



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 03-16297

Fac ID: 0370010294

DATE: 3/31/2005

Tube City LLC
Jim Shewell
300 Conshohocken State Road Ste. 200
West Conshohocken, PA 19428

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
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

cc: USEPA

NWDO



**Permit To Install
Terms and Conditions**

**Issue Date: 3/31/2005
Effective Date: 3/31/2005**

FINAL PERMIT TO INSTALL 03-16297

Application Number: 03-16297
Facility ID: 0370010294
Permit Fee: **\$375**
Name of Facility: Tube City LLC
Person to Contact: Jim Shewell
Address: 300 Conshohocken State Road Ste. 200
West Conshohocken, PA 19428

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1344 Bowman Street
Mansfield, Ohio**

Description of proposed emissions unit(s):
Lime receiving and handling system.

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. 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 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 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. Records Retention Requirements

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.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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 verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction 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. 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 emissions unit(s) that is (are) served by such control system(s).

6. 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.

7. 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.

8. 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.

9. 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

Tube City LLC

PTI Application: 03-16297

Issued: 3/31/2005

Facility ID: 0370010294

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.

10. 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.

11. Applicability

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.

12. 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.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 emissions unit(s) covered by this permit.

6

Tube City LLC

PTI Application: 03-16297

Issued: 3/31/2005

Facility ID: 0370010294

Tube City LLC
PTI Application: 03-16297
Issued: 3/31/2005

Facility ID: 0370010294

14. 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.

15. 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.

B. 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	30.9

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>	
P901 - Lime Receiving, Storage, and Handling System (includes lime receiving/storage building, enclosed lime conveyor, lime storage silo, charge bucket building) Modification of PTI #03-13088 originally issued on 12-21-98 and modified on 7-24-03 and 9-4-03. Modification to add dolomitic lime storage silo and conveyor	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07 (B)
		OAC rule 3745-17-08(B)
		OAC rule 3745-17-07(A)
		OAC rule 3745-17-11(B)

Applicable Emissions
Limitations/Control Measures

See A.2.b

See A.2.c

See A.I.2.a.

See A.2.c

Lime Receiving/Storage Building
Stack:

0.01 grain/dscf particulate
emissions gr PE/dscf), 4.8 ton
PE/yr

Visible PE shall not exceed 0%
opacity as a six-minute average
from lime receiving/storage
building stack

Charge Bucket Building Stack

0.01 gr PE/dscf, 22.5 ton PE/yr

Visible PE shall not exceed 0%
opacity as a six-minute average
from charge bucket building stack

Lime Storage Silo Stack

0.01 gr PE/dscf, 0.2 ton PE/yr

Visible PE shall not exceed 0%
opacity as a six-minute average
from lime storage silo stack

Fugitive Emissions

3.4 ton/yr PE

Visible fugitive particulate
emissions from the lime
receiving/storage building and the
charge bucket building shall not
exceed 20% opacity as a 3 minute
average.

2. Additional Terms and Conditions

2.a "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the following:

- i. Use of baghouse for PE control on the lime receiving/storage building with a maximum outlet concentration of 0.01 gr PE/dscf of exhaust gas;
- ii. Use of baghouse for PE control on the bucket charge building with a maximum outlet concentration of 0.01 gr PE/dscf of exhaust gas;
- iii. Use of baghouse for PE control on the lime storage silo with a outlet concentration of 0.01 gr PE/dscf of exhaust gas;
- iv. Use of enclosure vented to baghouse (lime receiving/storage building baghouse) for lime conveyor (see A.2.a.i for baghouse requirements);
- v. The following particulate emission operations shall be contained within building enclosures:
 - (a) lime unloading
 - (b) lime transfer to grizzly feeder
 - (c) enclosed conveyor drop-out to charge bucket

2.b The requirements of this rule are equivalent to or less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

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

B. Operational Restrictions

1. The pressure drop across the Lime Receiving/Storage Building Baghouse, the Bucket Charge Building Baghouse, and the Lime Storage Silo Baghouse shall be maintained within the range of 2.0 to 6.0 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop

across the baghouses controlling this emissions unit while it is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and,
 - e. any corrective actions taken to eliminate the abnormal visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

D. Reporting Requirements

1. In accordance with the General Terms and Conditions of this permit, the permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across a baghouse controlling this emissions unit the did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any abnormal visible fugitive particulate emissions were observed from the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (the Northwest District Office) by January 31 and July 31 of each

year and shall cover the previous 6-month period.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation
0.01 gr PE/dscf, 4.8 ton/yr PE from the lime receiving/storage building stack

