

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-07100001-2009**
Application Received: **April 17, 2009**
Plant Identification Number: **03-54-071-00001**
Permittee: **Greer Industries, Inc. d.b.a. Greer Lime Company**
Facility Name: **Riverton Facility**
Mailing Address: **P.O. Box 302, Riverton, WV 26814**

Revised: NA

Physical Location: Riverton, Pendleton County, West Virginia
UTM Coordinates: 640.00 km Easting • 4,293 km Northing • Zone 17
Directions: Approximately two (2) miles south of Seneca Rocks (Junction US Route 33 and WV Route 55) on US Route 33, turn left onto Germany Valley Limestone Road.

Facility Description

Greer Lime Company (SIC Codes 3274, 1422 and NAICS Codes 32741, 212312) operates a limestone quarry, crushing and sizing operation, limestone grinding system, storage and loadout systems of various lime and limestone products, hydrate plant, two (2) rotary lime kiln systems, lime handling system, and a portable limestone crushing and sizing facility in Riverton, Pendleton County, West Virginia. The maximum capacity of the plant is 800 tons per hour and 1,500,000 tons of stone per year. The facility has the potential to operate twenty-four (24) hours a day for seven (7) days per week for fifty-two (52) weeks per year.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2008 Actual Emissions
Carbon Monoxide (CO)	160.28	52.42
Nitrogen Oxides (NO _x)	300.55	222.25
Particulate Matter (PM _{2.5})	1,369.54	97.3
Particulate Matter (PM ₁₀)	1,369.54	97.3
Total Particulate Matter (TSP)	2,880.70	204.65
Sulfur Dioxide (SO ₂)	134.44	5.73
Volatile Organic Compounds (VOC)	37.74	8.44
Lead (Pb)	0.0113	0
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2008 Actual Emissions
Hydrochloric Acid (HCl)	49.46	31.31
Hydrogen Fluoride	4.05	3.889
Speciated HAPs	0.35	0.312
Total HAPs	53.86	35.511
<i>Some of the above HAPs may be counted as PM or VOCs.</i>		

Title V Program Applicability Basis

This facility has the potential to emit 160.28 tons per year of CO, 300.55 tons per year of NO_x, 1,369.54 tons per year of PM₁₀, 134.44 tons per year of SO₂, and 49.46 tons per year of HCl. Due to this facility's potential to emit over 100 tons per year of criteria pollutants, over 10 tons per year of a single HAP, and 25 tons per year of aggregate HAPs, Greer Lime Company is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR5	To Prevent and Control of Particulate Matter Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas
	45CSR6	Open burning prohibited.
	45CSR7	To Prevent and Control of Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations
	45CSR10	Prevent and Control Air Pollution from the Emission of Sulfur Oxides
	45CSR11	Standby Plans for Emergency Episodes.
	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary Sources

45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 C.F.R. Part 60
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
45CSR29	Rules Requiring the Submission of Emissions Volatile Organic Compounds and Oxides of Nitrogen
45CSR30	Operating permit requirement.
45CSR34	Emission Standards for Hazardous Air Pollutants
40 C.F.R. Part 60 Subpart Y	Standards of Performance for Coal Preparation Plants
40 C.F.R. Part 60 Subpart HH	Standards of Performance for Lime Manufacturing Plants
40 C.F.R. Part 60 Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants
40 C.F.R. Part 61 Subpart M	Asbestos Inspection and Removal
40 C.F.R. Part 63 Subpart AAAAA	National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants
40 C.F.R. Part 82, Subpart F	Ozone Depleting Substances
State Only: 45CSR4	No Objectionable Odors.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-1396B	February 3, 2003	
R13-1381A	May 25, 2004	
R13-1685	February 10, 1994	
R13-1788	April 24, 1995	
R13-2222-P2	March 19, 2002	
R13-2113H	March 26, 2009	
R13-2670A	October 13, 2006	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit

in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

The changes to the October 21, 2004 Title V Permit and Fact Sheet since R30-07100001-2004 SM01 was issued are NSR permits, R13-2113G and R13-2113H.

