factor of 1.41 lbs HAP/ton oxidized starch produced.

k. Emission Limitation -
69.48 TPY total combined HAPs, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced and summing the monthly HAP emission rates for the rolling, 12-month period.

l. Operational Limitation -
100,740 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1.

m. Operational Limitation -
98,550 tons oxidized starch production, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P038 - MH Starch dryer #2, with cyclone and scrubber controls (modification)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P038) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's “Review of New Sources of Air Toxic Emissions” policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the “worst case” pollutant(s):

   Pollutant: chloroform

   TLV (mg/m3): 48.83

   Maximum Hourly Emission Rate (lbs/hr): 0.51

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.307

MAGLC (ug/m3): 1163

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

   a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

   b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

   c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

   If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

   a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

   b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

   c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P051 - Starch warehouse bulk loading #2, with baghouse control (modification)	OAC rule 3745-31-05(A)(3)	0.04 lb/hour particulates and 0.068 TPY particulates, as a rolling, 12-month summation 14.52 lbs/hour and 63.58 TPY volatile organic compounds (VOC) 15.86 lbs/hour and 69.48 TPY total combined hazardous air pollutants (HAPs) 14.52 lbs/hour volatile organic compounds (VOC) and 63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 15.86 lbs/hour total combined hazardous air pollutants (HAPs) and 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.)
	OAC rule 3745-31-05(D)	0.068 TPY particulates, as a rolling, 12-month summation 63.58 TPY VOC, as a rolling, 12-month summation (See A.I.2.b.) 69.48 TPY HAPS, as a rolling, 12-month summation (See A.I.2.b.)
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20% as a six-minute average, except as provided by rule

OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The 0.04 lb/hour particulates, 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 lbs/hour total combined HAPs, and 69.48 TPY total combined HAPs limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

2.b The 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 total combined HAPs, and 69.48 TPY total combined HAP emission limitations are from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

II. Operational Restrictions

1. The maximum annual process throughput for this emissions unit shall not exceed 50,420 tons, based upon a rolling, 12-month summation of the process throughputs.

2. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 10 inches of water while the emissions unit is in operation.

3. The maximum annual oxidized starch production rate for the facility shall not exceed 98,550 tons as a rolling, 12-month summation of the oxidized starch production rates. The emissions units identified in the production of oxidized starch are P004, P014, P015, P016, P017, P038, and P051.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The process throughput, in tons.

   b. The rolling, 12-month summation of the process throughputs, in tons.

   c. The monthly particulates emission rate, in tons.

   d. The rolling, 12-month summation of the particulates emission rates, in tons.

   e. The oxidized starch production rate, in tons.

   f. The rolling, 12-month summation of the oxidized starch production rates, in tons.

g. The VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

h. The rolling, 12-month summation of the VOC and total combined HAP emission rates from emissions units P004, P014, P015, P016, P017, P038, and P051 combined, in tons.

2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis. Upon installation and operation of a baghouse leak detection system, the permittee may reduce the recording of the pressure drop across the baghouse to a weekly basis.

3. The permittee shall properly install, operate, and maintain a baghouse leak detection system. Upon installation of this leak detection system, the permittee shall collect and record the following information each day:

a. All times during which the baghouse leak detection system detects a leak.

b. The cause of the detected baghouse leak.

c. The corrective measures taken to repair the baghouse leak and prevent a recurrence.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following:

a. All exceedances of the rolling, 12-month process throughput limitation.

a. All periods of time during which the pressure drop across the baghouse was not maintained at or above the required level.

b. All periods of time during which the a leak is detected by the baghouse leak detection system as well as a description of the corrective measures taken.

a. All exceedances of the rolling, 12-month particulates emission limitation.

b. All exceedances of the rolling, 12-month oxidized starch production rate limitation.

c. All exceedances of the rolling, 12-month VOC and/or total HAP emission limitations from emissions units P004, P014, P015, P016, P017, P038, and P051 combined.

These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under (A)(1).

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation -
   0.04 lb/hour particulates

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly starch capacity of this emissions unit by the facility derived emission factor of 0.00268 lb particulates/ton of starch.

   b. Emission Limitation -
   0.068 TPY particulates, as a rolling, 12-month summation

   Applicable Compliance Method -
   Compliance shall be based upon record keeping as specified in A.III.1.

   c. Emission Limitation -
   14.52 lbs/hour VOC from emissions unit P051

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate by the facility derived VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

   d. Emission Limitation -
   63.58 TPY VOC from emissions unit P051

   Applicable Compliance Method -
   As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

   e. Emission Limitation -
   15.86 lbs/hour total combined HAPs from emissions unit P051

   Applicable Compliance Method -
   Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate by the facility derived HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced.

   f. Emission Limitation -
   69.48 TPY total combined HAPs from emissions unit P051

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by the maximum annual operating schedule of 8,760 hours/year and then dividing by 2,000 lbs/ton).

