



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:

08-04334

DATE: 1/17/2002

AE Staley Manufacturing
Rebecca Sloan
2200 E Eldorado
Decatur, IL 62525-1578

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,

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

CC: USEPA

RAPCA



**Permit To Install
Terms and Conditions**

**Issue Date: 1/17/2002
Effective Date: 1/17/2002**

FINAL PERMIT TO INSTALL

08-04334

Application Number: 08-04334
APS Premise Number: 0857041333
Permit Fee: **\$400**
Name of Facility: AE Staley Manufacturing
Person to Contact: Rebecca Sloan
Address: 2200 E Eldorado
Decatur, IL 62525-1578

Location of proposed air contaminant source(s) [emissions unit(s)]:
**5600 Brentlinger Drive
Dayton, Ohio, Ohio**

Description of proposed emissions unit(s):
2 natural gas and or fuel oil fired temporary boilers superceding 08-04131 issued 5-17-00.

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.10 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 thirty (30) 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 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. 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

AE Staley Manufacturing
 PTI Application: **08-04334**
Issued: 1/17/2002

Facility ID: **0857041333**

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>
PE	11.04
NOx	54.11
CO	45.45
SO2	0.32
OC	5.95

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

1. NSPS Requirements

The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

<u>Source Number</u>	<u>Source Description</u>	<u>NSPS regulation (Subpart)</u>
B003	89 mmBtu/hr No. 2 oil or natural gas steam generating unit	40 CFR Part 60 Subpart Dc
B004	72 mmBtu/hr No. 2 oil or natural gas steam generating unit	40 CFR Part 60 Subpart Dc

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- a. construction date (no later than 30 days after such date);
- b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. actual start-up date (within 15 days after such date); and
- d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
 DAPC - Air Quality Modeling and Planning
 P.O. Box 1049
 Columbus, OH 43216-1049

and

Regional Air Pollution Control Agency
 451 West Third Street
 P. O. Box 972
 Dayton, Ohio 45422

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

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AE Staley Manufacturing
PTI Application: **08-04334**
Issued: 1/17/2002

Facility ID: **0857041333**

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

B003 - 89 mmBtu/hr natural gas fired steam generating unit

OAC 3745-31-05(A)(3)

40 CFR Part 60 Subpart Dc

OAC 3745-18-06(A)

OAC rule 3745-18-06(D)

OAC 3745-17-10(B)(1)

OAC rule 3745-17-07(A)

OAC rule 3745-31-05(D)

Applicable Emissions
Limitations/Control
Measures

7.79 TPY particulate emissions

0.05 lb/hour and 0.22 TPY sulfur dioxide (SO2)

8.72 lbs/hour and 38.2 TPY nitrogen oxides (NOx)

0.96 lb/hour and 4.20 TPY organic compounds (OC)

7.33 lbs/hour and 32.1 TPY carbon monoxide (CO)

Visible particulate emissions shall not exceed 5% opacity, as a six minute average.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-18-06(A), OAC 3745-17-10(B)(1), 40 CFR Part 60 Subpart Dc, and OAC rule 3745-31-05(D).

Emissions from B003 and B004, combined, as a rolling 12-month summation, shall not exceed:

- 11.04 TPY PE,
- 54.11 TPY NOx,
- 45.45 TPY CO,
- 0.32 TPY SO2, and
- 5.95 TPY OC

See Section A.I.2.a. below

See Section A.II.1. below

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

0.020 pound of particulate emissions per mmBtu actual heat input

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 Pursuant to 40 CFR Part 60 Subpart Dc, no SO₂ emission limitation has been developed for this emissions unit because it burns only natural gas.

2.b The hourly 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.c The PTI application for these two new natural gas boilers, identified as emissions units B003 and B004, states the installation and subsequent operation is to be temporary, operating in place of existing boilers natural gas/no.2 oil/used oil boilers B001 and B002 for maintenance and repair work. Except for start-up and shut-down, no more than two of the four boilers, i.e., B001, B002, B003, and B004, shall operate at the same time. The net change in emissions if both B003 and B004 are placed in operation and B001 and B002 are shut down are as follows:

<u>Pollutant</u>	<u>New Emissions Units B003 and B004</u>	<u>Existing Emissions* Units B001 and B002</u>	<u>Contemporaneous Increase**</u>	<u>Net Change</u>
PM	11.04	13.30	2.19	+0.07 (TPY)
SO ₂	0.32	39.21		-38.89 (TPY)
CO	45.45	15.87		+29.58 (TPY)
OC	5.95	2.65		+3.30 (TPY)
NO _x	54.11	29.21		+24.90 (TPY)

* Based upon the actual average emissions emitted during the years 1998 and 1999.

