

Synthetic Minor Determination and/or Netting Determination

Permit To Install: **03-17221**

A. Source Description

Huron Lime, Inc., owns and operates a lime manufacturing facility located in Huron, Ohio (Erie County). The lime manufacturing facility consists of three lime kilns each equipped with a settling chamber and a wet scrubber in series for emissions control.

B. Facility Emissions and Attainment Status

Based on stack testing done in June 2005, it was determined that potential HCl emissions from the three lime kilns combined were greater than the MACT major threshold of 10 tons per year for an individual HAP. The permittee has proposed to physically modify the wet scrubbers controlling the three kilns to increase control efficiency. The permittee is also proposing to restrict lime production for the purpose of limiting hazardous air pollutant (HAP) emissions, specifically hydrogen chloride (HCl), below the Maximum Achievable Control Technology (MACT) major source threshold of 10 tons per year. This PTI will incorporate the permittee's proposal into federally enforceable terms and conditions limiting the potential to emit of HCl.

For non-HAP pollutants, the facility's potential, uncontrolled emissions for PE, NOx, CO and SO2 are greater than major source thresholds under Title V and PSD. The permittee's proposal does not constitute an increase in emissions and therefore major new source review is not applicable to this PTI. The facility is located in Erie County, which is in attainment for all criteria pollutants.

C. Source Emissions

For purposes of this permit action the facility emissions and the source emissions are the same, see Facility Emissions above for details.

D. Conclusion

PTI #03-17221 will serve to limit the HAP (HCl) emissions from the three lime kilns (P901, P902, and P903, combined) to 9.9 tons per year (as a rolling 12-month average) based on lime production restrictions and enforceable control requirements. With the issuance of this PTI, the facility will not be subject to 40 CFR Part 63, Subpart AAAAA.



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL
ERIE COUNTY**

CERTIFIED MAIL

Street Address:

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

Mailing Address:
Lazarus Gov.
Center

Application No: 03-17221

Fac ID: 0322010062

DATE: 11/7/2006

Huron Lime, Inc.
Richard Lively
100 Meeker Street
Huron, OH 44839

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$3750** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern

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

CC: USEPA

NWDO

Toledo Metro Area Council of Gov.

MI

PUBLIC NOTICE

**ISSUANCE OF DRAFT PERMIT TO INSTALL 03-17221 FOR AN AIR CONTAMINANT SOURCE FOR
Huron Lime, Inc.**

On 11/7/2006 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Huron Lime, Inc.**, located at **100 Meeker Street, Huron, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 03-17221:

to be determined by county engineer.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Don Waltermeyer, Ohio EPA, Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402
[(419)352-8461]



**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 03-17221

Application Number: 03-17221
Facility ID: 0322010062
Permit Fee: **To be entered upon final issuance**
Name of Facility: Huron Lime, Inc.
Person to Contact: Richard Lively
Address: 100 Meeker Street
Huron, OH 44839

Location of proposed air contaminant source(s) [emissions unit(s)]:
**100 Meeker Street
Huron, Ohio**

Description of proposed emissions unit(s):
To be determined by county engineer.

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

Huron Lime, Inc.

Facility ID: 0322010062

PTI Application: 03-17221

Issued: To be entered upon final issuance

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

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reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, 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. If this permit is for an emissions unit located at a Title V facility, then 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.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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,

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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 re-issuance, or modification
- 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, 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 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.

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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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

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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 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 and the State and by citizens (to the extent allowed by section 304 of the Act) 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

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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 is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

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13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

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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 shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, 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. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of

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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)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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.

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

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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> |
|------------------|----------------------|
| HCl | 9.43 |

Huron Lime, Inc.

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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.

Operations, Property, and/or Equipment - (P901) - modification to rotary lime kiln no. 1, with settling chamber and wet scrubber (with quench unit) in series (modification of an existing unit to establish synthetic minor restrictions for HCl)

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|--------------------------------------|--|
| OAC rule 3745-31-05(C) | 0.12 lb hydrogen chloride (HCl)/ton lime produced, for emissions unit P901 3.78 tons HCl per rolling, 12- month period for emission units P901 See A.I.2.a and A.II.1. |
| OAC rule 3745-17-11(B) | 100 lbs particulate emissions (PE)/hour, for emissions units P901, P902, and P903, combined |
| OAC rule 3745-17-07(A) | Visible PE from the stack shall not exceed 20% opacity, as a six-minute average, except as otherwise provided by rule. |
| OAC rule 3745-18-28(F) | 4.0 lbs SO ₂ /ton of lime produced, from emissions units P901, P902, and P903, combined |
| OAC rule 3745-17-08(A) | None. See A.I.2.b. |
| OAC rule 3745-17-07(B) | None. See A.I.2.c. |

