West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Greer Industries, Inc. d.b.a. Greer Lime Company
Riverton, Pendleton County, WV
R30-07100001-2015

William F. Durham
Director

Issued: Draft/Proposed • Effective: Equals issue date plus two weeks
Expiration: Five Years After Issuance Date • Renewal Application Due: 6 Months Prior to Expiration

Permit Number: **R30-07100001-2015**
Permittee: **Greer Industries, Inc. d.b.a. Greer Lime Company**
Facility Name: **Riverton Facility**
Permittee Mailing Address: **1088 Germany Valley Limestone Road, Riverton, WV 26814**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location: Riverton, Pendleton County, West Virginia
Facility Mailing Address: 1088 Germany Valley Limestone Road, Riverton, WV 26814
Telephone Number: (304) 567-2141
Type of Business Entity: Corporation
Facility Description: Limestone Quarry and Lime Manufacturing Operation
SIC Codes: Primary 3274; Secondary 1422;
UTM Coordinates: 640.00 km Easting • 4293.00 km Northing • Zone 17

Permit Writer: Bobbie Scroggie

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0. Emission Units and Active R13, R14, and R19 Permits. 3

2.0. General Conditions. 12

3.0. Facility-Wide Requirements and Permit Shield. 20

Source-specific Requirements

4.0. Primary and Secondary Crushing Requirements. 34

5.0. Limestone Grinding Requirements. 36

6.0. 400 TPD Rotary Lime Kiln Requirements. 41

7.0. 500 TPD Rotary Lime Kiln Requirements. 47

8.0. Lime Handling System Requirements. 52

9.0. Hydrate System Requirements. 55

10.0. Portable Crushing and Screening Plant Requirements. 59

11.0. Coal Handling Requirements. 62

12.0. 40 C.F.R. Part 63 Subpart AAAAA "Lime Manufacturing" Requirements. 69

APPENDIX A - 45CSR10 Monitoring Plan

APPENDIX B - 40CFR63, Subpart AAAAA, Operating, Maintenance, Monitoring Plan

APPENDIX C - 40CFR63, Subpart AAAAA Startup, Shutdown, Malfunction Plan

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
		PRIMARY AND SECONDARY CRUSHING (Group 002)			
1-DH-1	1-DH-1	Dump Hopper with Impact Hammer	1994	50 Tons/1.5 MMTPY	WS, PE
1-IH-1	1-IH-1	Impact Hammer	Pre 1975	250 TPH/1.5 MMTPY	WS, PE
1-VGF-1	1-VGF-1	Vibrating Grizzly Feeder; (54"x24') Diester Model: VFG-5424	1994	800 TPH/1.5 MMTPY	WS, PE
1-CR-1	1-CR-1	Primary Jaw Crusher; Nordberg Model No. C-140B; (41"x55") Single Toggle	1994	800 TPH/0.6 MMTPY	WS, PE
1-BC-1	1-BC-1	Stone Belt	1994	800 TPH/1.5 MMTPY	FE
1-VS-1	1-VS-1, 1-DC-1	Vibrating Screen Triple Deck (8x20); Diester Model No. XHM-20OT	1994	800 TPH/1.5 MMTPY	FE, WS, BH (TP8)
1-DC-1	1-DC-1	Dust Collector	1996	NA	NA
1-BC-2	1-BC-2	Stone Belt	1994	500 TPH/1.04 MMTPY	FE
1-SB-1	1-SB-1	Secondary Crusher Surge Bin	1994	75 Tons/1.04 MMTPY	PE
1-VF-1	1VF-1	Electromechanical Vibrating Feeder; Syntron Model: MF400-D	1994	500 TPH/1.04 MMTPY	PE
1-CR-2	1-CR-2	Secondary Cone Crusher (5½'); Nordberg Model: Standard Heavy Duty Symons	1994	500 TPH/1.04 MMTPY	WS, PE
1-BC-3	1-BC-3	Stone Belt	1994	800 TPH/1.5 MMTPY	FE
1-BC-4	1-BC-4	Stone Belt	1994	800 TPH/1.5 MMTPY	FE
1-BC-5	1-BC-5	Stone Belt	1994	800 TPH/1.5 MMTPY	FE
1-SI-1	1-SI-1	Stone Silo 1	Pre 1976	2,000 Tons, 1.5 MMTPY	FE
2-VF-3	2-VF-3	Vibrating Feeder	Pre 1976	800 TPH/1.5 MMTPY	FE
2-VF-4	2-VF-4	Vibrating Feeder	Pre 1976	800 TPH/1.5MMTPY	FE
1-SI-2	1-SI-2	Stone Silo 2	Pre 1976	2,000 Tons, 1.5 MMTPY	FE
2-VF-1	2-VF-1	Vibrating Feeder	1999	800 TPH/1.5 MMTPY	FE
2-VF-2	2-VF-2	Vibrating Feeder	1999	800 TPH/1.5 MMTPY	FE
2-BC-1	2-BC-1	Tunnel Belt	1999	800 TPH/1.5 MMTPY	FE
2-BC-2	2-BC-2	Scale Belt	1996	800 TPH/1.5 MMTPY	FE
2-VS-1	2-VS-1	Vibrating Screen Triple Deck (8'x24')	1994	800 TPH/1.5 MMTPY	FE, WS
2-BC-3	2-BC-3	Stone Belt	1996	400 TPH/0.6 MMTPY	FE
2-SI-1	2-SI-1	Storage Silo	1960	400 TPH/0.6 MMTPY	FE
2-BC-9	2-BC-9	Belt Conveyor	1997	400 TPH/0.6 MMTPY	FE
2-OS-2	2-OS-2	Open Stockpile	1996	400 TPH/0.6 MMTPY	WS
2-BC-4	2-BC-4	Stockpile Belt	1996	400 TPH/0.6 MMTPY	FE
2-OS-1	2-OS-1	Open Stockpile	2009	14,500 Tons/0.6MMTPY	WS