** Includes emissions increase for emissions unit P004 permitted in PTI 08-3938, issued February 3, 1999.

As a result of the net change in emissions, the proposed new source installation is not a major modification and the permittee has "netted out" of Federal Prevention of Significant Deterioration requirements.

II. Operational Restrictions

1. The permittee shall burn only natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet in this emissions unit.

2. The maximum annual natural gas usage for emissions units B003 and B004, combined, shall not exceed 1082.2 million cubic feet based upon a rolling, 12-month summation of the natural gas usage rates.

To ensure enforceability during the first 12-calendar months of operation following issuance of this permit, the permittee shall not exceed the natural gas usage level specified in the following table for emissions units B003 and B004:

Month(s)	Maximum Allowable Cumulative Natural Gas Usage (cubic feet)
1	90,183,333.33
1-2	180,366,666.7
1-3	270,550,000.0
1-4	360,733,333.3
1-5	450,916,666.7
1-6	541,100,000.0
1-7	631,283,333.3
1-8	721,466,666.7
1-9	811,650,000.0
1-10	901,833,333.3
1-11	992,016,666.7
1-12	1,082,200,000.0

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual natural gas usage limitation shall be based upon a rolling, 12-month summation of the natural gas usage figures.

3. Emissions units B003 and/or B004 shall only be placed in operation when emissions units B001 and B002 are shutdown for maintenance and repairs.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The natural gas usage for each month.
 - b. During the first 12 calendar months of operation following issuance of this permit, the cumulative natural gas usage for each calendar month.
 - c. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the natural gas usage rates.
 - d. The rolling, 12-month summation of emission rates for B003 and B004, combined, for each of the following pollutants: particulates, NO_x, CO, SO₂, and OC.
2. For each day during which the permittee burns a fuel other than natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports, in accordance with Section A.1.c. of the General Terms and Conditions, and shall include the following information:
 - a. An identification of each day when a fuel other than natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet was burned in this emissions unit.
 - b. For the first 12 calendar months of operation following the issuance of this permit, an identification of each month during which the cumulative natural gas usage levels exceeded the maximum allowable cumulative natural gas usage rates, and the actual cumulative natural gas usage rates for each such month.
 - c. Beginning after the first 12 calendar months of operation following the issuance of this permit, an identification of each month during which the rolling, 12-month summation of the natural gas usage rates exceeded the allowable rolling, 12-month summation, and the actual rolling, 12-month summation of the natural gas usage rates for each such month.
 - d. An identification of each month during which the rolling, 12-month summation of emission rates for B003 and B004, combined, exceeded the allowable rolling 12-month summation of emission rates for each of the following pollutants: particulates, SO₂, NO_x, CO, and OC, and the actual rolling, 12-month summation of emission rates for B003 and

B004, combined, for each such month.

2. The permittee shall submit annual reports which summarize the following information:
 - a. The actual 12-month summation of the natural gas usage rates, in million cubic feet.
 - b. The actual 12-month summation of emission rates for B003 and B004, combined, for each of the following pollutants: particulates, NO_x, CO, SO₂, and OC, in tons.

These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

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-
0.020 pound of particulate emissions (PE) per mmBtu actual heat input

Applicable Compliance Method-
Compliance shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0872 mm cu ft/hour) by the emission factor of 1.9 lbs PE/mm cu ft as specified in AP-42 Chapter 1.4-2 (7/98) and dividing by the maximum hourly heat input capacity of the emissions unit (89.0 mmBtu/hour).
 - b. Emission Limitation -
7.79 TPY Particulate Emissions (PE)

Applicable Compliance Method -
As long as compliance is maintained with the 0.020 lb PE/mmBtu emission limitation, compliance with the annual limitation will be shown [the annual emission limitation was calculated by multiplying the 0.020 lb PE/mmBtu limitation by the emissions unit maximum heat input capacity (89.0 mmBtu/hr), and then multiplying by 8760 hr/yr and dividing by 2000 lb/ton].
 - c. Emission Limitation -
0.05 lb/hr SO₂

Applicable Compliance Method -

AE Staley Manufacturing
PTI Application: **08 04224**
Issued

Facility ID: **0857041333**

Emissions Unit ID: **B003**

Compliance shall be determined by multiplying the emission factor for natural gas (0.6 lb SO₂/mm cu ft) as specified in AP-42 Chapter 1.4-2 (7/98), by the maximum hourly gas burning capacity (0.0872 mm cu ft/hour) of the emissions unit.

