



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
MONTGOMERY COUNTY**

CERTIFIED MAIL

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov.
Center

Application No: 08-04464

DATE: 5/13/2003

Cargill Inc
Angie Duvall
PO Box 1400A 3201 Needmore Rd
Dayton, OH 454140000

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, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of 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,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

RAPCA



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: 5/13/2003
Effective Date: 5/13/2003**

FINAL PERMIT TO INSTALL 08-04464

Application Number: 08-04464
APS Premise Number: 0857041124
Permit Fee: **\$5800**
Name of Facility: Cargill Inc
Person to Contact: Angie Duvall
Address: PO Box 1400A 3201 Needmore Rd
Dayton, OH 454140000

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

Description of proposed emissions unit(s):
increasing emissions of P002, P003, P004, P024, P025, P086, chapter 31 replacing 08-03290 issued 6-12-96 with the third administrative modification issued 9-2-98.

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 emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the 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.9 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 obtained before 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 ninety (90) days after commencing operation of the source(s) covered by this permit.

11. 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.

12. 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.

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

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

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

4. 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.

5. 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 cannot meet the requirements of this permit 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 cannot meet the requirements of this permit or cannot meet applicable standards.

6. 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.

7. 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).

8. 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.

9. 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**

<u>Pollutant</u>	<u>Tons Per Year</u>
Sulfur dioxide	44.3
Particulate emissions	1.58
Hazardous Air Pollutants (HAPs)	69.48, including VOCs

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - South Mill Steep Aspiration with scrubber control	OAC rule 3745-31-05(A)(3)	0.466 lb/hour particulate emissions (PE) 1.04 lbs/hour sulfur dioxide (SO ₂)
*Modification		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-31-05(D).
	OAC rule 3745-31-05(D)	0.68 TPY PE, as a rolling, 12-month summation 4.56 TPY SO ₂ , as a rolling, 12-month summation
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20 percent, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

13

Cargill

PTI A₁

Issued: 5/13/2003

Emissions Unit ID: P002

2. Additional Terms and Conditions

- 2.a** The 1.04 lb/hour, 4.56 TPY SO₂ and 0.466 lb/hour PE 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.

II. Operational Restrictions

1. The maximum annual process throughput rate for this emissions unit shall not exceed 817,600 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.
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 pH of the scrubber liquor shall be maintained at or above 7, on an average 8-hour shift while the emissions unit is in operation.
4. The scrubber water flow rate shall be continuously maintained at a value of not less than 8 gallons per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The process throughput rate, in tons.
 - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.
 - c. The rolling, 12-month summation of the monthly PE rates, in tons, calculated by multiplying the rolling, 12-month process throughput rate (from section A.III.1.b) by the most recent facility-derived emission factor [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance] (lb PE/ton), and then dividing by 2,000 lbs/ton.
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.

3. 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.
4. The permittee shall collect and record the following information each day while the emissions unit is in operation:
 - 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 once per day basis.
 - c. The pH of the liquor, on a continuous basis.
 - d. A log of the downtime for the capture (collection) system, control device and monitoring equipment and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. All exceedances of the rolling, 12-month process throughput restriction of 817,600 tons.
 - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.
 - c. All periods of time during which the pH of the scrubber liquor was not maintained at or above the required levels.
 - d. All exceedances of the rolling, 12-month PE limitation of 0.68 TPY.
 - e. All periods of time during which the scrubber water flow rate was not maintained at or above the required level.

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

2. The permittee shall submit quarterly summaries that include a log of the downtime for the capture, (collection) control device and monitoring equipment when the associated emission unit was in operation.

V. Testing Requirements

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

16

Cargill

PTI A₁

Issued: 5/13/2003

Emissions Unit ID: P002

determined in accordance with the following method(s):

- a. Emission Limitation -
0.466 lb/hour PE

Applicable Compliance Method -

Compliance with the hourly allowable PE limitation shall be determined by multiplying the maximum hourly capacity of the emissions unit (tons corn/hour) by the most recent facility-derived emission factor in lb PE/ton [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance].

- b. Emission Limitation -
1.04 lbs/hour SO₂

Applicable Compliance Method -

Compliance with the hourly allowable SO₂ emission limitation shall be determined by multiplying the maximum concentration of SO₂ in the air stream (0.0000015 lb SO₂/cu.ft of air flow) by the maximum volumetric air flow rate of this emissions unit (cu.ft/minute), and then multiplying by 60 min/hr.

