



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION
WYANDOT COUNTY**

CERTIFIED MAIL

Street Address:

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

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Lazarus Gov.
Center

Application No: 03-07409

DATE: 7/11/2002

National Lime and Stone Company
Dan Mapes
P.O. Box 120
Findlay, OH 458390120

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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

NWDO



**Permit To Install
Terms and Conditions**

**Issue Date: 7/11/2002
Effective Date: 7/11/2002**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 03-07409

Application Number: 03-07409
APS Premise Number: 0388000004
Permit Fee: **\$0**
Name of Facility: National Lime and Stone Company
Person to Contact: Dan Mapes
Address: P.O. Box 120
Findlay, OH 458390120

Location of proposed air contaminant source(s) [emissions unit(s)]:
**North Patterson Street
Carey, Ohio**

Description of proposed emissions unit(s):
Administrative modification to PTI 03-07409m2, issued 6/20/02. Modification involves corrections to the list of emission points and replacing PD monitoring with VE checks.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

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 Record keeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - 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 record keeping 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 record keeping 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, record keeping, 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

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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.

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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.

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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 Record keeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or Record keeping 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 Record keeping 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

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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

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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>
OC	23.30
NO _x	7.01
CO	5.87
Fugitive PE	2.70
Stack PE	14.75

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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>
Natural gas-fired 16 mmBtu/hr pelletized limestone dryer (Administrative modification to PTI 03-07409, issued June 20, 2002. Emission unit is being modified to replace pressure drop monitoring with VE monitoring.)	OAC rule 3745-31-05(A)(3)	use of a baghouse (see A.I.2.a) 5.32 lbs organic compounds (OC)/hour, 23.30 tons OC/year 1.60 lbs nitrogen oxides (NO _x)/hour, 7.01 tons NO _x /year 1.34 lbs carbon monoxide (CO)/hour, 5.87 tons CO/year 2.06 lbs particulate emissions (PE)/hour, 9.02 tons PE/year (see A.I.2.a) Visible particulate emissions shall not exceed 0% opacity, as a six-minute average No visible particulate emissions from building enclosure
	OAC rule 3745-17-11(A)	See A.I.2.b.
	OAC rule 3745-17-07(A)	See A.I.2.b.

2. Additional Terms and Conditions

- 2.a Best available technology (BAT) for this emissions unit has been determined to be use of total building enclosure and a baghouse control system with a maximum outlet concentration of 0.008 gr/dscf.

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

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit and for any visible fugitive particulate 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 color of the emissions (include the location for fugitive emissions);
 - b. The total duration of any visible emission incident; and
 - c. Any corrective actions taken to minimize or eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit semiannual written reports that (a) identify all days during which visible particulate emissions from the baghouse stack serving this emissions unit and/or any visible fugitive particulate emissions from the egress points were observed, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation

5.32 lbs OC/hour and 23.30 tons OC/year

Applicable Compliance Method

The hourly OC emission limitation is based on the emission unit's potential to emit*. Therefore, no hourly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation. If required, compliance with the lb/hr limitation shall be determined in accordance with the test methods and procedures of 40 CFR Part 60, Appendix A, Methods 1-4, and 18, 25 or 25A.

*The potential to emit for the pelletized limestone dryer is based on a maximum emission rate of 5.32 lbs VOC per hour developed through stack testing.

The permittee shall demonstrate compliance with the annual limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance will also be shown with the annual limitation.

b. **Emission Limitation**

1.60 lbs NO_x/hour and 7.01 tons NO_x/year

Applicable Compliance Method

The permittee shall demonstrate compliance with the hourly limitation by multiplying an emission factor of 100 lb NO_x/mmscf divided by 1000 Btu/scf [AP-42, Chapter 1, Table 1.4-1 (7/98)], then multiplying by a maximum firing capacity of 16 mmBtu/hr. If required, compliance with the lb/hr limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4 and 7.

The ton/yr limitation was developed by multiplying the lb/hr limitation by a maximum operating schedule of 8760 hr/year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. **Emission Limitation**

1.34 lbs CO/hour and 5.87 tons CO/year

Applicable Compliance Method

The permittee shall demonstrate compliance with the hourly limitation by multiplying an emission factor of 84 lb CO/mmscf divided by 1000 Btu/scf [AP-42, Chapter 1, Table 1.4-1 (7/98)], then multiplying by a maximum firing capacity of 16 mmBtu/hr. If required, compliance with the lb/hr limitation shall be determined in accordance with the test

Emissions Unit ID: **P023**

methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4 and 10 or 10B.