2. Additional Terms and Conditions

- 2.a This permit establishes a federally enforceable emission limitation of 3.78 tons HCl per rolling, 12-month period for purposes of avoiding applicability of Maximum Achievable Control Technology (MACT) regulations. The federally enforceable emission limitation is based on the lbs HCl/ton emission limitation and a lime production restriction (See A.II.1).
- 2.b This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC 3745-17-08(B) do not apply to this emissions unit.
- 2.c Pursuant to OAC rule 3745-17-07(B)(11), OAC rule 3745-17-07(B)(1) does not

apply because OAC rule 3745-17-08 is not applicable.

II. Operational Restrictions

1. The maximum amount of lime produced in emissions unit P901 (kiln #1) shall not exceed 63,072 tons of lime per year, based upon a rolling, 12-month summation of the monthly production rates.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the lime production rates specified in the following table:

| <u>Month(s)</u> | <u>Lime Production (tons)</u> |
|-----------------|-------------------------------|
| 1-1 | 10,950 |
| 1-2 | 21,900 |
| 1-3 | 32,850 |
| 1-4 | 43,800 |
| 1-5 | 54,750 |
| 1-6 | 63,072 |
| 1-7 | 63,072 |
| 1-8 | 63,072 |
| 1-9 | 63,072 |
| 1-10 | 63,072 |
| 1-11 | 63,072 |
| 1-12 | 63,072 |

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual lime production limitations shall be based upon a rolling, 12-month summation of the monthly lime production rates.

2. Water utilized in the scrubber shall only be obtained from settling ponds that are not undergoing excavation operations.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to continuously monitor the the following parameters during operation of this emissions unit:

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- a. the pressure drop, in inches of water, across the scrubber;
 - b. the water flow rate, in gallons per minute, across the scrubber. For this emissions unit, the scrubber water flow rate will be continuously measured by a pump amperage gauge, which is directly proportional to water flow rate;
 - c. the supplemental water flow rate to the ID fan, in gallons per minute; and
 - d. the supplemental water flow rate to the quench unit, in gallons per minute
2. 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 following on a daily basis:
- a. the pressure drop, in inches of water, across the scrubber;
 - b. the water flow rate, in terms of pump amperage (which is proportional to water flow rate), across the scrubber;
 - c. the water flow rate, in gallons per minute, to the ID fan;
 - d. the water flow rate, in gallons per minute, to the quench unit
3. Whenever a monitored value for any of the parameters specified in A.III.2 above deviates from (falls below) the acceptable value specified in A.III.4, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not

Emissions Unit ID: P901

eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

4. The acceptable values for parameters specified in A.III.2 are as follows for all times while the emissions unit is in operation:
 - a. the acceptable value for the pressure drop across the scrubber is a minimum of 16 inches of water;
 - b. the acceptable value for the scrubber water flow rate is a minimum of 1400 gallons per minute (a scrubber pump amperage of 23 or above);
 - c. the acceptable value for the supplemental scrubber water flow rate to the ID fan, is a minimum of 4 gallons of water per minute; and
 - d. the acceptable value for the supplemental scrubber water flow rate to the quench unit, is a minimum of 275 gallons of water per minute.

The values above are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the value(s) based upon information obtained during future particulate emission and HCl tests that demonstrate compliance with the allowable particulate emission rate and HCl emission rate for this emissions unit. In addition, approved revisions to the value(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

5. The permittee shall collect and record the operating times of the capture (collection) system, control device, monitoring equipment, and this emissions unit, on a daily basis.
6. The permittee shall collect or require the coal supplier to collect a minimum of one representative grab sample per month of the coal supplied for burning in this emissions unit. The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal and analyze the coal sample for sulfur content (percent) and heat content (Btu/pound of coal). The analytical methods for sulfur content and heat content shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989 Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