The following updates were made in the renewal.

1. Added Section 1.2, Active R13, R14, and R19 Permits and Table.
2. Updated the regulatory language for Sections 3.1.1 and 3.1.2, 45CSR§§6-3.1 and 3.2.
3. The permittee was issued permit R13-2113F on July 17, 2007 to modify the "Fine Grinding" operations at the Riverton Facility. During construction it was discovered that the dust collector 3-DC-3 was not sized adequately to handle the air flow and dust load from the plant. R13-2113G is the modification of this operation to add and rename dust collector 3-DC-1A to 11-DC-3 to assure adequate control of emissions. Screw conveyors 11-SC-4, 11-SC-5, and 11-SC-6 were also placed back in service to transfer the dust collector dust to an old unused lime bin (11-SI-4), which was placed back in service. Dust collector 3-DC-3, rotary airlock 3-RA-3, and screw conveyors 3-SC-8 and 3-SC-9 were removed from service and from R13-2113G. The rotary airlock 3-RA-3 was previously removed. The permittee will also return bin 3-SB-3 as 11-SI-7 and former screw conveyor 3-SC-5 as 11-SC-7 to service and add a new loading spout (11-LS-4) to the end of 11-SC-7. 11-SI-7, 11-SC-7, and 11-LS-4 are currently not in operation.
4. R13-2113H is for the construction of a feed hopper (11-DH-1) and belt conveyor (11-BC-4) in the Fine Grinding Circuit.
5. A typo was corrected in Section 5.1.3.b of the renewal permit, which was renumbered from Section 5.1.4.b in the most recent permit. When permit R13-2113G was updated, PM emissions from emission point E-11-DC-3 (3EP3) were accidentally changed. R13-2113H resets those limits from the current 3.6 TPY (PM₁₀) and 6.2 TPY (TSP) to the correct 6.99 TPY and 14.67 TPY, respectively.
6. The following Emission Unit and Emission Point identifications changes were made in various locations in the Emission Unit Table and Sections 5.0 of the renewal Title V permit. These revisions were made pertaining to R13-2113G and R13-2113H permits.
 - 6.1. Emission points 3EP3 and 3EP4 from the most recent permit were changed to E-11-DC-3 and E-11-DC-2 in the renewal, respectively [see Sections 5.1.3, 5.2.1, and 5.4.5.]
 - 6.2. Control devices 3-DC-3 and 3-DC-4 from the most recent permit were changed to 11-DC-3 and 11-DC-2 in the renewal, respectively [see Sections 5.1.6, 5.4.6, and 5.4.7.].
 - 6.3. "For all pollution control equipment listed within this Title V permit as Section 1.0, Emission Groups (003) and (011)..." was revised to "For all pollution control equipment listed in Emission Group (011) of Section 1.0 as dust collectors (11-DC-1, 11-DC-2, and 11-DC-3)..." in the renewal as Sections 5.4.6 and 5.4.7. This revision identifies all the pollution control equipment listed in Section 1.0 of the renewal for the Limestone Grinding Group 011.
 - 6.4. Section 5.1.8 of the most recent permit was renumbered as Section 5.1.6 in the renewal and revised from "... all pollution control equipment and..." to "... all pollution control equipment listed in the Fine Grinding Circuit [dust collectors (11-DC-1, 11-DC-2, and 11-DC-3)] and..." This revision identifies all the pollution control equipment listed in Section 1.0 of the renewal for the Limestone Grinding Group 011.