The ton/yr limitation was developed by multiplying the lb/hr limitation by a maximum operating schedule of 8760 hr/year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- d. **Emission Limitation**
 2.06 lbs PE/hour and 9.02 tons PE/year

Applicable Compliance Method

The permittee shall demonstrate compliance with the hourly limitation by multiplying a maximum outlet grain loading of 0.008 gr/dscf by the maximum volumetric air flow (30,000 acfm), using the appropriate conversion factors of 7000 grains/lb and 60 minutes/hr. If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1- 5.

The permittee shall demonstrate compliance with the annual limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance will also be shown with the annual limitation.

- e. **Emissions Limitation**
 Visible particulate emissions shall not exceed 0% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.

- f. **Emission Limitation:**
 No visible particulate emissions from building enclosure

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 22.

VI. Miscellaneous Requirements

None

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PTI A

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Emissions Unit ID: **P023**

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>
Natural gas-fired 16 mmBtu/hr pelletized limestone dryer (Administrative modification to PTI 03-07409, issued June 20, 2002. Emission unit is being modified to replace pressure drop monitoring with VE monitoring.)	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping 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>
Pellet Plant crushing, screening, conveying and material handling operations- (1) wood flour surge bin, (1) limestone surge bin, (1) recycle surge bin, (1) turbulator, (1) pelletizer, (3) binder tanks, (1) crusher, (1) dried stone check screen with five baghouses (Administrative modification to PTI 03-7409, issued June 20, 2002. Emission unit is being modified to correct the list of emission points and replacing the pressure drop monitoring with VE monitoring).	OAC rule 3745-31-05(A)(3)	use of building enclosure vented to baghouse system (see A.I.2.a) 1.15 lbs particulate emissions (PE)/hr 5.03 tons PE/yr (see A.I.2.d.) No visible particulate emissions from building enclosure (see A.I.2.b.) Visible particulate emissions from baghouse stacks shall not exceed 0% opacity, as a six-minute average (see A.I.2.b.)
	OAC rule 3745-17-11 (B)	See A.I.2.c.
	OAC rule 3745-17-07 (A)	See A.I.2.c.

2. Additional Terms and Conditions

- 2.a Best available technology (BAT) for this emissions unit has been determined to be use of total building enclosure vented to a baghouse control system with a maximum outlet

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PTI A

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Emissions Unit ID: P024

concentration of 0.01 gr/dscf. The baghouse control system is comprised of five baghouses (See A.I.2.b.and A.V.1.a).

- 2.b** Visible particulate emissions and BAT requirements for the material handling operations shall comply with the following:

Emissions Point (company ID)	Equipment Type	BAT Control Requirements	Opacity Limitations
Wood flour surge bin to SC116	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
SC116 to Munson Mixer	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
Limestone Surge Bin to SC124	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
SC124 to Munson Mixer	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
Munson Mixer to SC126	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
SC126 to Turbulator	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
Turbulator to Pelletizer	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
Pelletizer to C17	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
C17 to Pellet Dryer	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
Dryer to Vibrating C25	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building

Nation**PTI A****Modification Issued: 7/11/2002**Emissions Unit ID: **P024**

Vibrating C25 to C26	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
C26 to Elevator	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
Elevator to Triple Deck Pellet Screen	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
Triple Deck Pellet Screen	screening	building enclosure and baghouse	0%-stack no visible emissions from building
Elevator to Dried Stone Check Screen	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
Dried Stone Check Screen	screening	building enclosure and baghouse	0%-stack no visible emissions from building
Dried Stone Check Screen to Triple Deck Pellet Screen	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
Dried Stone Check Screen to Stedman Crusher	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building
Stedman Crusher to C-17	crushing	building enclosure and baghouse	0%-stack no visible emissions from building
Dried Stone Check Screen to SC29	transfer point	building enclosure and baghouse	0%-stack no visible emissions from building

2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).

2.d All particulate emissions are assumed to be particulate matter less than 10 μm in size (PM_{10}).