- d. Emission Limitation -
0.22 TPY SO₂

Applicable Compliance Method -

As long as compliance is maintained with the hourly SO₂ emission limitation, compliance with the annual limitation will be shown (the annual emission limitation was calculated by multiplying the 0.05 lb SO₂/hr limitation by 8760 hr/yr and dividing by 2000 lb/ton).

- e. Emission Limitation-
8.72 lbs/hour NO_x

Applicable Compliance Method -

Compliance shall be determined by multiplying the emission factor for natural gas (100 lbs NO_x/mm cu ft) as specified in AP-42 Chapter 1.4-1 (2/98), by the maximum hourly gas burning capacity (0.0872 mm cu ft/hour) of the emissions unit.

- f. Emission Limitation -
38.2 TPY NO_x

Applicable Compliance Method -

As long as compliance is maintained with the hourly NO_x emission limitation, compliance with the annual limitation will be shown (the annual emission limitation was calculated by multiplying the 8.72 lbs NO_x/hr limitation by 8760 hr/yr and dividing by 2000 lb/ton).

- g. Emission Limitation -
0.96 lb/hour OC

Applicable Compliance Method -

Compliance shall be determined by multiplying the emission factor for natural gas (11.0 lbs OC/mm cu ft) as specified in AP-42 Chapter 1.4-2 (7/98), by the maximum hourly gas burning capacity (0.0872 mm cu ft/hour) of the emissions unit.

- h. Emission Limitation -
4.20 TPY OC

Applicable Compliance Method -

As long as compliance is maintained with the hourly OC emission limitation, compliance with the annual limitation will be shown (the annual emission limitation was calculated by multiplying the 0.96 lb OC/hr limitation by 8760 hr/yr and dividing by 2000 lb/ton).

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Issued: 1/17/2002

Emissions Unit ID: **B003**

- i. Emission Limitation -
7.33 lbs/hour CO

Applicable Compliance Method -

When burning natural gas, compliance shall be determined by multiplying the emission factor for natural gas (84 lbs CO/mm cu ft) as specified in AP-42 Chapter 1.4-1 (2/98), by the maximum hourly gas burning capacity (0.0872 mm cu ft/hour) of the emissions unit.

- j. Emission Limitation -
32.1 TPY CO

Applicable Compliance Method -

As long as compliance is maintained with the hourly CO emission limitation, compliance with the annual limitation will be shown (the annual emission limitation was calculated by multiplying the 7.33 lbs CO/hr limitation by 8760 hr/yr and dividing by 2000 lb/ton).

- k. Emission Limitation -
5% opacity, as a 6-minute average

Applicable Compliance Method-

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the tests and procedures specified in USEPA Reference Method 9.

- l. Emission Limitation-
11.04 TPY Particulate Emissions for B003 and B004, combined, as a rolling 12-month summation

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.2. of B003 and B004 and shall be determined by multiplying the total natural gas burned for the previous rolling 12 months by the emission factor of 1.9 lbs PE/mm cu ft, as specified in AP-42 Chapter 1.4-2 (7/98), and dividing by 2,000 pounds per ton.

- m. Emission Limitation-
54.11 TPY NO_x for B003 and B004, combined, as a rolling 12-month summation

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in A.III.2. of B003 and B004 and shall be determined by multiplying the total natural gas burned for the previous rolling 12 months by the emission factor of 100 lbs NO_x/mm cu ft, as specified in AP-42 Chapter 1.4-1 (2/98), and dividing by 2,000 lb/ton.

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- n. Emission Limitation-
45.45 TPY CO for B003 and B004, combined, as a rolling 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.2. of B003 and B004 and shall be determined by multiplying the total natural gas burned for the previous rolling 12 months by the emission factor of 84 lbs/mm cu ft, as specified in AP-42 Chapter 1.4-1 (2/98), and dividing by 2,000 lb/ton.

- o. Emission Limitation-
0.32 TPY SO₂ for B003 and B004, combined, as a rolling 12-month summation

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in A.III.2. of B003 and B004 and shall be determined by multiplying the total natural gas burned for the previous rolling 12 months by the emission factor of 0.6 lb SO₂/mm cu ft, as specified in AP-42 Chapter 1.4-2 (7/98), and dividing by 2000 lbs/ton.

