Fact Sheet

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

Permit Number: R30-07100001-2020
Application Received: December 2, 2019
Plant Identification Number: 03-54-071-00001
Permittee: Greer Industries, Inc. d.b.a. Greer Lime Company
Facility Name: Riverton Facility
Mailing Address: 1088 Germany Valley Limestone Road, Riverton, WV 26814

Physical Location: Riverton, Pendleton County, West Virginia
UTM Coordinates: 640.00 km Easting • 4293.00 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 327410, 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.

Emissions Summary

<table>
<thead>
<tr>
<th>Regulated Pollutants</th>
<th>Potential Emissions</th>
<th>2019 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>160.4</td>
<td>57.10</td>
</tr>
<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>301.39</td>
<td>237.20</td>
</tr>
</tbody>
</table>
Plaintwide Emissions Summary [Tons per Year]

<table>
<thead>
<tr>
<th>Regulated Pollutants</th>
<th>Potential Emissions</th>
<th>2019 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (Pb)</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Particulate Matter (PM$_{2.5}$)</td>
<td>84.54</td>
<td>33.74</td>
</tr>
<tr>
<td>Particulate Matter (PM$_{10}$)</td>
<td>188.37</td>
<td>102.03</td>
</tr>
<tr>
<td>Total Particulate Matter (TSP)</td>
<td>407.13</td>
<td>262.40</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO$_2$)</td>
<td>134.6</td>
<td>6.05</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>37.72</td>
<td>9.50</td>
</tr>
</tbody>
</table>

$PM_{10}$ is a component of TSP.

<table>
<thead>
<tr>
<th>Hazardous Air Pollutants</th>
<th>Potential Emissions</th>
<th>2019 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCl</td>
<td>37.22</td>
<td>31.15</td>
</tr>
<tr>
<td>HF</td>
<td>4.05</td>
<td>3.78</td>
</tr>
<tr>
<td>Other HAPs</td>
<td>0.33</td>
<td>0.16</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>41.60</td>
<td>35.09</td>
</tr>
</tbody>
</table>

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis
This facility has the potential to emit 160.4 tons/yr of CO, 301.39 tons/yr of NO$_x$, 188.37 tons/yr of PM$_{10}$, 134.6 tons/yr of SO$_2$, and 37.22 tons/yr of HCl. Due to this facility’s potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 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
Open burning prohibited.

45CSR6  To Prevent and Control of Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations

45CSR7  Prevent and Control Air Pollution from the Emission of Sulfur Oxides

45CSR10  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.
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 Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the 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**

<table>
<thead>
<tr>
<th>Permit or Consent Order Number</th>
<th>Date of Issuance</th>
<th>Permit Determinations or Amendments That Affect the Permit (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R13-1396E</td>
<td>September 10, 2019</td>
<td></td>
</tr>
<tr>
<td>R13-1381A</td>
<td>May 25, 2004</td>
<td></td>
</tr>
<tr>
<td>R13-1685</td>
<td>February 10, 1994</td>
<td></td>
</tr>
<tr>
<td>R13-1788</td>
<td>April 24, 1995</td>
<td></td>
</tr>
<tr>
<td>R13-2113K</td>
<td>April 21, 2016</td>
<td></td>
</tr>
<tr>
<td>R13-2222-P2</td>
<td>March 19, 2002</td>
<td></td>
</tr>
<tr>
<td>R13-2670B</td>
<td>May 1, 2014</td>
<td></td>
</tr>
</tbody>
</table>
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," which may be downloaded from DAQ's website.

**Determinations and Justifications**

This is the third Title V permit renewal for this facility. There have been no changes to the facility since the issuance of Minor Modification R30-07100001-2015(MM03).

**Section 1.1 Emission Units**

- In reviewing the R13 permits associated with this Title V permit it was found that Emission Units 6-FG-6, 7-DC-6, 7-DC-20, 7-DC-21, 11-FT-1, 11-DV-5, and 11-SC-22 had previously been left out of the Title V Emission Units Table, but were included in the Emission Units Table in R13-2113K. Therefore, they were added to the Title V permit's Emission Units Table under Groups 006 (6-FG-1), 007 (7-DC-6, 7-DC-20 and 7-DC-21), and 011 (11-FT-1, 11-DV-5, and 11-SC-20).

**Section 3.0 Facility-Wide Requirements**

- In addition to the boiler plate language, section 3.0 contains opacity, particulate matter limits, and fugitive emission requirements for the facility from R13-1396E, 45CSR7 and 40 C.F.R. 60 Subpart OOO. There have been no changes to the applicable requirements of 45CSR7 and 40 C.F.R 60 Subpart OOO since the last Title V permit renewal. R13-1396E was issued on September 10, 2019 and the associated changes were made during minor modification R30-07100001-2015(MM03). As a result of EPA Region III comments, pressure drop ranges for Greer’s baghouses were added to condition 3.2.2.