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
2-BC-5	2-BC-5	Kiln Stone Belt	Pre 1990	400 TPH/0.9 MMTPY	FE
2-BC-6	2-BC-6	Kiln Stone Conveyor Belt	Pre 1990	400 TPH/0.9 MMTPY	FE
2-BC-7	2-BC-7	Kiln Stone Conveyor Belt	Pre 1990	400 TPH/0.9 MMTPY	FE
2-BC-8	2-BC-8	Kiln Stone Conveyor Belt	Pre 1990	400 TPH/0.9 MMTPY	FE
400 TPD LIME KILN (Group 004)					
4-OS-1	4-OS-1	Kiln Stone Stockpile No. 1	Pre 1990	6,000 Tons/0.9 MMTPY	WS
4-BC-1	4-BC-1	Belt Conveyor	1995	150 TPH/0.9 MMTPY	FE
4-BC-2	4-BC-2	Belt Conveyor	1995	150 TPH/0.9 MMTPY	FE
4-BC-3	4-BC-3	Belt Conveyor	Pre 1990	400 TPH/0.5819 MMTPY	FE
4-BC-4	4-BC-4	Belt Conveyor	Pre 1990	400 TPH/0.276 MMTPY	FE
4-STB-1	4-STB-1	Stone Bin	Pre 1990	250 TPH/0.276 MMTPY	FE
4-PH-1	1E	6 Bay LPD Pre-Heater	Pre 1990	31.5 TPH/0.276 MMTPY	4-DC-1
4-TC-1	1E	Transfer Chute	Pre 1990	31.5 TPH/0.276 MMTPY	4-DC-1
4-RK-1 400-105	1E	400 TPD Rotary Kiln (11'6"x150'); KVS Heat Rating; 5.0 MMBtu/ton Lime; Fuel: Coal	1995	16.7 TPH/0.146 MMTPY	4-DC-1
4-NC-1	E-6-DC-1	NIEMS Lime Cooler	Pre 1990	16.7 TPH/0.146 MMTPY	6-DC-1
4-VF-1	1E	Vibrating Feeder	Pre 1990	16.7 TPH/0.146 MMTPY	4-DC-1
4-VF-2	1E	Vibrating Feeder	Pre 1990	16.7 TPH/0.146 MMTPY	4-DC-1
4-VF-3	1E	Vibrating Feeder	Pre 1990	16.7 TPH/0.146 MMTPY	4-DC-1
4-VF-4	1E	Vibrating Feeder	Pre 1990	16.7 TPH/0.146 MMTPY	4-DC-1
5-SI-2	5-SI-2	Coal Bin	Pre 1990	30 Tons/0.0263 MMTPY	FE
5-WF-1	5-WF-1	Coal Weigh Feeder	Pre 1990	3 TPH/0.0263 MMTPY	FE
5-BM-1	1E	Ball Mill	Pre 1990	3 TPH/0.0263 MMTPY	4-DC-1
5-AS-1	1E	Classifier	Pre 1990	3 TPH/0.0263 MMTPY	4-DC-1
4-PC-1	1E	Primary Collector	Pre 1990	3 TPH/0.015 MMTPY	4-DC-1
4-SI-1	4-SI-1	Dust Bin	Pre 1990	30 TPH/0.015 MMTPY	FE
4-LS-2	4-LS-2	Loading Spout	Pre 1990	30 TPH/0.015 MMTPY	FE
4-DC-1	1E	Dust Collector	Pre 1990	NA	NA
4-SC-1	4-SC-1	Baghouse Screw Conveyor	Pre 1990	3 TPH/0.015 MMTPY	FE
4-SC-2	4-SC-2	Baghouse Screw Conveyor	Pre 1990	3 TPH/0.015 MMTPY	FE
4-SC-3	4-SC-3	Baghouse Collection Screw	Pre 1990	3 TPH/0.015 MMTPY	FE
4-SC-4	4-SC-4	Dust Screw Conveyor	Pre 1990	3 TPH/0.015 MMTPY	FE
4-BEL-1	4-BEL-1	Dust Elevator	Pre 1990	3 TPH/0.015 MMTPY	FE
5-CS-1	5-CS-1	3-Sided Covered Coal Storage Pile	2002	5,000 Tons/0.054 MMTPY	PE
5-CS-1A	5-CS-1A	Coal Storage Pile	2014	15,000 TPY	NA