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7. For each shipment of coal received for burning in this emissions unit, the permittee shall maintain records of the total quantity of coal received and the permittee's or coal supplier's analyses for sulfur content and heat content.
8. The permittee shall collect and record the following information on a monthly basis:
 - a. the amount of stone fed to emissions unit P901, in tons ;
 - b. the amount of lime produced by emissions unit P901, in tons (the tons of lime produced shall be calculated by dividing the stone feed (A.III.8.a) by a factor of 2);
 - c. for the first 12 months of operation, under the provisions of this permit, the cumulative year-to-date amount of lime production for emissions unit P901, in tons;
 - d. beginning the first month after the first 12 calendar months of operation, under the provisions of this permit, the rolling, 12-month lime production rates, in tons;
 - e. the HCl emission rate from lime produced for emissions unit P901, in tons per month (the HCl emission rate shall be calculated by multiplying the lbs HCl/ton of lime produced emission limitation for this emissions unit by the amount of lime produced (A.III.8.b));
 - f. for the first 12 months of operation, under the provisions of this permit, the cumulative year-to-date total HCl emissions, in tons;
 - g. beginning the first month, after the first 12 months of operation, under the provisions of this permit, the rolling, 12-month HCl emission rates, in tons.
9. The permittee shall maintain daily records that document any time periods when the water utilized in the scrubber was obtained from a settling pond undergoing excavation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. All exceedances of the rolling, 12-month HCl emission limitation of 3.78 tons.
 - b. For the first 12 calendar months of operation, under the provisions of this permit,

Emissions Unit ID: P901

all exceedances of the maximum allowable cumulative lime production rates specified in section A.II.1.

- c. Beginning the first month after the first 12 calendar months of operation under the provisions of this permit, all exceedances of the rolling, 12-month lime production restriction of 63,072 tons.

These reports shall be submitted in accordance with the general terms and conditions of this permit.

2. The permittee shall submit, on a quarterly basis, copies of the permittee's or coal supplier's analyses (wet basis) for each shipment of coal which is received for burning in this emissions unit. The permittee or coal supplier's analyses shall document sulfur content (percent) and heat content (BTU/pound) of each shipment of coal. The following information shall also be included with the copies of the permittee's or coal supplier's analyses:
 - a. the total quantity of coal received each month from each supplier (tons);
 - b. the weighted* average sulfur content (percent) of the coal received during each calendar month;
 - c. the weighted* average heat content (BTU/pound) of the coal received during each calendar month; and
 - d. the calculated (based on the ratio of the past measured stack sulfur dioxide emissions to the sulfur content of the fired coal) weighted* average sulfur dioxide emission rate in tons/year based on the coal received each calendar month.

*In proportion to the coal received from each supplier during the calendar month.

4. The permittee shall notify the Ohio EPA, Northwest District Office in writing of any daily record showing that the scrubber utilized water from a settling pond undergoing excavation. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Northwest District Office within 30 days after the event occurs.

V. Testing Requirements

1. The permittee is scheduled to perform HCl emission testing on this emissions unit in November 2006. If it is determined that the testing conducted for this emissions unit performed in October 2006 does not conform with Ohio EPA methods and procedures, the permittee shall conduct, or have conducted, additional emissions testing in accordance with the following requirements:
 - a. The emissions testing shall be conducted within 60 days after the company is notified that the testing performed in November 2006 does not conform with Ohio

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EPA methods and procedures.

- b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rates of 0.12 lb HCl/ton of lime produced.
- c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations:
 - i. Methods 1-4 of 40 CFR Part 60, Appendix A;
 - ii. for HCl, ASTM Method D6735;

Alternative USEPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office (NWDO).

- d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.
 - e. Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" (ITT) notification to the Ohio EPA, NWDO. The ITT notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, NWDO refusal to accept the results of the emissions tests.
 - f. Personnel from the Ohio EPA, NWDO shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
 - g. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, NWDO.
2. 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:

Emissions Unit ID: P901

a. **Emission Limitation**

0.12 lb HCl/ton lime produced for emissions units P901

Applicable Compliance Method

Compliance with the emission limitation shall be demonstrated by the performance testing required in condition A.V.1.

b. **Emission Limitation**

3.78 tons HCl per rolling, 12- month period for emission units P901

Applicable Compliance Method

Compliance with the emission limitation shall be based upon the record keeping requirements specified in A.III.8.