**Section 4.0 Requirements for Primary and Secondary Crushing**

- All requirements in section 4.0 are from NSR permit R13-1685 and 40 C.F.R. 60 Subpart OOO. There have been no changes to the applicable requirements from R13-1685 and 40 C.F.R 60 Subpart OOO since the last Title V permit renewal.

**Section 5.0 Requirements for Limestone Grinding**

- Condition 5.2.1. referenced condition 5.1.9 that did not exist. This condition 5.1.9 reference was added during the 2015 renewal to replace a reference to 45CSR§§7-3.1 and 3.2. Since condition 5.1.9 never existed, the original reference of 45CSR§§7-3.1 and 3.2 was put back into the permit.

- All requirements in section 5.0 are from NSR permit R13-2113K and 40 C.F.R. 60 Subpart OOO. There have been no changes to the applicable requirements of 40 C.F.R. 60 Subpart OOO since the last Title V permit renewal. Changes resulting from the issuance of R13-2113K were incorporated in minor modification R30-07100001-2015 (MM01).

**Section 6.0 Requirements for 400 TPD Rotary Lime Kiln**

- All applicable requirements of Section 6.0 are from R13-1381A, R13-1788, 45CSR10 and 40 C.F.R. 60 Subparts HH and OOO, none of which have changed since the last Title V permit renewal.

- The citation of condition 6.3.5 listed both the Control Device ID and Emission Point ID for Dust Collector (4-DC-1). The Emission Point ID was removed since it was unnecessary.
Section 7.0 Requirements for 500 TPD Rotary Lime Kiln

- Conditions 7.1.4, 7.1.5, 7.1.6, 7.1.8, 7.1.9, 7.1.10, 7.1.11, 7.1.12, 7.1.13 use both equipment ID numbers from R13-1788 and Title V Emission Unit IDs. The R13 equipment ID numbers were removed and only the Emission Unit IDs that were listed in section 1.1 Emission Units Table were used.

- Note: Condition 7.1.5 contains a coal fuel stockpile limit of 5000 tons. This differs from the limit given in the R13-1788 and was changed in the 2009 Title V renewal due to permit determination PD97-168.

- The citation of 7.1.6 referenced a “Limestone Stockpile common to the 400 TPD and 500 TPD Rotary Lime Kilns (KSS1)” this has been changed to Emission Unit ID 4-OS-1 since that is the emission unit ID of that stockpile.

- The citation of 7.1.13 had a typo for the R13-1788 permit condition that was corrected.

- Removed the old Condition 7.1.15. The citation of this condition is R13-2113, 1.0 which is the Emission Units Table in the R13 permit. The information of this condition is already included in the Title V Emission Units Table.

- The citation of 7.1.17 referenced a “30 Ton Blow-Off Tank.” This has been changed to Emission Unit ID 500-BOB since that is the emission unit ID of the 30 Ton Blow-Off Bin of emission group 005.

- There were no other changes made to Section 7.0 because there were no changes to the underlying requirements of 45CSR7, R13-1788, R13-1381A, and 40 C.F.R. 60, Subpart HH since the last Title V renewal and changes resulting from the issuance of NSR permit R13-2113K were incorporated in minor modification R30-07100001-2015 (MM01).

Section 8.0 Requirements for Lime Handling System (Group 006)

- Removed Condition 8.1.1. The citation of this condition is R13-2113, 1.0 which is the Emission Units Table in the R13 permit. The information of this condition is already included in the Title V Emission Units Table.

- There were no other changes made to Section 8.0 because there were no changes to the underlying requirements of 45CSR7 since the last Title V renewal and changes resulting from the issuance NSR permit R13-2113K were incorporated in minor modification R30-07100001-2015 (MM01).

Section 9.0 Requirements for Hydrate System (Group 007)

- Reorganized the permit conditions such that conditions associated with R13-1396E are grouped together and in order.

- In the citation for condition 9.1.10 (formerly condition 9.1.4), the emission unit description of the Hydrate Bagging Bin was replaced with its Emission Unit ID.

- There were no other changes made to Section 9.0 because there were no changes to the underlying requirements of 45CSR7 and R13-1396E since the issuance of the last Title V renewal.
Section 10.0 Requirements for Portable Crushing and Screening Plant (Group 008)

- Corrected a typo in the citation of Condition 10.1.2. that referenced 45CSR13, R13-2222, A.1. This reference should be 45CSR13, R13-2222, A.2.
- There were no other changes made to Section 10.0 because there were no changes to the underlying requirements of 40 C.F.R. 60 Subpart OOO and R13-2222 since the issuance of the last Title V renewal.

Section 11.0 Source-Specific Requirements for Coal Handling

- There were no changes to the underlying requirements of 40 C.F.R. 60 Subpart Y, 45CSR5, and NSR permit R13-2670B since the last Title V renewal.