- 6.5. Section 5.1.5 and Table 4.1.8 of the most recent permit were renumbered as Sections 5.1.4 and Table 4.1.7.1 in the renewal. Emission units 11-BC-4 was added to the table and emission units 3-SC-8 and 3-SC-9 were removed from the table according to the Title V renewal application. Emission units 11-DH-1 and 11-SC-1 were added to the table and emission unit 3-SI-1 was removed from the table per the Title V renewal application. The citations that referenced Table 4.1.8 were revised to Table 4.1.7.1 (see Sections 5.2.1 and 5.4.5).
- 6.6. It was noted in Section 5.1.4 that Emission Units 11-DH-1 and 11-BC-4 in Table 4.1.7.1 of Section 5.1.4 were installed after April 22, 2008. They are subject to 7 percent opacity requirement instead of the 10 percent opacity requirement.
- 6.7. Section 5.1.6 of the most recent permit was removed since the equipment listed in R13-2113E (condition 4.1.8.), R13-2113G (condition 4.1.8.) and R13-2113H (condition 4.1.8.) permit applications have been removed, thus making the condition absolute.
7. Sections 5.3.2 and 5.3.3 from the most recent permit were not transferred to the renewal Title V permit since the initial compliance performance testing has been completed.
8. Section 5.1.2 was replaced with Section 5.1.3 since Section 5.1.2 was shown as “Reserved” in the most recent version and Section 5.1.6 was removed as mentioned in Item 6.7. Sections 5.1.4 through 5.1.8 were renumbered accordingly.
9. Section 13.0 for Limestone Grinding Alternative Operating Scenario “A” requirements in the most recent permit was removed.
10. Appendixes B and H were removed since the Limestone Grinding Alternative Operating Scenario “A” is no longer required. After deleting Appendix B, Appendixes C, D, E, F, and G become Appendixes B, C, D, E, and F, respectively.
11. The Emission Unit Table 1.0 was revised according to Attachment D of Greer’s Title V Renewal Application.
12. Added Section 3.1.23 that requires the permittee to operate the Riverton Facility in accordance with the plans and specifications filed in Permit Application R13-2113G and R13-2113H as well as preceding permit applications associated with these NSR permits.
13. References to Group 003 were removed from various citations and from Section 5.0 heading since Group 011 replaced Group 003.
14. 45CSR34 is now cited with 40 C.F.R. Part 61 and 45CSR15 was repealed. The citation for 3.1.3 has been revised accordingly.
15. 40 C.F.R. Part 60 Subpart OOO was revised on April 28, 2009. The following sections that reference 40 C.F.R. Part 60 Subpart OOO have been updated in the renewal permit to the current rule.
 - 15.1. Revised Sections 3.1.19 through 3.1.22. These sections were renumbered as well from 3.1.18 through 3.1.24. Section 3.1.23 [40 C.F.R. § 60.672 (f)] was removed since individual enclosed storage bins are not controlled separately by a dust collector.
 - 15.2. Sections that previously referenced 40 C.F.R. §§ 60.672 (c) and (g) were not included in the Title V renewal since (c) was merged with (b) and (g) was merged with (f) in the revised 40 C.F.R. Part 60 Subpart OOO.

- 15.3. Sections 3.2.3 and 3.2.4 were added for equipment installed after April 22, 2008. Sections 3.2.3 through 3.2.4 are from the current 40 C.F.R. Part 60 Subpart OOO.
- 15.4. Sections 3.3.4 through 3.3.9 were updated to the current 40 C.F.R. Part 60 Subpart OOO. These conditions are from R13-1685 that used the previous NSPS.
- 15.5. Sections 3.4.7 through 3.4.10 were updated to the current 40 C.F.R. Part 60 Subpart OOO.
- 15.6. Section 10.2.1 was updated to the current 40 C.F.R. Part 60 Subpart OOO. This condition is from R13-2222-P2 that referenced the previous NSPS.
16. Sections 3.1.25 and 3.1.26 were renumbered as Sections 3.1.17 and 3.1.18.
17. The bituminous coal fuel stockpile tonnage in Section 7.1.5 was revised from 2,500 to 5,000 tons. The permittee pointed out that the tonnage should be revised according to permit determination, PD97-168.
18. The permittee requested that the monitoring of the wet scrubber in Section 9.2.1 be revised to fit the static pressure control that the permittee uses and to follow the monitoring requirements similar to Mississippi Lime (R13-2661). The company requested similar emission observations to the dust collector requirements in Section 3.2.2. Section 9.2.1 was revised from:
- “The owner or operator of a wet scrubber to control emissions shall install, calibrate, maintain and operate the following monitoring devices,
- (a) A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 250 Pascal’s ± 1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.
 - (b) A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions.”
- to:
- “The permittee shall conduct weekly visual emission observations on the wet fan scrubber stack and the permittee shall maintain a monitoring device for the water flow rate observations. The permittee shall maintain records of the maintenance performed on the wet fan scrubber. These records shall include all maintenance work performed on the wet fan scrubber. Records shall state the date and time of the wet fan scrubber inspection, the inspection results, and corrective action taken, if any. Records shall be maintained on site for five (5) years from its origination date.”
- The flow rate for the wet scrubber is a low of 10 gpm and high flow is not an issue.
19. Section 9.2.2 was added for opacity requirements of the dust collectors in the Hydrate System.
20. Replaced “monitoring devices” in Section 9.3.1 with “monitoring device for the water flow rate”.
21. Added Section 9.1.6. The company wanted to be sure that 45CSR7 requirements were mentioned in the Hydrate System requirement section.