c. **Emission Limitation**

The maximum amount of lime produced in emissions unit P901 (kiln #1) shall not exceed 63,072 tons of lime per year, based upon a rolling, 12-month summation of the monthly production rates

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Applicable Compliance Method

Compliance with the emission limitation shall be based upon the record keeping requirements specified in A.III.8.

d. **Emission Limitation**

100 lbs particulate emissions (PE)/hour, for emissions units P901, P902, and P903, combined

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with the hourly allowable PE emission limitation above in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 5.

e. **Emission Limitation**

4.0 lbs SO₂/ton of lime produced

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation above in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 4 and 6.

f. **Emission Limitation**

Visible PE from the stack shall not exceed 20% opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method

If required, compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

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.

Operations, Property, and/or Equipment - (P901) - modification to rotary lime kiln no. 1, with settling chamber and wet scrubber (with quench unit) in series (modification of an existing unit to establish synthetic minor restrictions for HCl)

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|---|
| None | None |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

Operations, Property, and/or Equipment - (P902) - modification to rotary lime kiln no. 2, with settling chamber and wet scrubber (with quench unit) in series (modification of an existing unit to establish synthetic minor restrictions for HCl)

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|--|
| OAC rule 3745-31-05(C) | 0.04 lb hydrogen chloride (HCl)/ton lime produced, for emissions unit P902 1.97 tons HCl per rolling, 12- month period for emission units P902 See A.I.2.a and A.II.1. |
| OAC rule 3745-17-11(B) | 100 lbs particulate emissions (PE)/hour, for emissions units P901, P902, and P903, combined |
| OAC rule 3745-17-07(A) | Visible PE from the stack shall not exceed 20% opacity, as a six-minute average, except as otherwise provided by rule. |
| OAC rule 3745-18-28(F) | 4.0 lbs SO ₂ /ton of lime produced, from emissions units P901, P902, and P903, combined |
| OAC rule 3745-17-08(A) | None. See A.I.2.b. |
| OAC rule 3745-17-07(B) | None. See A.I.2.c. |

2. Additional Terms and Conditions

- 2.a This permit establishes a federally enforceable emission limitation of 1.97 tons HCl per rolling, 12-month period for purposes of avoiding applicability of Maximum Achievable Control Technology (MACT) regulations. The federally enforceable emission limitation is based on the lbs HCl/ton emission limitation and a lime production restriction (See A.II.1).
- 2.b This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC 3745-17-08(B) do not apply to this emissions unit.
- 2.c Pursuant to OAC rule 3745-17-07(B)(11), OAC rule 3745-17-07(B)(1) does not

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apply because OAC rule 3745-17-08 is not applicable.

II. Operational Restrictions

1. The maximum amount of lime produced in emissions unit P902 (kiln #2) shall not exceed 98,550 tons of lime per year, based upon a rolling, 12-month summation of the monthly production rates.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the lime production rates specified in the following table:

| <u>Month(s)</u> | <u>Lime Production (tons)</u> |
|-----------------|-------------------------------|
| 1-1 | 16,425 |
| 1-2 | 32,850 |
| 1-3 | 49,275 |
| 1-4 | 65,700 |
| 1-5 | 82,125 |
| 1-6 | 98,550 |
| 1-7 | 98,550 |
| 1-8 | 98,550 |
| 1-9 | 98,550 |
| 1-10 | 98,550 |
| 1-11 | 98,550 |
| 1-12 | 98,550 |

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual lime production limitations shall be based upon a rolling, 12-month summation of the monthly lime production rates.

2. Water utilized in the scrubber shall only be obtained from settling ponds that are not undergoing excavation operations.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to continuously monitor the the following parameters during operation of this emissions unit:
 - a. the pressure drop, in inches of water, across the scrubber;
 - b. the water flow rate, in gallons per minute, across the scrubber. For this

Emissions Unit ID: P902

emissions unit, the scrubber water flow rate will be continuously measured by a pump amperage gauge, which is directly proportional to water flow rate;