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
5-CS-2	5-CS-2	Coal Storage Pile	2014	15,000 TPY	NA
5-DH-1	5-DH-1	Dump Hopper - Coal	2006	50 TPH/0.054 MMTPY	PE
5-VF-1	5-VF-1	Vibrating Feeder - Coal	2006	50 TPH/0.054 MMTPY	PE
5-BC-0	5-BC-0	Belt Conveyor - Coal	2006	50 TPH/0.054 MMTPY	FE
5-CR-1	5-CR-1	Coal Grinder	2006	50 TPH/0.054 MMTPY	FE
5-SI-1	5-SI-1	Coal Silo	2006	2,500 Tons/0.054 MMTPY	FE
5-VF-2	5-VF-2	Vibrating Feeder - Coal	2006	60 TPH/0.054 MMTPY	FE
5-BC-1	5-BC-1	Belt Conveyor - Coal	2006	60 TPH/0.054 MMTPY	FE
5-BC-2	5-BC-2	Belt Conveyor - Coal	2006	60 TPH/0.054 MMTPY	FE
5-BC-3	5-BC-3	Belt Conveyor	1960s	60 TPH/0.054 MMTPY	FE
500 TPD LIME KILN (Group 005)					
4-BC-5	4-BC-5	Belt Conveyor	1995	400 TPH/0.306 MMTPY	FE
4-STB-2	4-STB-2	Stone Bin	1995	300 Tons/0.306 MMTPY	FE
4-PH-2	500-115	8-Bay LPD Preheater	1995	38.62 TPH/0.306 MMTPY	4-DC-2
4-TC-2	500-115	Transfer Chute		38.62 TPH/0.306 MMTPY	4-DC-2
4-RK-2	500-115	500 Ton per day KVS Rotary Lime Kiln - Lime Calcining System; Kennedy Van Saun, Allis Mineral Systems Burner 89 MMBtu/hr; Fuel: Coal	1995	38.62 TPH/0.306 MMTPY	4-DC-2
4-NC-2	500-P1	NIEMS - Lime Cooler	1995	20.8 TPH/0.165 MMTPY	6-DC-4
4-VF-5	500-115	Vibrating Feeder	1995	20.8 TPH/0.165 MMTPY	4-DC-2
4-VF-6	500-115	Vibrating Feeder	1995	20.8 TPH/0.165 MMTPY	4-DC-2
4-VF-7	500-115	Vibrating Feeder	1995	20.8 TPH/0.165 MMTPY	4-DC-2
4-VF-8	500-115	Vibrating Feeder	1995	20.8 TPH/0.165 MMTPY	4-DC-2
5-BC-4	5-BC-4	Conveyor Belt	1995	60 TPH/0.028 MMTPY	FE
5-SI-3	5-SI-3	Coal Bin	1995	50 Tons/0.028 MMTPY	FE
5-WF-2	5-WF-2	Coal Weigh Feeder	1995	3.5 TPH/0.028 MMTPY	FE
5-BM-2	500-115	Ball Mill	1995	3.5 TPH/0.028 MMTPY	4-DC-2
5-AS-2	500-115	Classifier	1995	3.5 TPH/0.028 MMTPY	4-DC-2
4-PC-2	500-115	Primary Separator	1995	3 TPH/0.015 MMTPY	4-DC-2
4-SC-9	500-119b	Screw Conveyor	1995	3 TPH/0.015 MMTPY	4-DC-3
4-SC-10	500-119b	Screw Conveyor	1995	3 TPH/0.015 MMTPY	4-DC-3
4-BEL-2	500-119b	Bucket Conveyor	1995	3 TPH/0.015 MMTPY	4-DC-3
4-SI-2	500-119b	Dust Bin for Bag House Dust	1995	50 Tons/0.015 MMTPY	4-DC-3
4-LS-1	500-119b	Loading Spout	1995	30 TPH/0.015 MMTPY	4-DC-3
500-BOB	500-119b	Blow Off Bin for Truck Cleaning	1997	30 TPH/0.003 MMTPY	4-DC-3
4-DC-2	500-115	Dust Collector	1995	NA	NA

