



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY STATIONARY SOURCE PERMIT TO OPERATE

This permit implements the requirements for Reasonably Available Control Technology (RACT) for NO_x in the Western Virginia Emissions Control Area

This permit (i) is for the purpose of implementing the "reasonably available control technology" (RACT) requirements of 9 VAC 5-40-310 and 9 VAC 5-40-311 of the Regulations of the Board and (ii) establishes control technology and other requirements for the control of nitrogen oxides (NO_x) emissions from the Global Stone Chemstone Corporation lime manufacturing plant in the Western Virginia Emissions Control Area. These RACT requirements shall be the legal and regulatory basis for control of NO_x emissions from this facility.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Global Stone Chemstone Corporation
508 Quarry Lane
Clear Brook, Virginia 22624
Registration No.: 80504
Plant ID No.: 51-069-0034

is authorized to operate

a lime manufacturing facility

located at

508 Quarry Lane
Frederick County, Virginia

in accordance with the Conditions of this permit.

Approved on:

February 9, 2005

P. Bradley Churning
Director, Department of Environmental Quality

Permit consists of 4 pages.

Permit Conditions 1 to 13.

Source Testing Report Format.

PERMIT CONDITIONS - the regulatory reference or authority for each condition is listed in parentheses () after each condition.

PROCESS REQUIREMENTS

1. **Equipment List** - The following equipment is subject to the requirements of 9 VAC 5-40-310 for the Western Virginia Emissions Control Area. A demonstration of Reasonably Available Control Technology, (RACT), for NO_x is required for the following unit:

- a rotary lime kiln rated at 500 tons/day

(9 VAC 5-80-850 and 9 VAC 5-40-310)

2. **Emission Controls** - NO_x emissions from the rotary lime kiln shall be controlled by proper kiln design and operation.
(9 VAC 5-80-850)

OPERATING/EMISSION LIMITATIONS

3. **Emission Limits** - Maximum NO_x emissions from the operation of the rotary lime kiln shall not exceed 60.9 lb per hour and 3.2 lb per ton of lime produced. Compliance with the NO_x emissions of 3.2 lb per ton of lime produced shall be based on NO_x emission rates obtained from the most recent stack test and the annual production of lime which is calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-850 and 9 VAC 5-50-260)

INITIAL COMPLIANCE DETERMINATION

4. **Stack Testing** - The permitted facility shall conduct a performance test for NO_x from the rotary lime kiln stack to demonstrate compliance with the emission limits contained in Condition 3. The tests shall be performed no later than April 30, 2007. The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the applicable reference methods contained in 40 CFR Part 60, Appendix A. The details of the test are to be arranged with the Director, Valley Region. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Director, Valley Region, within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-880 and 9 VAC 5-50-30)

RECORDS

5. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall

include, but are not limited to:

- a. The monthly and annual production of lime, in tons. The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
- b. Results of all performance tests.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-900)

6. **Testing/Monitoring Ports** - The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations and in accordance with the applicable performance specification (reference 40 CFR Part 60, Appendix B.
(9 VAC 5-80-930)

GENERAL CONDITIONS

7. **Relationship To Other Requirements** - Except to the extent that conditions in this permit may be more stringent, this permit does not supersede or replace any other valid permit, regulatory or statutory requirement. Furthermore, this approval to operate shall not relieve the Global Stone Chemstone Corporation of the responsibility to comply with all other local, state and federal regulations, including permit regulations.
(9 VAC 5-80-800 D and 9 VAC 5-80-820 F)
8. **Federal Enforceability** - Once the permit is approved by the U.S. Environmental Protection Agency into the Commonwealth of Virginia State Implementation Plan, the permit is enforceable by EPA and citizens under the federal Clean Air Act.
(9 VAC 5-80-800 C.2 and 9 VAC 5-80-820 F)
9. **Permit Modification** - The Board may modify, rewrite, or amend this permit with the consent of the Global Stone Chemstone Corporation, for good cause shown by the Global Stone Chemstone Corporation, or on its own motion provided approval of the changes is accomplished in accordance with Regulations of the Board and the Administrative Process Act (§ 2.2-4000 et seq.); however, such changes shall not be effective until the changes are approved following the requirements of 40 CFR Part 51 (Requirements for Preparation, Adoption, and Submittal of Implementation Plans).
(9 VAC 5-80-960 and 9 VAC 5-80-1000)
10. **Failure to Comply** - Failure by the Global Stone Chemstone Corporation to comply with any of the conditions of this permit shall constitute a violation of a Permit of the Board. Failure to comply may result in a Notice of Violation and civil penalty. Nothing herein shall waive the

initiation of appropriate enforcement actions or the issuance of orders as appropriate by the Board as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
(9 VAC 5-80-820 F, 9 VAC 5-80-910 and 9 VAC 5-80-1010)

11. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
- c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
- d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.
(9 VAC 5-170-130 and 9 VAC 5-80-850)

12. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Valley Region of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-940)

13. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-860 D)

SOURCE TESTING REPORT FORMAT

Cover

1. Plant name and location
2. Units tested at source (indicate Ref. No. used by source in permit or registration)
3. Tester; name, address and report date

Certification

1. Signed by team leader / certified observer (include certification date)
- * 2. Signed by reviewer

Introduction

1. Test purpose
2. Test location, type of process
3. Test dates
- * 4. Pollutants tested
5. Test methods used
6. Observers' names (industry and agency)
7. Any other important background information

Summary of Results

1. Pollutant emission results / visible emissions summary
2. Input during test vs. rated capacity
3. Allowable emissions
- * 4. Description of collected samples, to include audits when applicable
5. Discussion of errors, both real and apparent

Source Operation

1. Description of process and control devices
2. Process and control equipment flow diagram
3. Process and control equipment data

* Sampling and Analysis Procedures

1. Sampling port location and dimensioned cross section
2. Sampling point description
3. Sampling train description
4. Brief description of sampling procedures with discussion of deviations from standard methods
5. Brief description of analytical procedures with discussion of deviation from standard methods

Appendix

- * 1. Process data and emission results example calculations
2. Raw field data
- * 3. Laboratory reports
4. Raw production data
- * 5. Calibration procedures and results
6. Project participants and titles
7. Related correspondence
8. Standard procedures

* Not applicable to visible emission evaluations.