22. Section 3.2.1.a, 3rd sentence was revised from "...visual emissions approaching 20% opacity..." to "...visual emissions approaching opacity limits..." The reason for the change is that the equipment governed by 40 C.F.R. Part 60 Subparts HH and OOO would be in violation if opacity approaches 20%. 40 C.F.R. Part 60 Subparts HH and OOO have more stringent opacity requirements (7% to 15%) than 45CSR7.
23. Replaced Section 9.5.1 with "See Section 3.5 for reporting requirements" since Section 9.2.1 now requires weekly visual emission observations for the scrubber. Section 9.2.1 was revised to fit the static pressure control that the permittee uses and to follow the monitoring requirements similar to Mississippi Lime (R13-2661). Section 9.5.2 was removed since reporting requirements are in Section 3.5.
24. Removed the initial test requirements in Sections 6.3.5 and 7.3.4 since the permittee tested for CO NOx. The current test frequency for CO is "Once/5 years" and for NOx is "Once/3 years."

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

45CSR§10-5.1	This process is not defined as a refinery process gas stream or any other process gas stream that contains hydrogen sulfides to be combusted.
45CSR17	Greer Lime Company is subject to 45CSR7 which exempts it from 45CSR17, To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter, as stated in 45CSR§7-10.2.
40 C.F.R. §§ 60.380 - 60.386 Subpart LL	Standards of Performance for Metallic Mineral Processing do not apply because lime or limestone is not metallic mineral.
40 C.F.R. §§ 60.674 (a) and 60.676 (c), (d), and (e) Subpart OOO	These sections of 40 C.F.R. Part 60 Subpart OOO do not apply to Greer Lime Company since Greer Lime Company does not incorporate a wet scrubber in their manufacturing process.
40 C.F.R. §§ 60.730 - 60.737 Subpart UUU	Standards of Performance for Calciners and Dryers in Mineral Industries do not apply because lime is not listed as a mineral processed or produced in a mineral processing plant.
40 C.F.R. 64 Compliance Assurance Monitoring (CAM)	<p>The two rotary kilns have uncontrolled potential to be Title V major for PM, however they are subject to 40 C.F.R. 63 Subpart AAAAA standards, which were proposed after 11/15/1990 and therefore, exempts the pollutant specific emission unit "PSEU" from "CAM".</p> <p>The new coal handling system employs only passive control measures to meet the 20% opacity requirements of 40 C.F.R. Part 60 Subpart Y and therefore, does not employ any add on control equipment that would require CAM monitoring.</p> <p>The new as well as the existing fine grinding lines do not encompass any individual PSEU having pre-controlled emissions exceeding major source thresholds for Title V.</p>

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: October 1, 2009
Ending Date: November 2, 2009

All written comments should be addressed to the following individual and office:

Wayne Green
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Wayne Green
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1258 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Sections 3.5.3 and 3.5.5 were revised accordingly to US EPA Region 3 request that all annual compliance certifications be submitted electronically (e-mail). This is a general change to the boiler plate language.