west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone (304) 926-0475 • FAX: (304) 926-0479

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	R13-2113K
Plant ID No.:	071-00001
Applicant:	Greer Lime Company
Facility Name:	Riverton Facility
Location:	Riverton, Pendleton County
SIC Code:	3274
NAICS Code:	32741
Application Type:	Modification
Received Date:	January 19, 2016
Engineer Assigned:	Thornton E. Martin Jr.
Fee Amount:	$2,000.00
Date Received:	January 20, 2016
Complete Date:	February 29, 2016
Applicant Ad Date:	January 14, 2016
Newspaper:	*The Pendleton Times*
UTM's:	Easting: 639.519 km Northing: 4,293.455 km Zone: 17
Description:	Applicant proposes to modify the lime handling circuit and hydrate truck loadout through the addition of two (2) new screw conveyors.

BACKGROUND INFORMATION

While researching the affected permit for Modification, it was determined that the Lime Handling Circuit is permitted under registration R13-2113J. The Hydrate Truck Loadout is separately permitted under registration R13-1396C. The Applicant was notified of their options to complete this modification and chose the most timely and efficient option whereas, registration R13-2113J will be modified to include the additional screw conveyor and a separate application with associated fees will be submitted to add the new screw conveyor to registration R13-1396C.

DESCRIPTION OF PROCESS

New screw conveyor 6-SC-11 will be added to the discharge of existing large pebble silo 6-SI-10 for the purpose of transferring large pebble lime to existing belt conveyor 6-BC-5. This will

allow Greer Lime the flexibility to process stored large pebble lime to other smaller sized products (mid-size pebble, granular, and/or fines) through processing (crushing and screening) on existing equipment. The discharge of large pebble lime from silo 6-SI-10 will either be to new screw conveyor 6-SC-11 or to the existing loadout belt 6-BC-6. Product will never be transferred in both directions simultaneously. The addition of the new screw conveyor will result in one new transfer point [TP248A (FE): 6-SC-11 to 6-BC-5] and additional particulate matter emissions associated with this single new transfer point. There will be no increase in regulated pollutant emissions from existing equipment, as all existing equipment in lime handling is already permitted for the full maximum production of both preheater rotary lime kilns. In keeping with this permitting methodology, new screw conveyor 6-SC-11 will be rated at 50 TPH and 311,000 TPY, although actual annual throughput will be considerably less.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

The proposed addition of the screw conveyor for the Lime Handling Circuit will result in an increase of controlled particulate matter emissions for the one associated transfer point and assuming 80% control efficiency for full enclosure. No yearly throughput changes are proposed for any existing equipment.

The Applicant performed the calculations for estimated emissions based on the emission factor from AP-42, 13.2.4 Aggregate Handling and Storage Piles (11/06) and was checked for accuracy and completeness by the writer. Controlled PM emissions from the new screw conveyor transfer point (TP248A) will be limited to 3.90 pounds per hour and 12.13 tons per year. Controlled PM_{10} emissions from the new screw conveyor transfer point (TP248A) will be limited to 1.80 pounds per hour and 5.60 tons per year. All PM_{10} is conservatively assumed to be $PM_{2.5}$.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

A toxicity analysis was not performed because the pollutants being emitted from this facility are PM (particulate matter) and PM_{10} (particulate matter less than 10 microns in diameter), which are non-toxic pollutants.

AIR QUALITY IMPACT ANALYSIS

Air dispersion modeling was not performed due to the size and proposed location of this facility. This facility will be located in Pendleton County, WV. Pendleton County is currently in attainment for PM (particulate matter), PM_{10} (particulate matter less than 10 microns in diameter) and $PM_{2.5}$ (particulate matter less than 2.5 microns in diameter).

CHANGES TO PERMIT R13-2113J

The following changes were made to R13-2113J:

* Table 1.0 was updated to add the new equipment.

* Permit has been put into NSR Permit Rev 2-1-13 format.

* No other changes to permit apply.

RECOMMENDATION TO DIRECTOR

The information contained in this permit application indicates that compliance with all applicable regulations should be achieved when all of the proposed particulate matter control methods are in operation. Due to the location, nature of the process, and control methods proposed, adverse impacts on the surrounding area should be minimized. Therefore, the granting of a permit to Greer Industries, Inc. dba Greer Lime Company for the additional screw conveyor to their Lime Handling facility is hereby recommended.

Thornton E. Martin Jr.
Permit Engineer

February 29, 2016
Date