- c. the supplemental water flow rate to the ID fan, in gallons per minute; and
 - d. the supplemental water flow rate to the quench unit, in gallons per minute
2. 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 following on a daily basis:
- a. the pressure drop, in inches of water, across the scrubber;
 - b. the water flow rate, in terms of pump amperage (which is proportional to water flow rate), across the scrubber;
 - c. the water flow rate, in gallons per minute, to the ID fan;
 - d. the water flow rate, in gallons per minute, to the quench unit
3. Whenever a monitored value for any of the parameters specified in A.III.2 above deviates from (falls below) the acceptable value specified in A.III.4, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.
- In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.
4. The acceptable values for parameters specified in A.III.2 are as follows for all times while the emissions unit is in operation:
- a. the acceptable value for the pressure drop across the scrubber is a minimum of 16 inches of water;

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- b. the acceptable value for the scrubber water flow rate is a minimum of 1400 gallons per minute (a scrubber pump amperage of 23 or above);
- c. the acceptable value for the supplemental scrubber water flow rate to the ID fan, is a minimum of 4 gallons of water per minute; and
- d. the acceptable value for the supplemental scrubber water flow rate to the quench unit, is a minimum of 275 gallons of water per minute.

The values above are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the value(s) based upon information obtained during future particulate emission and HCl tests that demonstrate compliance with the allowable particulate emission rate and HCl emission rate for this emissions unit. In addition, approved revisions to the value(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- 5. The permittee shall collect and record the operating times of the capture (collection) system, control device, monitoring equipment, and this emissions unit, on a daily basis.
- 6. The permittee shall collect or require the coal supplier to collect a minimum of one representative grab sample per month of the coal supplied for burning in this emissions unit. The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal and analyze the coal sample for sulfur content (percent) and heat content (Btu/pound of coal). The analytical methods for sulfur content and heat content shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989 Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.
- 7. For each shipment of coal received for burning in this emissions unit, the permittee shall maintain records of the total quantity of coal received and the permittee's or coal supplier's analyses for sulfur content and heat content.

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8. The permittee shall collect and record the following information on a monthly basis:
 - a. the amount of stone fed to emissions unit P902, in tons ;
 - b. the amount of lime produced by emissions unit P902, in tons (the tons of lime produced shall be calculated by dividing the stone feed (A.III.8.a) by a factor of 2);
 - c. for the first 12 months of operation, under the provisions of this permit, the cumulative year-to-date amount of lime production for emissions unit P902, in tons;
 - d. beginning the first month after the first 12 calendar months of operation, under the provisions of this permit, the rolling, 12-month lime production rates, in tons;
 - e. the HCl emission rate from lime produced for emissions unit P902, in tons per month (the HCl emission rate shall be calculated by multiplying the lbs HCl/ton of lime produced emission limitation for this emissions unit by the amount of lime produced (A.III.8.b);
 - f. for the first 12 months of operation, under the provisions of this permit, the cumulative year-to-date total HCl emissions, in tons;
 - g. beginning the first month, after the first 12 months of operation, under the provisions of this permit, the rolling, 12-month HCl emission rates, in tons.
9. The permittee shall maintain daily records that document any time periods when the water utilized in the scrubber was obtained from a settling pond undergoing excavation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. All exceedances of the rolling, 12-month HCl emission limitation of 1.97 tons.
 - b. For the first 12 calendar months of operation, under the provisions of this permit, all exceedances of the maximum allowable cumulative lime production rates specified in section A.II.1.
 - c. Beginning the first month after the first 12 calendar months of operation under the provisions of this permit, all exceedances of the rolling, 12-month lime production restriction of 98,550 tons.

These reports shall be submitted in accordance with the general terms and conditions

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of this permit.

2. The permittee shall submit, on a quarterly basis, copies of the permittee's or coal supplier's analyses (wet basis) for each shipment of coal which is received for burning in this emissions unit. The permittee or coal supplier's analyses shall document sulfur content (percent) and heat content (BTU/pound) of each shipment of coal. The following information shall also be included with the copies of the permittee's or coal supplier's analyses:
 - a. the total quantity of coal received each month from each supplier (tons);
 - b. the weighted* average sulfur content (percent) of the coal received during each calendar month;
 - c. the weighted* average heat content (BTU/pound) of the coal received during each calendar month; and
 - d. the calculated (based on the ratio of the past measured stack sulfur dioxide emissions to the sulfur content of the fired coal) weighted* average sulfur dioxide emission rate in tons/year based on the coal received each calendar month.
- *In proportion to the coal received from each supplier during the calendar month.
4. The permittee shall notify the Ohio EPA, Northwest District Office in writing of any daily record showing that the scrubber utilized water from a settling pond undergoing excavation. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Northwest District Office within 30 days after the event occurs.