- p. Emission Limitation-
5.95 TPY OC for B003 and B004, combined, as a rolling 12-month summation

Applicable Compliance Method

Compliance shall be based upon record keeping as specified in A.III.2. for B003 and B004 and shall be determined by multiplying the total natural gas burned for the previous rolling 12 months by the emission factor of 11.0 lbs OC/mm cu ft, as specified in AP-42 Chapter 1.4-2 (7/98), and dividing by 2000 lbs/ton.

VI. Miscellaneous Requirements

1. The requirements of this permit shall supercede the requirements of PTI 08-04131, issued May 17, 2000.
2. In the event the boilers identified as B003 and B004 and represented in the Permit-to-Install application #08-04334, dated and received by the Regional Air Pollution Control Agency on October 5, 2001, are removed from the site, or dismantled, and the permittee subsequently wishes to reinstall these boilers, the permittee will be required to apply for and obtain a new Permit-to-Install in accordance with OAC rule 3745-31-02(A).

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>
B003 - 89 mmBtu/hr natural gas fired steam generating unit		

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

Applicable Emissions Limitations/Control Measures	5.95 TPY OC
6.31 TPY particulate emissions	The above annual limits are based upon rolling 12-month summation See Section A.I.2.a below
0.04 lb/hour and 0.18 TPY sulfur dioxide (SO ₂)	See Section A.II.1. below
7.00 lbs/hour and 30.7 TPY nitrogen oxides (NO _x)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
0.77 lbs/hour and 3.38 TPY organic compounds (OC)	0.020 pound of particulate emissions per mmBtu actual heat input
5.88 lbs/hour and 25.8 TPY carbon monoxide (CO)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
Visible particulate emissions shall not exceed 5% opacity, as a six minute average.	
The requirements of this rule also include compliance with the requirements of OAC rule 3745-18-06(A), OAC 3745-17-10(B)(1), 40 CFR Part 60 Subpart Dc, and OAC rule 3745-31-05(D).	
Emissions from B003 and B004, combined shall not exceed:	
11.04 TPY PE, 54.11 TPY NO _x , 45.45 TPY CO,	
0.32 TPY SO ₂ , and	

2. Additional Terms and Conditions

- 2.a** Pursuant to 40 CFR Part 60 Subpart Dc, no SO₂ emission limitation has been developed for this emissions unit because it burns only natural gas.
- 2.b** The hourly 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.c** The PTI application for these two new natural gas boilers, identified as emissions units B003 and B004, states the installation and subsequent operation is to be temporary, operating in place of existing boilers natural gas/no.2 oil/used oil boilers B001 and B002 for maintenance and repair work. Except for start-up and shut-down, no more than two of the four boilers, i.e., B001, B002, B003, and B004, shall operate at the same time. The net change in emissions if both B003 and B004 are placed in operation and B001 and B002 are shut down are as follows:

<u>Pollutant</u>	<u>New Emissions Units B003 and B004</u>	<u>Existing Emissions* Units B001 and B002</u>	<u>Contemporaneous Increase**</u>	<u>Net Change</u>
PM	11.04	13.30	2.19	+0.07 (TPY)
SO ₂	0.32	39.21		-38.89 (TPY)
CO	45.45	15.87		+29.58 (TPY)
OC	5.95	2.65		+3.30 (TPY)
NO _x	54.11	29.21		+24.90 (TPY)

* Based upon the actual average emissions emitted during the years 1998 and 1999.

** Includes emissions increase permitted for emission unit P004 in PTI 08-3938, issued February 3, 1999.

As a result of the net change in emissions, the proposed new source installation is not a major modification and the permittee has "netted out" of Federal Prevention of Significant Deterioration requirements.

II. Operational Restrictions

- The permittee shall burn only natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet in this emissions unit.
- The maximum annual natural gas usage for emissions units B003 and B004, combined, shall not exceed 1082.2 million cubic feet based upon a rolling, 12-month summation of the natural gas usage rates.

To ensure enforceability during the first 12-calendar months of operation following issuance of this permit, the permittee shall not exceed the natural gas usage level specified in the following table for emissions units B003 and B004:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Natural Gas Usage (cubic feet)</u>
1	90,183,333.33
1-2	180,366,666.7
1-3	270,550,000.0
1-4	360,733,333.3
1-5	450,916,666.7

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1-6	541,100,000.0
1-7	631,283,333.3
1-8	721,466,666.7
1-9	811,650,000.0
1-10	901,833,333.3
1-11	992,016,666.7
1-12	1,082,200,000.0

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual natural gas usage limitation shall be based upon a rolling, 12-month summation of the natural gas usage figures.