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the

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weather conditions allow, for any visible particulate emissions from the baghouse stacks (Baghouses P024-1BH, P024-2BH, P024-3BH, P024-4BH, and P024-5BH) serving this emissions unit and for any visible fugitive particulate 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 color of the emissions (include the location for fugitive emissions);
- b. The total duration of any visible emission incident; and
- c. Any corrective actions taken to minimize or eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which visible particulate emissions from the baghouse stacks serving this emissions unit and/or any visible fugitive particulate emissions from the egress points were observed, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- a. **Emission Limitation:**
1.15 lbs PE/hour from baghouse stack

Applicable Compliance Method:

The permittee shall demonstrate compliance in accordance with the following calculation:

PE will be controlled by a baghouse control system consisting of five baghouses. The five baghouse stacks will result in a combined emission of 1.15 lbs PE/hr as determined in accordance with the following:

$$\text{PE}(\text{baghouse stack}) = (\text{P024-1BH}) + (\text{P024-2BH}) + (\text{P024-3BH}) + (\text{P024-4BH}) + (\text{P024-5BH})$$

$$\begin{aligned} \text{P024-1BH} &= \text{PE from all material handling operations not controlled by other baghouses} \\ &= (0.01 \text{ gr/ft}^3)(5625 \text{ ft}^3/\text{min})(60 \text{ min/hr})(\text{lb}/7000 \text{ gr}) \\ &= 0.48 \text{ lb PE/hr} \end{aligned}$$

*The maximum volumetric air flow for this baghouse is 7500 ft³/min. 5625 ft³/min (75%) is dedicated to P024-1BH and 1875 ft³/min is dedicated to emission unit P901.

$$\begin{aligned} \text{P024-2BH} &= \text{PE from dried stone check screen of P024} \\ &= (0.01 \text{ gr/ft}^3)(1600 \text{ ft}^3/\text{min})(60 \text{ min/hr})(\text{lb}/7000 \text{ gr}) \\ &= 0.14 \text{ lb PE/hr} \end{aligned}$$

$$\begin{aligned} \text{P024-3BH} &= \text{PE from Stedman crusher of P024} \\ &= (0.01 \text{ gr/ft}^3)(1600 \text{ ft}^3/\text{min})(60 \text{ min/hr})(\text{lb}/7000 \text{ gr}) \\ &= 0.14 \text{ lb PE/hr} \end{aligned}$$

$$\begin{aligned} \text{P024-4BH} &= \text{PE from limestone surge bin of P024} \\ &= (0.01 \text{ gr/ft}^3)(2880 \text{ ft}^3/\text{min})(60 \text{ min/hr})(\text{lb}/7000 \text{ gr}) \\ &= 0.25 \text{ lb PE/hr} \end{aligned}$$

$$\begin{aligned} \text{P024-5BH} &= \text{PE from recycle surge bin of P024} \\ &= (0.01 \text{ gr/ft}^3)(1600 \text{ ft}^3/\text{min})(60 \text{ min/hr})(\text{lb}/7000 \text{ gr}) \\ &= 0.14 \text{ lb PE/hr} \end{aligned}$$

$$\text{PE (baghouse stack)} = (0.48 \text{ lb PE/hr}) + (0.14 \text{ lb PE/hr}) + (0.14 \text{ lb PE/hr}) + (0.25 \text{ lb PE/hr}) + (0.14 \text{ lb PE/hr}) = 1.15 \text{ lb PE/hr}$$

If required the permittee shall demonstrate compliance by testing in accordance with 40 CFR 60, Appendix A, Methods 1-5.

- b. **Emission Limitation:**
5.03 tons PE/year from baghouse stacks

Applicable Compliance Method:

The tons/yr limitation was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- c. **Emission Limitation:**
No visible particulate emissions from building enclosures

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be

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determined in accordance with 40 CFR Part 60, Appendix A, Method 22.

d. **Emission Limitation:**

Visible particulate emissions from baghouse stacks shall not exceed 0% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.