V. Testing Requirements

1. The permittee performed HCl emission testing on this emissions unit in October 2006. The results of the October 2006 test have not been submitted and subsequently reviewed by the Ohio EPA, Northwest District Office. If it is determined that the testing conducted for this emissions unit performed in October 2006 does not conform with Ohio EPA methods and procedures, the permittee shall conduct, or have conducted, additional emissions testing in accordance with the following requirements:
 - a. The emissions testing shall be conducted within 60 days after the company is notified that the testing performed in October 2006 does not conform with Ohio EPA methods and procedures.

Emissions Unit ID: P902

- b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rates of 0.04 lb HCl/ton of lime produced.
 - c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations:
 - i. Methods 1-4 of 40 CFR Part 60, Appendix A;
 - ii. for HCl, ASTM Method D6735;

Alternative USEPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office (NWDO).
 - d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.
 - e. Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" (ITT) notification to the Ohio EPA, NWDO. The ITT notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, NWDO refusal to accept the results of the emissions tests.
 - f. Personnel from the Ohio EPA, NWDO shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
 - g. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, NWDO.
2. 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**
0.04 lb HCl/ton lime produced for emissions units P902
- Applicable Compliance Method**
Compliance with the emission limitation shall be demonstrated by the performance testing required in condition A.V.1.

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b. **Emission Limitation**

1.97 tons HCl per rolling, 12- month period for emission units P902

Applicable Compliance Method

Compliance with the emission limitation shall be based upon the record keeping requirements specified in A.III.8.

c. **Emission Limitation**

The maximum amount of lime produced in emissions unit P902 (kiln #2) shall not exceed 98,550 tons of lime per year, based upon a rolling, 12-month summation of the monthly production rates

Applicable Compliance Method

Compliance with the emission limitation shall be based upon the record keeping requirements specified in A.III.8.

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d. **Emission Limitation**

100 lbs particulate emissions (PE)/hour, for emissions units P901, P902, and P903, combined

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with the hourly allowable PE emission limitation above in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 5.

e. **Emission Limitation**

4.0 lbs SO₂/ton of lime produced

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation above in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 4 and 6.

f. **Emission Limitation**

Visible PE from the stack shall not exceed 20% opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method

If required, compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section**I. Applicable Emissions Limitations and/or Control Requirements**

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

Operations, Property, and/or Equipment - (P902) - modification to rotary lime kiln no. 2, with settling chamber and wet scrubber (with quench unit) in series (modification of an existing unit to establish synthetic minor restrictions for HCl)

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|---|
| None | None |

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

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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.

Operations, Property, and/or Equipment - (P903) - modification to rotary lime kiln no. 3, with settling chamber and wet scrubber (with quench unit) in series (modification of an existing unit to establish synthetic minor restrictions for HCl)

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|--|
| OAC rule 3745-31-05(C) | 0.08 lb hydrogen chloride (HCl)/ton lime produced, for emissions unit P903 3.68 tons HCl per rolling, 12- month period for emission units P903 See A.I.2.a and A.II.1. |
| OAC rule 3745-17-11(B) | 100 lbs particulate emissions (PE)/hour, for emissions units P901, P902, and P903, combined |
| OAC rule 3745-17-07(A) | Visible PE from the stack shall not exceed 20% opacity, as a six-minute average, except as otherwise provided by rule. |
| OAC rule 3745-18-28(F) | 4.0 lbs SO ₂ /ton of lime produced, from emissions units P901, P902, and P903, combined |
| OAC rule 3745-17-08(A) | None. See A.I.2.b. |
| OAC rule 3745-17-07(B) | None. See A.I.2.c. |

2. Additional Terms and Conditions

- 2.a This permit establishes a federally enforceable emission limitation of 3.68 tons HCl per rolling, 12-month period for purposes of avoiding applicability of Maximum Achievable Control Technology (MACT) regulations. The federally enforceable emission limitation is based on the lbs HCl/ton emission limitation and a lime production restriction (See A.II.1).
- 2.b This facility is not located within the areas identified in "Appendix A" of OAC rule

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3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC 3745-17-08(B) do not apply to this emissions unit.

- 2.c Pursuant to OAC rule 3745-17-07(B)(11), OAC rule 3745-17-07(B)(1) does not apply because OAC rule 3745-17-08 is not applicable.