Section 12.0 Source-Specific Requirements Pertaining to NESHAP for Lime Manufacturing Facilities

- Split conditions 12.4.1 and 12.4.2 into 6 separate conditions 12.4.1 – 12.4.6.
- Condition 12.5.2 was split into conditions 12.5.2.- 12.5.5.
- There were no changes made to Section 12.0 because there were no changes to the underlying requirements of 40 C.F.R. 63 Subpart AAAAA since the last Title V renewal.

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 a 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 non-metallic mineral processing plant subject to 40 C.F.R. 60 Subpart OOO. Wet scrubber 7-SCR-1 is not located in a process that is defined as a non-metallic mineral processing plant.

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) - 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”.

West Virginia Department of Environmental Protection • Division of Air Quality
The coal handling system (5-DH-1, 5-VF-1, 5-BC-0, 5-CR-1, 5-SI-1, 5-VF-2, 5-BC-1, 5-BC-2 and 5-BC-3) employs only passive control measures to meet the opacity requirements of 40 C.F.R. Part 60 Subpart Y and therefore, do not employ any add on control equipment that would require CAM monitoring.

The lime handling system (Group 006) does not encompass any individual PSEU having pre-controlled emissions exceeding major source thresholds for Title V.

The Hydrate Plant (Group 007) does not encompass any individual PSEU having pre-controlled emissions exceeding major source thresholds for Title V.

The fine grinding lines (Group 11) do not encompass any individual PSEU having pre-controlled emissions exceeding major source thresholds for Title V.

The open coal stockpiles (5-CS-1A and 5-CS-2) authorized by R13-2670B employ only passive control measures to meet the opacity requirements of 40 C.F.R. Part 60 Subpart Y and therefore, do not employ any add on control equipment that would require CAM monitoring.

Request for Variances or Alternatives

None.

Insignificant Activities

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

Comment Period

<table>
<thead>
<tr>
<th>Beginning Date:</th>
<th>May 29, 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ending Date:</td>
<td>June 29, 2020</td>
</tr>
</tbody>
</table>

Point of Contact

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

Robert Mullins
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV  25304
Phone:  304/926-0499 ext. 41286   •   Fax:  304/926-0478
Robert.A.Mullins@wv.gov

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.

Response to Comments (Statement of Basis)

On June 29, 2020, Mathew Willson of U.S. EPA Region III submitted comments on Greer Lime Company’s Title V renewal permit. Below are the comments and the responses to the comments.

1. Condition 3.2.2 requires the permittee to maintain a pressure gauge on all dust collectors. The pressure differential across the baghouse is used an indicator of proper operation. It is unclear in the permit what pressure reading would indicate proper operation. Please update the permit condition to clarify how the permittee should evaluate the pressure reading to ensure the device is
operating properly. Please update the record keeping and reporting requirements in the permit as necessary to ensure the permittee can demonstrate compliance with this condition.

Response: Condition 3.2.2. has been revised to include a table listing the ΔP Compliant Range (inches of H₂O) for each of the dust collectors.

2. 3.7.2(d) states that 40 C.F.R. §§ 60.674(a) and 60.676(c), (d), and (e) do not apply to Greer Lime Company since Greer Lime Company does not incorporate a wet scrubber in their manufacturing process, yet the source inventory lists a wet scrubber with emission unit ID 7-SCR-1. Please explain this apparent contradiction and update the permit and fact sheet as appropriate.

Response: Pursuant to a November 18, 2003 decision by the USEPA, Greer’s “processing equipment that handles only lime product is not subject to NSPS Subpart OOO.” The Hydrate Plant only handles lime and, therefore, is not subject to Subpart OOO. Wet scrubber 7-SCR-1 is part of the Hydrate Plant and therefore not subject to the requirements of 40 C.F.R. 60 Subpart OOO. To help reduce confusion, condition 3.7.2.d and the Factsheet have been updated to “Greer Lime Company does not incorporate a wet scrubber in their non-metallic mineral processing plant subject to 40 C.F.R. 60 Subpart OOO. Wet scrubber 7-SCR-1 is not located in a process that is defined as a non-metallic mineral processing plant.”

3. The reporting requirements in condition 4.5.1, 8.5.1, 9.5.1 and 10.5.1 state either “None” or “Reserved”. This may be interpreted by the permittee to mean that there are no reporting requirements applicable to the units addressed, even though reporting requirements in section 3.5 may still be applicable. Please consider rephrasing these conditions to ensure that the permittee does not misinterpret them.

Response: The use of “None” or “Reserved” in the Source-Specific Reporting Sections does not indicate that the facility does not have any Facility-Wide Reporting Requirements in section 3.5. This is the format used in all of our Title V permits. Therefore, no change will be made.