- c. Emission Limitation -
0.68 TPY PE, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the annual allowable PE limitation shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

- d. Emission Limitation -
4.56 TPY SO₂, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000 lbs/ton.

- e. Emission Limitation -
Opacity shall not exceed 20%, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

Cargill Inc

PTI Application: 08-04145

Issued

Facility ID: 0857041124

Emissions Unit ID: P002

- f. Operational Limitation -
817,600 tons process throughput as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the limitation above shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

VI. Miscellaneous Requirements

1. * The terms and conditions in this PTI supercedes PTI # 08-03290, (issued 6/16/96 and modified 10/17/96, 1/3/97 and 9/2/98) for emissions units P002, P003, P024, P025 and P086 and PTI #08-04145, issued 6/5/2001 for P004. This modification was the result of an increase in the annual SO₂ emissions.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - South Mill Steep Aspiration with scrubber control	OAC rule 3745-31-05	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

20

Cargill

PTI A₁

Issued: 5/13/2003

Emissions Unit ID: P002

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - South Mill Aspiration, with packed tower scrubber *Modification	OAC rule 3745-31-02(A)(2)	2.61 lbs/hour sulfur dioxide (SO ₂) The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D)	11.43 TPY SO ₂ , as a rolling, 12-month summation
	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 3745-31-02(A)(2).

2. Additional Terms and Conditions

- 2.a The 2.61 lb/hour and 11.43 TPY SO₂ 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.

II. Operational Restrictions

Issued: 5/13/2003

1. The maximum annual process throughput for this emissions unit shall not exceed 817,600 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 2 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 10 gallons per minute at all times while the emissions unit is in operation.
4. The pH of the scrubber liquor shall be maintained at or above 7, on an average 8-hour shift while the emissions unit is in operation.

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.
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 calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. The permittee shall properly install, 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.
4. The permittee shall collect and record the following information each day while the emissions unit is in operation:
 - a. The pressure drop across the scrubber, in inches of water, on a once per shift basis.
 - b. The scrubber water flow rate, in gallons per minute, on a once per shift basis.
 - c. The pH of the scrubber liquor, on a continuous basis.

Emissions Unit ID: P003

- d. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. All exceedances of the rolling, 12-month process throughput restriction of 817,600 tons.
 - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.
 - c. All periods of time during which the scrubber water flow rate was not maintained at or above the required level.
 - d. All periods of time during which the pH of the scrubber liquor was not maintained at or above the required level.

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

2. The permittee shall submit quarterly summaries that include a log of the downtime for the capture, (collection) control device and monitoring equipment when the associated emission unit was in operation.

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 -
2.61 lbs/hour SO₂

Applicable Compliance Method -

Compliance with the hourly allowable SO₂ emission limitation shall be determined by multiplying the company's estimated maximum concentration of SO₂ in the air stream (0.0000015 lb SO₂/cu.ft of air flow) by the maximum volumetric air flow rate (cu.ft./min), and by 60min/hr.

- b. Emission Limitation -
11.43 TPY SO₂, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance with the hourly SO₂ emission limitation is maintained, compliance with the annual SO₂ emission limitation shall be assumed (the annual limitation was

determined by multiplying the hourly limitation by 8760, and then dividing by 2000 lbs/ton).

- c. Operational Limitation -
817,600 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

VI. Miscellaneous Requirements

1. * The terms and conditions in this PTI supercedes PTI # 08-03290,(issued 6/16/96 and modified 10/17/96, 1/3/97 and 9/2/98) for emissions units P002, P003, P024, P025 and P086 and PTI #08-04145, issued 6/5/2001 for P004. This modification was the result of an increase in the annual SO₂ emissions.

2. P003 and P004 were existing emission units that were not modified such that they would be subject to 3745-31-05(A)(3). Both emission units were included with PTI # 08-03290 and accepted emission limitations for SO₂ in accordance with 3745-31-02(A)(2).

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - South Mill Aspiration, with packed tower scrubber	OAC rule 3745-31-02	

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P004 - Modhouse Starch Modification Tanks with packed tower scrubber	OAC rule 3745-31-02(A)(2)	OAC rule 3745-18-06(E)
*Modification	OAC rule 3745-31-05(D)	

Applicable Emissions
Limitations/Control
Measures

0.89 lb/hour sulfur dioxide
(SO₂)

14.52 lbs/hour and 63.58
TPY volatile organic
compounds (VOC) [from
this emissions unit]

15.86 lbs/hour and 69.48
TPY total combined
hazardous air pollutants
(HAPs) [from this emissions
unit]

The requirements of this rule
also include compliance with
the requirements of OAC
rule 3745-31-05(D).