g. Emission Limitation -
14.52 lbs/hour VOC from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced.

h. Emission Limitation -
63.58 TPY VOC, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced and summing the monthly VOC emission rates for the rolling, 12-month period.

i. Emission Limitation -
15.86 lbs/hour total combined HAPs from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly oxidized starch production rate from emissions units P004, P014, P015, P016, P017, P038, and P051 combined by the facility tested HAP emission factor of 1.41 lbs HAP/ton oxidized starch produced.

j. Emission Limitation -
69.48 TPY total combined HAPs, as a rolling, 12-month summation from emissions units P004, P014, P015, P016, P017, P038, and P051 combined

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1. and shall be determined by multiplying the monthly oxidized starch production rate by the facility tested HAP emission factor of 1.41 lbs HAPs/ton oxidized starch produced and summing the monthly HAP emission rates for the rolling, 12-month period.

k. Emission Limitation -
20% opacity, as a six-minute average

Applicable Compliance Method -
Compliance shall be determined through visible emissions evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

l. Operational Limitation -
50,420 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1.

m. Operational Limitation -
98,550 tons oxidized starch production, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon record keeping as specified in A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P051 - Starch warehouse bulk loading #2, with baghouse control (modification)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

SIC CODE **2046** **SCC CODE** **3-02-007-52** **EMISSIONS UNIT ID** **P004**

EMISSIONS UNIT DESCRIPTION **MH Starch modification tanks (modification)**

DATE INSTALLED **July 1973**

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM_{10}					
Sulfur Dioxide	attainment	0.89 lb/hour	3.38 TPY	0.89 lb/hour	3.38 TPY
Organic Compounds	attainment	~~14.51~~ 14.52 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~63.55~~ 63.58 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	~~14.51~~ 14.52 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~63.55~~ 63.58 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Total Combined HAPs		15.86 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~69.47~~ 69.48 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	15.86 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~69.47~~ 69.48 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined

APPLICABLE FEDERAL RULES:

NSPS? **NESHAP?** **PSD?** **OFFSET POLICY?**

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with the applicable OAC rules and specified allowable mass emission rates through the application of a scrubber control for SO2, scrubber water pH monitoring, oxidized starch production limitations, record keeping, and reporting.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? **Yes**

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? **$**

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

AIR TOXICS MODELING PERFORMED*? **X** **YES** ____ **NO**

IDENTIFY THE AIR CONTAMINANTS: **formaldehyde**

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

SIC CODE 2046 **SCC CODE** 3-02-007-54 **EMISSIONS UNIT ID** P014

EMISSIONS UNIT DESCRIPTION MH Starch dryer #1 (modification)

DATE INSTALLED July 1973

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	5 lbs/hour	21.9 TPY	5 lbs/hour	21.9 TPY
PM_{10}					
Sulfur Dioxide	attainment	0.01 lb/hour	0.04 TPY	0.01 lb/hour	0.04 TPY
Organic Compounds	attainment	8.14 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	35.65 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	8.14 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	35.65 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined
Nitrogen Oxides	attainment	3.4 lbs/hour	14.93 TPY	3.4 lbs/hour	14.93 TPY
Carbon Monoxide	attainment	1.31 lbs/hour	5.74 TPY	1.31 lbs/hour	5.74 TPY
Lead					
Other: Total combined HAPs		8.81 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	38.59 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	8.81 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	38.59 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined

APPLICABLE FEDERAL RULES:

NSPS? **NESHAP?** **PSD?** **OFFSET POLICY?**

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with applicable OAC rules and specified allowable mass emission rates through the application of cyclone and fabric filter controls, use of natural gas in the dryer, process throughput limitation, oxidized starch production limitation, record keeping, and reporting.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

AIR TOXICS MODELING PERFORMED*? **X** **YES** ____ **NO**

IDENTIFY THE AIR CONTAMINANTS: **chloroform**

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

SIC CODE 2046 **SCC CODE** 3-02-007-52 **EMISSIONS UNIT ID** P015

EMISSIONS UNIT DESCRIPTION Starch warehouse bulk loading #1 (modification)

DATE INSTALLED July 1972

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.040 lb/hour	0.068 TPY	0.040 lb/hour	0.068 TPY
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	~~14.51~~ 14.52 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~63.55~~ 63.58 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	~~14.51~~ 14.52 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~63.55~~ 63.58 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Total Combined HAPs		15.86 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~69.47~~ 69.48 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	15.86 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~69.47~~ 69.48 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined

APPLICABLE FEDERAL RULES:

NSPS? **NESHAP?** **PSD?** **OFFSET POLICY?**

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with applicable OAC rules and specified allowable mass emission rates through the application of a fabric filter control, process throughput limitation, oxidized starch production limitation, record keeping, and reporting.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