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
4-SC-5	500-119b	Module C-D Screw Conveyor	1995	3 TPH/0.015 MMTPY	4-DC-3
4-SC-6	500-119b	Module A-B Screw Conveyor	1995	3 TPH/0.015 MMTPY	4-DC-3
4-SC-7	500-119b	Baghouse Conveyor	1995	3 TPH/0.015 MMTPY	4-DC-3
4-SC-8	500-119b	Dust Screw Conveyor	1995	3 TPH/0.015 MMTPY	4-DC-3
4-DC-3	500-119b	Dust Collector	1995	NA	NA
LIME HANDLING SYSTEM (Group 006)					
6-BC-1	6-BC-1	Belt Conveyor	Pre 1990	16.7 TPH/0.146 MMTPY	FE
6-BC-2	E-6-DC-1	Belt Conveyor	Pre 1990	50 TPH/0.311 MMTPY	6-DC-1
6-BEL-2	E-6-DC-3	Bucket Elevator	Pre 1990	50 TPH/0.1 MMTPY	6-DC-3
6-BC-3	E-6-DC-1	Belt Conveyor	Pre 1990	50 TPH/0.311 MMTPY	6-DC-1
6-CR-3	E-6-DC-1	Roll Crusher; McLanahan Roll Crusher Model No. Black Diamond 18" x 18" Type: Double Roll	1998	50 TPH/0.311 MMTPY	6-DC-1
6-DC-1	E-6-DC-1	Dust Collector	1991	NA	NA
6-BEL-1	6-BEL-1	Bucket Elevator	1998	50 TPH/0.311 MMTPY	FE
6-VS-4	E-6-DC-3	5 Deck Vibrating Screen (5' x 10')	1998	50 TPH/0.311 MMTPY	6-DC-3
6-DC-3	E-6-DC-3	Dust Collector	1991	NA	NA
6-SC-1	6-SC-1	Screw Conveyor	Pre 1990	50 TPH/0.311 MMTPY	FE
6-SC-2	6-SC-2	Screw Conveyor	1998	50 TPH/0.311 MMTPY	FE
6-SC-3	6-SC-3	Screw Conveyor	1998	50 TPH/0.311 MMTPY	FE
6-SC-4A	6-SC-4A	Screw Conveyor	1998	50 TPH/0.1 MMTPY	FE
6-SC-4B	6-SC-4B	Screw Conveyor	1998	50 TPH/0.1 MMTPY	FE
6-SC-5	6-SC-5	Screw Conveyor	Pre 1990	50 TPH/0.311 MMTPY	FE
6-SI-1	6-SI-1	Lime Storage Silo No. 1	1960s	125 Tons/0.311 MMTPY	FE
6-SI-2	6-SI-2	Lime Storage Silo No. 2	1960s	125 Tons/0.311 MMTPY	FE
6-SI-3	6-SI-3	Lime Storage Silo No. 3	1960s	125 Tons/0.311 MMTPY	FE
6-SI-4	6-SI-4	Lime Storage Silo No. 4	1960s	125 Tons/0.311 MMTPY	FE
6-SI-5	6-SI-5	Lime Storage Silo No. 5	1960s	125 Tons/0.311 MMTPY	FE
6-SI-6	6-SI-6	Lime Storage Silo No. 6	1960s	125 Tons/0.311 MMTPY	FE
6-SI-7	6-SI-7	Hydrate Feed Storage Silo No. 7	1960s	735 Tons/0.1 MMTPY	FE
6-SI-8	6-SI-8	Hydrate Feed Storage Silo No. 8	1960s	735 Tons/0.1 MMTPY	FE
6-SI-9A	6-SI-9A	Hydrate Feed Storage Silo No. 9A	1960s	735 Tons/0.1 MMTPY	FE
6-BB-1	6-BB-1	Granular Lime Bagging Bin	Pre 1990	25 TPH/0.311 MMTPY	FE+FE
6-VF-1	6-VF-1	Vibrating Feeder	1998	150 TPH/0.311 MMTPY	FE
6-VF-2	6-VF-2	Vibrating Feeder	1998	150 TPH/0.311 MMTPY	FE
6-VF-3	6-VF-3	Vibrating Feeder	1998	150 TPH/0.311 MMTPY	FE
6-VF-4	6-VF-4	Vibrating Feeder	1998	150 TPH/0.311 MMTPY	FE