3.90 TPY SO₂, as a rolling,
12-month summation

14.52 lbs/hour and 63.58
TPY* VOC [from emissions
units P004, P014, P015,
P016, P017, P038 and P051,
combined]

15.86 lbs/hour and 69.48
TPY* total HAPs [from
emissions units P004, P014,
P015, P016, P017, P038 and
P051, combined]

* based on a rolling, 12-

month summation

The emission limitation specified by
this rule is less stringent than the
emission limitation established
pursuant to OAC rule 3745-31-
02(A)(2).

2. Additional Terms and Conditions

- 2.a** The 14.52 lbs/hr VOC, 63.58 TPY VOC, 15.86 lbs/hr total combined HAPs, 69.48 TPY total combined HAPs (for this emissions unit), 0.89 lb/hr and 3.90 TPY SO₂, 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 limitations.

II. Operational Restrictions

1. The pH of the scrubber liquor shall be maintained at or above 7, on an average 8-hour shift while the emissions unit is in operation.
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 scrubber water flow rate shall be continuously maintained at a value of not less than 10 gallons per minute at all times while the emissions unit is in operation.
4. The maximum annual oxidized starch production rate for emissions units P004, P014, P015, P016, P017, P038 and P051, combined, shall not exceed 98,550 tons, as a rolling, 12-month summation of the monthly oxidized starch production rates.

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.
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.
3. The permittee shall collect and record the following information each day while the emissions unit is in operation:
 - a. The pressure drop across the scrubber, in inches of water, on a once per day basis.

Emissions Unit ID: P004

- b. The scrubber water flow rate, in gallons per minute, on a once per day basis.
 - c. The pH of the scrubber liquor, on a continuous basis.
 - d. A log of the downtime for the capture (collection) system, control device and monitoring equipment and the associated emissions unit
4. The permittee shall maintain monthly records of the following information for this emissions unit:
- a. The oxidized starch production rate, in tons.
 - b. The number of hours the emissions unit was in operation.
 - c. The rolling, 12-month summation of the monthly oxidized starch production rates, in tons.
 - d. The average hourly VOC and total combined HAP emission rates, in pounds/hr (average), calculated as follows:
 - i. for VOC, multiply the oxidized starch production rate (from section A.III.4.a, tons/month) by the facility-derived VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced, and then divide by the number of hours of operation, from section A.III.4.b; and
 - ii. for HAPs, multiply the oxidized starch production rate (from section A.III.4.a, tons/month) by the facility-derived HAPs emission factor of 1.41 lbs HAPs/ton oxidized starch produced, and then divide by the number of hours of operation, from section A.III.4.b.
 - e. The rolling, 12-month summations of the monthly VOC and total combined HAPs emission rates, in tons, calculated as follows:
 - i. for VOC, multiply the rolling, 12-month summation of the monthly oxidized starch production rates (from section A.III.4.c, tons) by the by the facility-derived VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced; and
 - ii. for HAPs, multiply the rolling, 12-month summation of the monthly oxidized starch production rates (from section A.III.4.c, tons) by the facility-derived HAPs emission factor of 1.41 lbs HAPs/ton oxidized starch produced.
5. The permittee shall maintain monthly records of the following information for emissions units P004, P014, P015, P016, P017, P038 and P051, combined:
- a. The rolling, 12-month summation of the monthly oxidized starch production rates, in tons (calculated by summing the rolling, 12-month summation of the monthly starch production

rates for emissions units P004, P014, P015, P016, P017, P038 and P051).

- b. The rolling, 12-month summation of the VOC and total combined HAPs emission rates, in tons (calculated by summing the rolling, 12-month VOC and total combined HAPs emission rates for emissions units P004, P014, P015, P016, P017, P038 and P051).
- c. The average hourly VOC and total combined HAP emission rates, in pounds/hr (average) (calculated by summing the average hourly VOC and total combined HAPs emission rates for emissions units P004, P014, P015, P016, P017, P038 and P051).