VI. Miscellaneous Requirements

None

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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>
Pellet Plant crushing, screening, conveying and material handling operations- (1) wood flour surge bin, (1) limestone surge bin, (1) recycle surge bin, (1) turbulator, (1) pelletizer, (3) binder tanks, (1) crusher, (1) dried stone check screen with five baghouses (Administrative modification to PTI 03-7409, issued June 20, 2002. Emission unit is being modified to correct the list of emission points and replacing the pressure drop monitoring with VE monitoring).	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

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III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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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>
Pelletizing plant loadout operations- (2) bucket elevators, (4) screw conveyors, (3) 275-ton product storage bins, and (3) loadout spouts (Administrative modification to PTI 03-7409, issued June 20, 2002. Emission unit is being modified to replace the pressure drop monitoring with VE monitoring).	OAC rule 3745-31-05(A)(3)	Control requirements (see A.I.2.a) <u>Baghouse stack:</u> 0.16 lb particulate emissions (PE)/hour, 0.70 ton PE/year Visible particulate emissions shall not exceed 0% opacity, as a six-minute average from baghouse stack <u>Fugitive emissions:</u> 5.40 tons PE/year Visible particulate emissions shall not exceed 5% opacity as a six-minute average from partial enclosure for truck/railcar loadout operations
	OAC rule 3745-17-08(B)	See A.I.2.b.
	OAC rule 3745-17-11(B)(2)	See A.I.2.b.
	OAC rule 3745-17-07(A)	See A.I.2.b.
	OAC rule 3745-17-08(B)	See A.I.2.b.

2. Additional Terms and Conditions

- 2.a** The "Best Available Technology" (BAT) control requirements for emissions unit P901 have been determined to be:
- i. Use of a partial building enclosure and telescoping chutes for truck/railcar loadout operations; and
 - ii. Use of baghouse with a maximum outlet concentration of 0.01 gr/dscf for bucket elevators, screw conveyors, and product bins.
- 2.b** 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.c** All PE from the baghouse are considered to be PM₁₀.

II. Operational Restrictions

1. The maximum annual material throughput for emissions unit P901 shall not exceed 72,000 tons per year.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain monthly records of the amount of material throughput for this emissions unit (in tons per month and total tons, to date for the calendar year).
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit and for any visible fugitive particulate 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 color of the emissions (include the location for fugitive 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 minimize or eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which visible particulate emissions from the baghouse stack serving this emissions unit and/or any visible fugitive particulate emissions from the egress points were observed, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual deviation (excursion) reports which identify any exceedances of the annual material throughput limitation, as well as the corrective actions that were taken to achieve compliance. If no deviations occurred during the calendar year, the permittee shall submit an annual report, which states no deviations occurred during that year. 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 limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. **Emission Limitation**
0.16 lb PE/hr and 0.70 ton PE/year from baghouse

Applicable Compliance Method

The permittee shall demonstrate compliance with the hourly limitation by multiplying a baghouse maximum outlet concentration of 0.01 gr/dscf, a maximum volumetric air flow rate of 1875 dscf*/min and conversion factors of 7000 grains/lb and 60 min/hr. If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1- 5.

*The maximum volumetric air flow for this baghouse is 7500 ft³/min. 1875 ft³/min (25%) is dedicated to P901 and 5625 ft³/min is dedicated to emission unit P024.

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The ton per year limitation was developed by multiplying the lb/hr allowable mass emission rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

b. **Emission Limitation**

Visible particulate emissions shall not exceed 0% opacity, as a six-minute average from baghouse stack

Applicable Compliance Method

If required, compliance with the visible emission limitation specified above shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.

c. **Emission Limitation**

5.40 tons PE/year (fugitive)

Applicable Compliance Method

The permittee shall demonstrate compliance with this emission limitation by multiplying an emission factor of 1.5 lbs PM/ton handled [AP-42, Chapter 11.17, Table 11.17-4 (2/98)], the maximum annual material throughput of 72,000 tons/year and a control efficiency of 95% obtained from the use of a partial enclosure and telescoping chutes.

d. **Emission Limitation**

Visible particulate emissions shall not exceed 5% opacity, as a six-minute average from partial enclosure for truck/railcar loadout

Applicable Compliance Method

If required, compliance with the visible emission limitation specified above shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.

VI. Miscellaneous Requirements

None

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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>
Pelletizing plant loadout operations- (2) bucket elevators, (4) screw conveyors, (3) 275-ton product storage bins, and (3) loadout spouts with baghouse (Administrative modification to PTI 03-7409, issued June 20, 2002. Emission unit is being modified to replace the pressure drop monitoring with VE monitoring).	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

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None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None