II. Operational Restrictions

1. The maximum amount of lime produced in emissions unit P903 (kiln #3) shall not exceed 91,980 tons of lime per year, based upon a rolling, 12-month summation of the monthly production rates.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the lime production rates specified in the following table:

| <u>Month(s)</u> | <u>Lime Production (tons)</u> |
|-----------------|-------------------------------|
| 1-1 | 15,330 |
| 1-2 | 30,660 |
| 1-3 | 45,990 |
| 1-4 | 61,320 |
| 1-5 | 76,650 |
| 1-6 | 91,980 |
| 1-7 | 91,980 |
| 1-8 | 91,980 |
| 1-9 | 91,980 |
| 1-10 | 91,980 |
| 1-11 | 91,980 |
| 1-12 | 91,980 |

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual lime production limitations shall be based upon a rolling, 12-month summation of the monthly lime production rates.

2. Water utilized in the scrubber shall only be obtained from settling ponds that are not undergoing excavation operations.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to continuously monitor the the following parameters during operation of this emissions unit:

- a. the pressure drop, in inches of water, across the scrubber;
 - b. the water flow rate, in gallons per minute, across the scrubber. For this emissions unit, the scrubber water flow rate will be continuously measured by a pump amperage gauge, which is directly proportional to water flow rate;
 - c. the supplemental water flow rate to the ID fan, in gallons per minute; and
 - d. the supplemental water flow rate to the quench unit, in gallons per minute
2. 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 following on a daily basis:
- a. the pressure drop, in inches of water, across the scrubber;
 - b. the water flow rate, in terms of pump amperage (which is proportional to water flow rate), across the scrubber;
 - c. the water flow rate, in gallons per minute, to the ID fan;
 - d. the water flow rate, in gallons per minute, to the quench unit
3. Whenever a monitored value for any of the parameters specified in A.III.2 above deviates from (falls below) the acceptable value specified in A.III.4, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.
- In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.
4. The acceptable values for parameters specified in A.III.2 are as follows for all times

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while the emissions unit is in operation:

- a. the acceptable value for the pressure drop across the scrubber is a minimum of 16 inches of water;
- b. the acceptable value for the scrubber water flow rate is a minimum of 1400 gallons per minute (a scrubber pump amperage of 23 or above);
- c. the acceptable value for the supplemental scrubber water flow rate to the ID fan, is a minimum of 4 gallons of water per minute; and
- d. the acceptable value for the supplemental scrubber water flow rate to the quench unit, is a minimum of 275 gallons of water per minute.

The values above are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the value(s) based upon information obtained during future particulate emission and HCl tests that demonstrate compliance with the allowable particulate emission rate and HCl emission rate for this emissions unit. In addition, approved revisions to the value(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

5. The permittee shall collect and record the operating times of the capture (collection) system, control device, monitoring equipment, and this emissions unit, on a daily basis.
6. The permittee shall collect or require the coal supplier to collect a minimum of one representative grab sample per month of the coal supplied for burning in this emissions unit. The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal and analyze the coal sample for sulfur content (percent) and heat content (Btu/pound of coal). The analytical methods for sulfur content and heat content shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989 Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

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7. For each shipment of coal received for burning in this emissions unit, the permittee shall maintain records of the total quantity of coal received and the permittee's or coal supplier's analyses for sulfur content and heat content.
8. The permittee shall collect and record the following information on a monthly basis:
 - a. the amount of stone fed to emissions unit P903, in tons ;
 - b. the amount of lime produced by emissions unit P903, in tons (the tons of lime produced shall be calculated by dividing the stone feed (A.III.8.a) by a factor of 2);
 - c. for the first 12 months of operation, under the provisions of this permit, the cumulative year-to-date amount of lime production for emissions unit P903, in tons;
 - d. beginning the first month after the first 12 calendar months of operation, under the provisions of this permit, the rolling, 12-month lime production rates, in tons;
 - e. the HCl emission rate from lime produced for emissions unit P903, in tons per month (the HCl emission rate shall be calculated by multiplying the lbs HCl/ton of lime produced emission limitation for this emissions unit by the amount of lime produced (A.III.8.b);
 - f. for the first 12 months of operation, under the provisions of this permit, the cumulative year-to-date total HCl emissions, in tons;
 - g. beginning the first month, after the first 12 months of operation, under the provisions of this permit, the rolling, 12-month HCl emission rates, in tons.
9. The permittee shall maintain daily records that document any time periods when the water utilized in the scrubber was obtained from a settling pond undergoing excavation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. All exceedances of the rolling, 12-month HCl emission limitation of 3.68 tons.
 - b. For the first 12 calendar months of operation, under the provisions of this permit, all exceedances of the maximum allowable cumulative lime production rates specified in section A.II.1.
 - c. Beginning the first month after the first 12 calendar months of operation under