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
6-VF-5	6-VF-5	Vibrating Feeder	1998	150 TPH/0.311 MMTPY	FE
6-VF-6	6-VF-6	Vibrating Feeder	1998	150 TPH/0.311 MMTPY	FE
6-BC-8	6-BC-8	Belt Conveyor	1998	150 TPH/0.1 MMTPY	FE
6-BC-9	6-BC-9	Belt Conveyor	1998	150 TPH/0.1 MMTPY	FE
6-BC-10	6-BC-10	Belt Conveyor	1998	150 TPH/0.1 MMTPY	FE
6-GB-1	6-GB-1	Granular Bagger	1998	25 TPH/0.311MMTPY	FE+FE
6-SC-8	6-SC-8	Screw Conveyor	1998	150 TPH/0.311 MMTPY	FE
6-SC-9	6-SC-9	Screw Conveyor	1998	150 TPH/0.311 MMTPY	FE
6-LS-1	E-6-DC-3	Retractable Loading Spout	1998	150 TPH/0.311 MMTPY	6-DC-3
6-BC-11	6-BC-11	Belt Conveyor	1998	150 TPH/0.1 MMTPY	FE
6-BEL-5	6-BEL-5	Bucket Elevator	1984	150 TPH/0.1 MMTPY	FE
6-SC-6A	6-SC-6A	Screw Conveyor	2013	50 TPH/0.1 MMTPY	FE
6-SC-6B	6-SC-6B	Screw Conveyor	2013	50 TPH/0.1 MMTPY	FE
6-BC-13	6-BC-13	Belt Conveyor	1998	150 TPH/0.311 MMTPY	FE
6-BC-14	6-BC-14	Belt Conveyor	1998	150 TPH/0.311 MMTPY	FE
6-DC-4	500-P1	Dust Collector	1995	NA	NA
6-BC-15	500-P1	Belt Conveyor	1995	20.8 TPH/0.165 MMTPY	6-DC-4
6-BC-16	500-P1	Belt Conveyor	1995	20.8 TPH/0.165 MMTPY	6-DC-4
6-BC-4	500-P1	Product Belt Conveyor	1995	50 TPH/0.311 MMTPY	6-DC-4
6-DC-2	E-6-DC-2	Dust Collector	1998	NA	NA
6-BC-5	E-6-DC-2	Product Belt Conveyor	Pre 1990	50 TPH/0.311 MMTPY	FE
6-VS-3	E-6-DC-2	Double Deck Vibrating Screen (4'x8')	Pre 1990	50 TPH/0.311 MMTPY	6-DC-2
6-BEL-3	6-BEL-3	Bucket Elevator	Pre 1990	50 TPH/0.311 MMTPY	FE
6-CR-2	E-6-DC-2	Roll Crusher	1998	50 TPH/0.311 MMTPY	6-DC-2
6-SI-10	E-6-DC-2	Storage Silo	1991	1,200 Tons/0.311 MMTPY	6-DC-2
6-BC-6	6-BC-6	Conveyor Belt	1991	150 TPH/0.311 MMTPY	FE (Dust Sock)
6-BC-7	6-BC-7	Conveyor Belt	1991	150 TPH/0.311 MMTPY	
6-BEL-4	6-BEL-4	Bucket Elevator	1991	50 TPH/0.311 MMTPY	FE
6-SI-9B	E-6-DC-2	Storage Silo	1991	1,200 Tons/0.311 MMTPY	6-DC-2
6-VS-5	6-VS-5	Single Deck Vibrating Screen	2006	50 TPH/0.06 MMTPY	FE
6-SC-10	6-SC-10	Screw Conveyor	2006	50 TPH/0.06 MMTPY	FE
6-BL-1	6-BL-1	DensPhase Pump System	2006	50 TPH/0.06 MMTPY	FE
HYDRATE PLANT (Group 007)					
7-SB-1	E3	Hydrate Feed Bin	1984	50 TPH/0.1 MMTPY	7-DC-3
7-DC-3	E3	Dust Collector	1984	NA	NA
7-BC-1	7-BC-1	Belt Conveyor	1984	15 TPH/0.1 MMTPY	FE+FE
7-SC-0	7-SC-0	Screw Conveyor	1984	15 TPH/0.1 MMTPY	FE+FE