Applicable Compliance Method

The gr/dscf limitation was established in accordance with the baghouse manufacturer's guaranteed outlet concentration. If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

The annual emission limitation was established by the multiplying the maximum outlet concentration of 0.01 gr/dscf, a maximum baghouse air flow of 12,772 dscfm, a conversion factor of 60 minutes/hr, a conversion factor of 1.0 lbs PE/7000 grains, a maximum operating schedule of 8760 hrs/yr, and a conversion factor of 2000 lbs/ton. Therefore provided compliance is shown with the gr/dscf limitation, compliance with the annual limitation will be assumed.

- b. Emission Limitation
0.01 gr PE/dscf, 22.5 ton/yr PE from the charge bucket building stack

Applicable Compliance Method

The gr/dscf limitation was established in accordance with the baghouse manufacturer's guaranteed outlet concentration. If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

The annual emission limitation was established by the multiplying the maximum outlet concentration of 0.01 gr/dscf, a maximum baghouse air flow of 60,000 dscfm, a conversion factor of 60 minutes/hr, a conversion factor of 1.0 lbs PE/7000 grains, a maximum operating schedule of 8760 hrs/yr, and a conversion factor of 2000 lbs/ton. Therefore provided compliance is shown with the gr/dscf limitation, compliance with the annual limitation will be assumed.

- c. Emission Limitation
0.01 gr PE/dscf, 0.2 ton/yr PE from the lime storage silo stack

Applicable Compliance Method

Emissions Unit ID: **P901**

The gr/dscf limitation was established in accordance with the baghouse manufacturer's guaranteed outlet concentration. If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

The annual emission limitation was established by the multiplying the maximum outlet concentration of 0.01 gr/dscf, a maximum baghouse air flow of 624 dscfm, a conversion factor of 60 minutes/hr, a conversion factor of 1.0 lbs PE/7000 grains, a maximum operating schedule of 8760 hrs/yr, and a conversion factor of 2000 lbs/ton. Therefore provided compliance is shown with the gr/dscf limitation, compliance with the annual limitation will be assumed.

- d. Emission Limitation
 3.4 tons PE/yr (fugitive)

Applicable Compliance Method

The permittee shall demonstrate compliance with the emission limitation by employing the following table for calculating fugitive emissions:

Emission Point	Equipment Type	Capacity (tons/hr)	Emission Factor*	Capture Efficiencies
lime unloading into building	transfer point	2.4	1.5 lbs/ton (uncontrolled)	Partial enclosure - 60% Baghouse - 80%
lime transfer to grizzly feeder	transfer point	2.4	2.2 lbs/ton (uncontrolled)	Partial enclosure - 60% Baghouse - 80%
grizzly feeder to enclosed conveyor	transfer point	2.4	0.022 lbs/ton (controlled)	accounted for in the emission factor
lime transfer to enclosed conveyor	transfer point	1.2	0.022 lbs/ton (controlled)	accounted for in the emission factor

*The emission factors used are from AP.42, Table 11.17-4 (February 1998)

- e. Emission Limitation
 Visible PE shall not exceed 0% opacity as a six-minute average from lime receiving/storage building stack

Applicable Compliance Method

If required compliance shall be demonstrated in accordance with USEPA Reference

14

Tube C

PTI A

Issued: 3/31/2005

Emissions Unit ID: **P901**

Method 9 of 40 CFR Part 60, Appendix A.

Tube (
PTI A
Issued: 3/31/2005

Emissions Unit ID: **P901**

- f. Emission Limitation
Visible PE shall not exceed 0% opacity as a six-minute average from charge bucket building stack
- Applicable Compliance Method
If required compliance shall be demonstrated in accordance with USEPA Reference Method 9 of 40 CFR Part 60, Appendix A.
- g. Emission Limitation
Visible PE shall not exceed 0% opacity as a six-minute average from lime storage silo stack
- Applicable Compliance Method
If required compliance shall be demonstrated in accordance with USEPA Reference Method 9 of 40 CFR Part 60, Appendix A.
- h. Emission Limitation
Visible fugitive particulate emissions from the lime receiving/storage building and the charge bucket building shall not exceed 20% opacity as a 3 minute average.
- Applicable Compliance Method
If required compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B).

F. Miscellaneous Requirements

None