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the provisions of this permit, all exceedances of the rolling, 12-month lime production restriction of 91,980 tons.

These reports shall be submitted in accordance with the general terms and conditions of this permit.

2. The permittee shall submit, on a quarterly basis, copies of the permittee's or coal supplier's analyses (wet basis) for each shipment of coal which is received for burning in this emissions unit. The permittee or coal supplier's analyses shall document sulfur content (percent) and heat content (BTU/pound) of each shipment of coal. The following information shall also be included with the copies of the permittee's or coal supplier's analyses:
 - a. the total quantity of coal received each month from each supplier (tons);
 - b. the weighted* average sulfur content (percent) of the coal received during each calendar month;
 - c. the weighted* average heat content (BTU/pound) of the coal received during each calendar month; and
 - d. the calculated (based on the ratio of the past measured stack sulfur dioxide emissions to the sulfur content of the fired coal) weighted* average sulfur dioxide emission rate in tons/year based on the coal received each calendar month.
- *In proportion to the coal received from each supplier during the calendar month.
4. The permittee shall notify the Ohio EPA, Northwest District Office in writing of any daily record showing that the scrubber utilized water from a settling pond undergoing excavation. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Northwest District Office within 30 days after the event occurs.

V. Testing Requirements

1. The permittee performed HCl emission testing on this emissions unit in October 2006. The results of the October 2006 test have not been submitted and subsequently reviewed by the Ohio EPA, Northwest District Office. If it is determined that the testing conducted for this emissions unit performed in October 2006 does not conform with Ohio EPA methods and procedures, the permittee shall conduct, or have conducted, additional emissions testing in accordance with the following requirements:

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- a. The emissions testing shall be conducted within 60 days after the company is notified that the testing performed in October 2006 does not conform with Ohio EPA methods and procedures.
 - b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rates of 0.08 lb HCl/ton of lime produced.
 - c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations:
 - i. Methods 1-4 of 40 CFR Part 60, Appendix A;
 - ii. for HCl, ASTM Method D6735;

Alternative USEPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office (NWDO).
 - d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.
 - e. Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" (ITT) notification to the Ohio EPA, NWDO. The ITT notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, NWDO refusal to accept the results of the emissions tests.
 - f. Personnel from the Ohio EPA, NWDO shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
 - g. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, NWDO.
2. 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**
0.08 lb HCl/ton lime produced for emissions units P903

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Applicable Compliance Method

Compliance with the emission limitation shall be demonstrated by the performance testing required in condition A.V.1.

b. **Emission Limitation**

3.68 tons HCl per rolling, 12- month period for emission units P903

Applicable Compliance Method

Compliance with the emission limitation shall be based upon the record keeping requirements specified in A.III.8.

c. **Emission Limitation**

The maximum amount of lime produced in emissions unit P903 (kiln #3) shall not exceed 91,980 tons of lime per year, based upon a rolling, 12-month summation of the monthly production rates

Applicable Compliance Method

Compliance with the emission limitation shall be based upon the record keeping requirements specified in A.III.8.

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d. **Emission Limitation**

100 lbs particulate emissions (PE)/hour, for emissions units P901, P902, and P903, combined

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with the hourly allowable PE emission limitation above in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 5.

e. **Emission Limitation**

4.0 lbs SO₂/ton of lime produced

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with the hourly allowable SO₂ emission limitation above in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 4 and 6.

f. **Emission Limitation**

Visible PE from the stack shall not exceed 20% opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method

If required, compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

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.

Operations, Property, and/or Equipment - (P903) - modification to rotary lime kiln no. 3, with settling chamber and wet scrubber (with quench unit) in series (modification of an existing unit to establish synthetic minor restrictions for HCl)

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|---|
| None | None |

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