3. Emissions units B003 and/or B004 shall only be placed in operation when emissions units B001 and B002 are shutdown for maintenance and repairs.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The natural gas usage for each month.
 - b. During the first 12 calendar months of operation following issuance of this permit, the cumulative natural gas usage for each calendar month.
 - c. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the natural gas usage rates.
 - d. The rolling, 12-month summation of emission rates for B003 and B004, combined, for each of the following pollutants: particulates, NO_x, CO, SO₂, and OC.
2. For each day during which the permittee burns a fuel other than natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports, in accordance with Section A.1.c. of the General Terms and Conditions, and shall include the following information:

Emissions Unit ID: B004

- a. An identification of each day when a fuel other than natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet was burned in this emissions unit.
 - b. For the first 12 calendar months of operation following the issuance of this permit, an identification of each month during which the cumulative natural gas usage levels exceeded the maximum allowable cumulative natural gas usage rates, and the actual cumulative natural gas usage rates for each such month.
 - c. Beginning after the first 12 calendar months of operation following the issuance of this permit, an identification of each month during which the rolling, 12-month summation of the natural gas usage rates exceeded the allowable rolling, 12-month summation, and the actual rolling, 12-month summation of the natural gas usage rates for each such month.
 - d. An identification of each month during which the rolling, 12-month summation of emission rates for B003 and B004, combined, exceeded the allowable rolling 12-month summation of emission rates for each of the following pollutants: particulates, SO₂, NO_x, CO, and OC, and the actual rolling, 12-month summation of emission rates for B003 and B004, combined, for each such month.
2. The permittee shall submit annual reports which summarize the following information:
- a. The actual 12-month summation of the natural gas usage rates, in million cubic feet.
 - b. The actual 12-month summation of emission rates for B003 and B004, combined, for each of the following pollutants: particulates, NO_x, CO, SO₂, and OC, in tons.

These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

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-
0.020 pound of particulate emissions (PE) per mmBtu actual heat input

Applicable Compliance Method-
 Compliance shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0700 mm cu ft/hour) by the emission factor of 1.9 lbs PE/mm cu ft as specified in AP-42 Chapter 1.4-2 (7/98) and dividing by the maximum hourly heat input capacity of the emissions unit (72.0 mmBtu/hour).

- b. Emission Limitation -
6.31 TPY Particulate Emissions (PE)

Applicable Compliance Method -

As long as compliance is maintained with the 0.020 lb PE/mmBtu emission limitation, compliance with the annual limitation will be shown [the annual emission limitation was calculated by multiplying the 0.020 lb PE/mmBtu limitation by the emissions unit maximum heat input capacity (72.0 mmBtu/hr), and then multiplying by 8760 hr/yr and dividing by 2000 lb/ton].

- c. Emission Limitation -
0.04 lb/hr SO₂

Applicable Compliance Method -

Compliance shall be determined by multiplying the emission factor for natural gas (0.6 lb SO₂/mm cu ft) as specified in AP-42 Chapter 1.4-2 (7/98), by the maximum hourly gas burning capacity (0.0700 mm cu ft/hour) of the emissions unit.

- d. Emission Limitation -
0.18 TPY SO₂

Applicable Compliance Method -

As long as compliance is maintained with the hourly SO₂ emission limitation, compliance with the annual limitation will be shown (the annual emission limitation was calculated by multiplying the 0.04 lb SO₂/hr limitation by 8760 hr/yr and dividing by 2000 lb/ton).

- e. Emission Limitation-
7.00 lbs/hour NO_x

Applicable Compliance Method -

Compliance shall be determined by multiplying the emission factor for natural gas (100 lbs NO_x/mm cu ft) as specified in AP-42 Chapter 1.4-1 (2/98), by the maximum hourly gas burning capacity (0.0700 mm cu ft/hour) of the emissions unit.

- f. Emission Limitation -
30.7 TPY NO_x

Applicable Compliance Method -

As long as compliance is maintained with the hourly NO_x emission limitation, compliance with the annual limitation will be shown (the annual emission limitation was calculated by multiplying the 7.00 lbs NO_x/hr limitation by 8760 hr/yr and dividing by 2000 lb/ton).