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 level specified above.
 - 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 level.
 - d. All exceedances of the rolling, 12-month oxidized starch production rate restriction of 98,550 tons (for emissions units P004, P014, P015, P016, P017, P038 and P051, combined).
 - e. All exceedances of the rolling, 12-month VOC and total HAP emission limitations (for emissions units P004, P014, P015, P016, P017, P038 and P051, combined) of 63.58 and 69.48 tons, respectively.
 - f. All exceedances of the hourly VOC and total HAPs emission limitations (for emissions units P004, P014, P015, P016, P017, P038 and P051, combined) of 14.52 and 15.86 pounds, respectively.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under (A)(1).

2. The permittee shall submit quarterly summary reports that include a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated

32

Cargill Inc

PTI Application: 08 04464

Issued

Facility ID: 0857041124

Emissions Unit ID: P004

emissions unit was in operation.

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 with the hourly allowable SO₂ emission limitation shall be determined by multiplying the maximum concentration of SO₂ in the air stream (0.00000076 lb SO₂/cu.ft of air flow) by the maximum volumetric air flow rate of this emissions unit (cu.ft/minute), and then multiplying by 60 min/hr.
 - b. Emission Limitation -
14.52 lbs/hour VOC (from this emissions unit)

Applicable Compliance Method -
Compliance with the hourly allowable VOC emission limitation shall be demonstrated based on the record keeping requirements established in section A.III.4 of this permit.
 - c. Emission Limitation -
63.58 TPY VOC (from this emissions unit)

Applicable Compliance Method -
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760, and then dividing by 2,000 lbs/ton).
 - d. Emission Limitation -
15.86 lbs/hour (total combined HAPs from this emissions unit)

Applicable Compliance Method -
Compliance with the hourly allowable HAPs emission limitation shall be demonstrated based on the record keeping requirements established in section A.III.4 of this permit.
 - e. Emission Limitation -
69.48 TPY total combined HAPs (from this emissions unit)

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 8,760, and then dividing by 2,000 lbs/ton).

- f. Emission Limitation -
3.90 TPY SO₂, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance with the hourly SO₂ emission limitation is maintained, compliance with the annual SO₂ emission limitation shall be assumed (the annual limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000 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 with the hourly allowable VOC emission limitation shall be determined based on the record keeping requirements established in sections A.III.4 and 5 of this permit.

- 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 with the annual allowable VOC emission limitation shall be determined based on the record keeping requirements established in sections A.III.4 and 5 of this permit.

- 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 with the hourly allowable HAPs emission limitation shall be determined based on the record keeping requirements established in sections A.III.4 and 5 of this permit.

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

Applicable Compliance Method -
Compliance with the annual allowable HAPs emission limitation shall be determined based on the record keeping requirements established in sections A.III.4 and 5 of this permit.

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

Applicable Compliance Method -
Compliance shall be based upon the record keeping requirements specified in section A.III.4 and 5 of this permit.

VI. Miscellaneous Requirements

1. * The terms and conditions in this PTI supercedes PTI # 08-03290,(issued 6/16/96 and modified 10/17/96, 1/3/97 and 9/2/98) for emissions units P002, P003, P024, P025 and P086 and PTI #08-04145, issued 6/5/2001 for P004. This modification was the result of an increase in the annual SO₂ emissions.
2. P003 and P004 were existing emission units that were not modified such that they would be subject to 3745-31-05(A)(3). Both emission units were included with PTI # 08-03290 and accepted emission limitations for SO₂ in accordance with 3745-31-02(A)(2).

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Modhouse Starch Modification Process	OAC rule 3745-31-02	

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**

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P024 - North Mill Steep Tanks Aspiration, with wet tray scrubber *Modification	OAC rule 3745-31-05(A)(3)	0.272 lb/hour particulate emissions (PE) 0.68 lb/hour sulfur dioxide (SO ₂) The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D)	0.567 TPY PE, as a rolling, 12-month summation 2.97 TPY SO ₂ , as a rolling, 12-month summation
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20 percent, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)	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 0.68 lb/hour SO₂, 2.97 TPY SO₂ and 0.272 lb/hour PE limitations were developed for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. The maximum annual process throughput rate for this emissions unit shall not exceed 1,635,200 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.
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 pH of the scrubber liquor shall be maintained at or above 7, on an average 8-hour shift while the emissions unit is in operation.
4. The scrubber water flow rate shall be continuously maintained at a value of not less than 8 gallons per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The process throughput rate, in tons.
 - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.
 - c. The rolling, 12-month summation of the monthly PE rates, in tons, calculated by multiplying the rolling, 12-month process throughput rate (from section A.III.1.b) by the most recent facility-derived emission factor in lbs PE/ton [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance] (lb PE/ton), and then dividing by 2,000 lbs/ton.
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.