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
7-BEL-1	7-BEL-1	Bucket Elevator	1984	15 TPH/0.1 MMTPY	FE+FE
7-SC-1	E4	Screw Conveyor	2013	15 TPH/0.1 MMTPY	7-SCR-1
7-SCR-1	E4	Wet Scrubber	1999	NA	NA
7-MT-1	7-MT-1	Mixing Tub	1999	15 TPH/0.1 MMTPY	FE+FE
7-HY-1	E4	Atmospheric Hydrator	1999	15 TPH/0.1 MMTPY	7-SCR-1
7-SC-2	E1	Screw Conveyor	1984	15 TPH/0.1 MMTPY	7-DC-1
7-BEL-2	E1	Bucket Elevator	1984	15 TPH/0.1 MMTPY	7-DC-1
7-AS-20	E20	Air Separator	2013	25 TPH/0.1 MMTPY	7-DC-20
7-BM-1	E20	Ball Mill	1984	10 TPH/0.1 MMTPY	7-DC-20
7-SC-8	E20	Screw Conveyor	1984	10 TPH/0.1 MMTPY	7-DC-20
7-SC-9	E20	Screw Conveyor	1984	10 TPH/0.1 MMTPY	7-DC-20
7-BEL-3	E1	Bucket Elevator	1984	20 TPH/0.1 MMTPY	7-DC-1
7-SC-10	E1	Screw Conveyor	1984	20 TPH/0.1 MMTPY	7-DC-1
7-SC-11	E1	Screw Conveyor	1984	20 TPH/0.1 MMTPY	7-DC-1
7-DC-1	E1	Dust Collector	1984	NA	NA
7-SI-1	E1	Hydrate Bin	1984	150 TPH/0.1 MMTPY	7-DC-1
7-SI-2	E1	Hydrate Bin	1984	150 TPH/0.1 MMTPY	7-DC-1
7-SC-12	E1	Screw Conveyor	1984	15 TPH/0.1 MMTPY	7-DC-1
7-SC-13	E1	Screw Conveyor	1984	15 TPH/0.1 MMTPY	7-DC-1
7-BL-1	E1	Blower	1991	15 TPH/0.1 MMTPY	7-DC-1
7-SI-4	E5	Hydrate Silo	1997	200 TPH/0.1 MMTPY	7-DC-4
7-LS-2	7-LS-2	Truck Loading Spout	1997	45 TPH/0.1 MMTPY	PE
7-DC-4	E5	Dust Collector	1997	NA	NA
7-BEL-4	E1	Bucket Elevator	1984	15 TPH/0.1 MMTPY	7-DC-1
7-SC-14	E1	Screw Conveyor	1984	15 TPH/0.1 MMTPY	7-DC-1
7-LS-1	E1	Truck Loading Spout	1991	15 TPH/0.1 MMTPY	7-DC-1
7-SC-15	E1	Screw Conveyor	1991	15 TPH/0.1 MMTPY	7-DC-1
7-SC-16	E1/E2	Screw Conveyor	1991	15 TPH/0.1 MMTPY	7-DC-1/ 7-DC-2
7-SC-17	E2	Screw Conveyor	1991	15 TPH/0.1 MMTPY	7-DC-2
HBB	E2	Hydrate Bagging Bin	1991	15 TPH/0.1 MMTPY	7-DC-2
HB	E6	Hydrate Bagger	1991	15 TPH/0.1 MMTPY	7-DC-5
7-SC-18	E6	Clean Up Screw Conveyor	1991	15 TPH/0.1 MMTPY	7-DC-5
7-SC-23	E1	Screw Conveyor	2013	25 TPH/0.1 MMTPY	7-DC-1
7-SC-24	E20	Screw Conveyor	2013	10 TPH/0.1 MMTPY	7-DC-20
7-SC-25	E1	Screw Conveyor	2013	20 TPH/0.1 MMTPY	7-DC-1