AIR TOXICS MODELING PERFORMED*? _____ **YES** _____ **NO**

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

SIC CODE **2046** **SCC CODE** **3-02-007-52** **EMISSIONS UNIT ID** **P016**

EMISSIONS UNIT DESCRIPTION **Starch warehouse conveying and storage (modification)**

DATE INSTALLED **July 1972**

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.088 lb/hour	0.238 TPY	0.088 lb/hour	0.238 TPY
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	~~14.51~~ 14.52 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~63.55~~ 63.58 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	~~14.51~~ 14.52 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~63.55~~ 63.58 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Total Combined HAPs		15.86 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~69.47~~ 69.48 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	15.86 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~69.47~~ 69.48 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined

APPLICABLE FEDERAL RULES:

NSPS? **NESHAP?** **PSD?** **OFFSET POLICY?**

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with applicable OAC rules and specified allowable mass emission rates through the application of a fabric filter control on each storage bin, process throughput limitation, oxidized starch production limitation, record keeping, and reporting.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? **No**

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? **$**

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

AIR TOXICS MODELING PERFORMED*? _____ **YES** _____ **NO**

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

SIC CODE **2046** **SCC CODE** **3-02-007-52** **EMISSIONS UNIT ID** **P017**

EMISSIONS UNIT DESCRIPTION **Starch warehouse starch bag packing (modification)**

DATE INSTALLED **July 1973**

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.051 lb/hour	0.032 TPY	0.051 lb/hour	0.032 TPY
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	~~14.51~~ 14.52 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~63.55~~ 63.58 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	~~14.51~~ 14.52 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~63.55~~ 63.58 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Total Combined HAPs		15.86 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~69.47~~ 69.48 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	15.86 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~69.47~~ 69.48 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined

APPLICABLE FEDERAL RULES:

NSPS? **NESHAP?** **PSD?** **OFFSET POLICY?**

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with applicable OAC rules and specified allowable mass emission rates through the application of a fabric filter control, process throughput limitation, oxidized starch production limitation, record keeping, and reporting.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? **No**

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? **$**

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

AIR TOXICS MODELING PERFORMED*? _____ **YES** _____ **NO**

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

SIC CODE **2046** **SCC CODE** **3-02-007-54** **EMISSIONS UNIT ID** **P038**

EMISSIONS UNIT DESCRIPTION **MH Starch dryer #2 (modification)**

DATE INSTALLED **July 1981**

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	5 lbs/hour	21.9 TPY	5 lbs/hour	21.9 TPY
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	6.45 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	28.25 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	6.45 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	28.25 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Total Combined HAPs		7.05 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	30.88 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	7.05 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	30.88 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined

APPLICABLE FEDERAL RULES:

NSPS? **NESHAP?** **PSD?** **OFFSET POLICY?**

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with applicable OAC rules and specified allowable mass emission rates through the application of cyclone and scrubber controls, process throughput limitation, oxidized starch production limitation, record keeping, and reporting.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? **Yes**

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? **$**

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

AIR TOXICS MODELING PERFORMED*? **X** **YES** ____ **NO**

IDENTIFY THE AIR CONTAMINANTS: **chloroform**

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

SIC CODE **2046** **SCC CODE** **3-02-007-52** **EMISSIONS UNIT ID** **P051**

EMISSIONS UNIT DESCRIPTION **Starch warehouse bulk loading #2 (modification)**

DATE INSTALLED **July 1981**

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.04 lb/hour	0.068 TPY	0.04 lb/hour	0.068 TPY
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	~~14.51~~ 14.52 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~63.55~~ 63.58 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	~~14.51~~ 14.52 lbs/hour and 14.52 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~63.55~~ 63.58 TPY and 63.58 TPY from P004, P014, P015, P016, P017, P038, and P051 combined
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Total Combined HAPs		15.86 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~69.47~~ 69.48 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined	15.86 lbs/hour and 15.86 lbs/hour from P004, P014, P015, P016, P017, P038, and P051 combined	~~69.47~~ 69.48 TPY and 69.48 TPY from P004, P014, P015, P016, P017, P038, and P051 combined

APPLICABLE FEDERAL RULES:

NSPS? **NESHAP?** **PSD?** **OFFSET POLICY?**

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with applicable OAC rules and specified allowable mass emission rates through the application of a fabric filter control, process throughput limitation, oxidized starch production limitation, record keeping, and reporting.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? **No**

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? **$**

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

NEW SOURCE REVIEW FORM B

PTI Number: 08-04145 Facility ID: 0857041124

FACILITY NAME Cargill Inc - Dayton

FACILITY DESCRIPTION starch production operations-mod P004, P014-P017, P038, P051 CITY/TWP Dayton

AIR TOXICS MODELING PERFORMED*? _____ **YES** _____ **NO**

IDENTIFY THE AIR CONTAMINANTS: _____

C:\temp\permits3\10427.wpd