Emissions Unit ID: P024

3. 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.
4. The permittee shall collect and record the following information each day while the emissions unit is in operation:
 - 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 once per day basis.
 - c. The pH of the scrubber liquor, on a continuous basis.
 - d. A log of the downtime for the capture (collection) system, control device and monitoring equipment and the associated emissions unit. .

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following for this emission unit:
 - a. All exceedances of the rolling, 12-month process throughput restriction of 1,635,200 tons.
 - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.
 - c. All periods of time during which the pH of the scrubber liquor was not maintained at or above the required levels.
 - d. All periods of time during which the scrubber water flow rate was not maintained at or above the required levels.
 - e. All exceedances of the rolling, 12-month PE limitation of 0.567 TPY.

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

2. The permittee shall submit quarterly summary reports that include a log of downtime for the capture (collection) system, control device and monitoring equipment when the emissions unit was in operation.

V. Testing Requirements

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

40

Cargill

PTI A₁

Issued: 5/13/2003

Emissions Unit ID: P024

determined in accordance with the following method(s):

- a. Emission Limitation -
0.272 lb/hour PE

Applicable Compliance Method -

Compliance with the hourly allowable PE limitation shall be determined by multiplying the maximum hourly capacity of the emissions unit (tons corn/hour) by the most recent facility-derived emission factor in lb PE/ton [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance].

- b. Emission Limitation -
0.68 lb/hour SO₂

Applicable Compliance Method -

Compliance with the hourly allowable SO₂ emission limitation shall be determined by multiplying the maximum concentration of SO₂ in the air stream (0.00000076 lb SO₂/cu.ft of air flow) by the maximum volumetric air flow rate of this emissions unit (cu.ft/minute), and then multiplying by 60 min/hr.

- c. Emission Limitation -
0.567 TPY PE, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the annual allowable emissions limitation may be based upon the record keeping requirements specified in section A.III.1 of this permit.

- d. Emission Limitation -
2.97 TPY SO₂, as a rolling, 12-month summation

Applicable Compliance Method -

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

- e. Emission Limitation -
Opacity shall not exceed 20 percent, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

- f. Operational Limitation -

Cargill Inc

PTI Application: 08-04145

Issued

Facility ID: 0857041124

Emissions Unit ID: P024

1,635,200 tons process throughput/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

VI. Miscellaneous Requirements

1. * The terms and conditions in this PTI supercedes PTI # 08-03290, (issued 6/16/96 and modified 10/17/96, 1/3/97 and 9/2/98) for emissions units P002, P003, P024, P025 and P086 and PTI #08-04145, issued 6/5/2001 for P004. This modification was the result of an increase in the annual SO₂ emissions.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P024 - North Mill Steep Tanks Aspiration	OAC rule 3745-31-05	

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P025 - North Mill Aspiration *Modification	OAC rule 3745-31-05(A)(3)	2.07 lbs/hour sulfur dioxide (SO ₂)
	OAC rule 3745-31-05(D)	The requirements of this rule also include the compliance with the requirements of OAC rule 3745-31-05(D). 9.07 TPY SO ₂ , as a rolling, 12-month summation
	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 2.07 lbs/hour and 9.07 TPY SO₂ emission limitations were developed for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. The maximum annual process throughput rate for this emissions unit shall not exceed 1,635,200 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

Emissions Unit ID: P025

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 pH of the scrubber liquor shall be maintained at or above 7, on an average 8-hour shift while the emissions unit is in operation.
4. The scrubber water flow rate shall be continuously maintained at a value of not less than 22 gallons per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The process throughput rate, in tons.
 - b. The rolling, 12-month summation of the process throughput rates, 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.
3. 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.
4. The permittee shall collect and record the following information each day while the emissions unit is in operation:
 - 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 once per day basis.
 - c. The pH of the scrubber liquor, on a continuous basis.
 - d. A log of the downtime for the capture (collection) system, control device and monitoring equipment and the associated emissions unit. .

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. All exceedances of the rolling, 12-month process throughput restriction of 1,635,200 tons.