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
7-WR-1	E6	Wire Conveyor Bagger Conveyor	1991	15 TPH/0.1 MMTPY	NE Bagged Product
7-BC-2	7-BC-2	Belt Conveyor	1991	15 TPH/0.1 MMTPY	
7-BC-3	7-BC-3	Belt Conveyor	1991	15 TPH/0.1 MMTPY	
7-WR-2	E2	Wire Conveyor	1991	15 TPH/0.1 MMTPY	FE
7-DC-2	E2	Dust Collector	1991	NA	NA
7-DC-5	E6	Dust Collector	1991	NA	NA
7-BEL5	E6	Bucket Elevator	1991	15 TPH/0.1 MMTPY	7-DC-5
PORTABLE PLANT (Group 008)					
GF1	GF1	Grizzly Feeder	2002	300 TPH/0.6 MMTPY	WS
PC1	PC1	Jaw Crusher	2002	300 TPH/0.6 MMTPY	WS
BC1	BC1	Under Crusher Belt Conveyor	2002	300 TPH/0.6 MMTPY	WS
BC2	BC2	Screen Feed Radial Stacker	2002	300 TPH/0.6 MMTPY	COM
PS1/BC5	PS1/BC5	Triple Deck Scalping Screen and Under Screen take-away belt	2002	300 TPH/0.6 MMTPY	PE, WS
BC3	BC3	Stockpile Feed Radial Stacker Belt	2002	110 TPH/0.6 MMTPY	COM
PSP1	PSP1	Limestone Open Stockpile 1 Area: 8,460 ft^2 Height: 32 Feet	2002	8,000 Tons/0.6 MMTPY	COM
BC4	BC4	Stockpile Feed Radial Stacker	2002	190 TPH/0.6 MMTPY	WS
PSP2	PSP2	Gabion Open Stockpile 2 Area: 8,460 ft^2 Height: 32 Feet	2002	8,000 Tons,/0.05 MMTPY	COM
BC6	BC6	Surge Bin Feed Radial Stacker	2002	300 TPH/0.6 MMTPY	COM
B1	B1	Surge Bin	2002	50 Tons/0.6 MMTPY	COM
BC7	BC7	Under-Bin Main Feed Belt Conveyor	2002	300 TPH/1.2 MMTPY	COM
PS2/BC12	PS2/BC12	Triple Deck Screen and Conveyor	2002	300 TPH/1.2 MMTPY	FE, WS
PC2	PC2	Cone Crusher	2002	300 TPH/0.6 MMTPY	WS
BC8	BC8	Belt Conveyor	2002	300 TPH/0.6 MMTPY	COM
BC9	BC9	Stockpile Feed Radial Stacker	2002	150 Tons/0.6 MMTPY	COM
PSP3	PSP3	Limestone Open Stockpile Area: 8,460 ft^2 Height: 32 Feet	2002	8,000 Tons/0.6 MMTPY	COM
BC10	BC10	Stock Feed Radial Stacker	2002	190 TPH/0.6 MMTPY	COM
PSP4	PSP4	Open Stockpile 4 Area: 8,460 ft^2 Height: 32 Feet	2002	8,000 Tons/0.6 MMTPY	COM
BC11	BC11	Stock Feed Radial Stacker	2002	75 TPH/0.6 MMTPY	COM
PSP5	PSP5	Open Stockpile 5 Area: 8,460 ft^2 Height: 32 Feet	2002	8,000 Tons/0.6 MMTPY	COM
VEHICULAR TRAFFIC (Group 009)					
VT	VT	Vehicles Traveling Plant Haulroads	Pre 1972	NA	WT
LIMESTONE GRINDING SYSTEM (Group 011)					
11-DH-1	11-DH-1	Feed Hopper	2009	100 TPH/0.1 MMTPY	PE