- g. Emission Limitation -
0.77 lb/hour OC

Applicable Compliance Method -

Compliance shall be determined by multiplying the emission factor for natural gas (11.0 lbs OC/mm cu ft) as specified in AP-42 Chapter 1.4-2 (7/98), by the maximum hourly gas burning capacity (0.0700 mm cu ft/hour) of the emissions unit.

AE Staley Manufacturing
PTI Application: **08 04224**
Issued

Facility ID: **0857041333**

Emissions Unit ID: B004

- h. Emission Limitation -
3.38 TPY OC

Applicable Compliance Method -

As long as compliance is maintained with the hourly OC emission limitation, compliance with the annual limitation will be shown (the annual emission limitation was calculated by multiplying the 0.77 lb OC/hr limitation by 8760 hr/yr and dividing by 2000 lb/ton).

- i. Emission Limitation -
5.88 lbs/hour CO

Applicable Compliance Method -

When burning natural gas, compliance shall be determined by multiplying the emission factor for natural gas (84 lbs CO/mm cu ft) as specified in AP-42 Chapter 1.4-1 (2/98), by the maximum hourly gas burning capacity (0.0700 mm cu ft/hour) of the emissions unit.

- j. Emission Limitation -
25.8 TPY CO

Applicable Compliance Method -

As long as compliance is maintained with the hourly CO emission limitation, compliance with the annual limitation will be shown (the annual emission limitation was calculated by multiplying the 5.88 lbs CO/hr limitation by 8760 hr/yr and dividing by 2000 lb/ton).

- k. Emission Limitation -
5% opacity, as a 6-minute average

Applicable Compliance Method-

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the tests and procedures specified in USEPA Reference Method 9.

- l. Emission Limitation-
11.04 TPY Particulate Emissions for B003 and B004, combined, as a rolling 12-month summation

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.2. of B003 and B004 and shall be determined by multiplying the total natural gas burned for the previous rolling 12 months by the emission factor of 1.9 lbs PE/mm cu ft, as specified in AP-42 Chapter 1.4-2 (7/98), and dividing by 2,000 pounds per ton.

- m. Emission Limitation-

54.11 TPY NO_x for B003 and B004, combined, as a rolling 12-month summation

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in A.III.2. of B003 and B004 and shall be determined by multiplying the total natural gas burned for the previous rolling 12 months by the emission factor of 100 lbs NO_x/mm cu ft, as specified in AP-42 Chapter 1.4-1 (2/98), and dividing by 2,000 lb/ton.

- n. Emission Limitation-
45.45 TPY CO for B003 and B004, combined, as a rolling 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.2. of B003 and B004 and shall be determined by multiplying the total natural gas burned for the previous rolling 12 months by the emission factor of 84 lbs/mm cu ft, as specified in AP-42 Chapter 1.4-1 (2/98), and dividing by 2,000 lb/ton.

- o. Emission Limitation-
0.32 TPY SO₂ for B003 and B004, combined, as a rolling 12-month summation

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in A.III.2. of B003 and B004 and shall be determined by multiplying the total natural gas burned for the previous rolling 12 months by the emission factor of 0.6 lb SO₂/mm cu ft, as specified in AP-42 Chapter 1.4-2 (7/98), and dividing by 2000 lbs/ton.

- p. Emission Limitation-
5.95 TPY OC for B003 and B004, combined, as a rolling 12-month summation

Applicable Compliance Method

Compliance shall be based upon record keeping as specified in A.III.2. for B003 and B004 and shall be determined by multiplying the total natural gas burned for the previous rolling 12 months by the emission factor of 11.0 lbs OC/mm cu ft, as specified in AP-42 Chapter 1.4-2 (7/98), and dividing by 2000 lbs/ton.

VI. Miscellaneous Requirements

1. The requirements of this permit shall supercede the requirements of PTI 08-04131, issued May 17, 2000.

AE Staley Manufacturing
PTI Application: ~~08-04334~~
Issued

Facility ID: **0857041333**

Emissions Unit ID: B004

2. In the event the boilers identified as B003 and B004 and represented in the Permit-to-Install application #08-04334, dated and received by the Regional Air Pollution Control Agency on October 5, 2001, are removed from the site, or dismantled, and the permittee subsequently wishes to reinstall these boilers, the permittee will be required to apply for and obtain a new Permit-to-Install in accordance with OAC rule 3745-31-02(A).

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>
B004 - 72 mmBtu/hr natural gas fired steam generating unit		

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