- b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.
- c. All periods of time during which the scrubber water flow rate was not maintained at or above the required levels.
- d. All periods of time during which the pH of the scrubber liquor was not maintained at or above the required levels.

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

- 2. The permittee shall submit quarterly summary reports that include a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.

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 -
2.07 lbs/hour SO₂

Applicable Compliance Method -

Compliance with the hourly allowable SO₂ emission limitation shall be determined by multiplying the maximum concentration of SO₂ in the air stream (0.0000015 lb SO₂/cu.ft of air flow) by the maximum volumetric air flow rate of this emissions unit (cu.ft/minute), and then multiplying by 60 min/hr.

- b. Emission Limitation -
9.07 TPY SO₂, as a rolling, 12-month summation

Applicable Compliance Method -

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

- c. Operational Limitation -

Cargill Inc
PTI Application: 08-04145
Issued

Facility ID: 0857041124

Emissions Unit ID: P025

1,635,200 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -
Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

VI. Miscellaneous Requirements

1. * The terms and conditions in this PTI supercedes PTI # 08-03290, (issued 6/16/96 and modified 10/17/96, 1/3/97 and 9/2/98) for emissions units P002, P003, P024, P025 and P086 and PTI #08-04145, issued 6/5/2001 for P004. This modification was the result of an increase in the annual SO₂ emissions.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P025 - North Mill Aspiration	OAC rule 3745-31-05	

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

II. Operational Restrictions

1. The maximum annual process throughput rate for this emissions unit shall not exceed 1,635,200 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.
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 pH of the scrubber liquor shall be maintained at or above 7, on an average 8-hour shift while the emissions unit is in operation .
4. The scrubber water flow rate shall be continuously maintained at a value of not less than 22 gallons per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The process throughput rate, in tons.
 - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.
 - c. The rolling, 12-month summation of the monthly PE rates, in tons, calculated by multiplying the rolling, 12-month process throughput rate (from section A.III.1.b) by the most recent facility-derived emission factor [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance] (lb PE/ton), and then dividing by 2,000 lbs/ton.
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.
3. 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.
4. The permittee shall collect and record the following information each day while the emissions unit

is in operation:

- 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 once per day basis.
- c. The pH of the liquor, on a continuous basis.
- d. A log of the downtime for the capture (collection) system, control device and monitoring equipment and the associated emissions unit .

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. All exceedances of the rolling, 12-month process throughput restriction of 1,635,200 tons.
 - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.
 - c. All periods of time during which the pH of the scrubber liquor was not maintained at or above the required levels.
 - d. All periods of time during which the scrubber water flow rate was not maintained at or above the required level.
 - e. All exceedances of the rolling, 12-month PE limitation of 0.331 TPY.

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

2. The permittee shall submit quarterly summaries that include a log of the downtime for the capture, (collection) control device and monitoring equipment when the associated emission unit was in operation.

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 -
0.159 lb/hour PE

Applicable Compliance Method -
Compliance with the hourly allowable PE limitation shall be determined by multiplying the maximum hourly capacity of the emissions unit (tons corn/hour) by the most recent facility-

52

Cargill

PTI A₁

Issued: 5/13/2003

Emissions Unit ID: P086

derived emission factor in lb PE/ton [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance].

- b. Emission Limitation -
 2.82 lbs/hour SO₂

Applicable Compliance Method -

Compliance with the hourly allowable SO₂ emission limitation shall be determined by multiplying the maximum concentration of SO₂ in the air stream (0.0000015 lb SO₂/cu.ft of air flow) by the maximum volumetric air flow rate of this emissions unit (cu.ft/minute), and then multiplying by 60 min/hr.

- c. Emission Limitation -
 0.331 TPY PE, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the annual allowable PE limitation shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

- d. Emission Limitation -
 12.35 TPY SO₂, as a rolling, 12-month summation

Applicable Compliance Method -

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

- e. Emission Limitation -
 Opacity shall not exceed 20%, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

- f. Operational Limitation -
 1,635,200 tons process throughput as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the limitation above shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

VI. Miscellaneous Requirements

- * The terms and conditions in this PTI supercedes PTI # 08-03290, (issued 6/16/96 and modified 10/17/96, 1/3/97 and 9/2/98) for emissions units P002, P003, P024, P025 and P086 and PTI #08-04145, issued 6/5/2001 for P004. This modification was the result of an increase in the annual SO₂ emissions.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P086 - North Mill Steep Aspiration 2	OAC rule 3745-31-05	

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