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
11-BC-4	11-BC-4	Belt Conveyor	2009	100 TPH/0.1 MMTPY	PE
11-BC-1	11-BC-1	Belt Conveyor	2007	200 TPH/0.5694 MMTPY	FE
11-BEL-1	11-BEL-1	Bucket Elevator	2007	200 TPH/0.5694 MMTPY	FE
11-SI-3	E-11-DC-1	Mill Feed Bin	2007	500 Tons/0.5694 MMTPY	11-DC-1
11-BC-2	11-BC-2	Belt Conveyor	2007	65 TPH/0.5694 MMTPY	FE
11-SB-2	11-SB-2	Surge Bin	2007	10 Ton/0.5694 MMTPY	FE
11-BM-1	E-11-DC-1	Bradley Mill	2007	65 TPH/0.5694 MMTPY	11-DC-1
11-DS-1	E-11-DC-1	Dynamic Separator	2007	65 TPH/0.5694 MMTPY	11-DC-1
11-HG-1	E-11-DC-1	Hot Air Generator	2007	7.5 MM Btu/Hr	11-DC-1
11-CY-1	E-11-DC-1	Cyclone Separator	2007	65 TPH/0.5694 MMTPY	11-DC-1
11-BL-3	E-11-DC-1	Blower	2007	65 TPH/0.5694 MMTPY	11-DC-1
11-CL-1	E-11-DC-1	Classifier Separator	2007	65 TPH/0.5694 MMTPY	11-DC-1
11-BL-2	E-11-DC-1	Blower	2007	65 TPH/0.5694 MMTPY	11-DC-1
11-SI-1	E-11-DC-1	Sand Storage Silo	2007	250 Tons/0.5694 MMTPY	11-DC-1
11-CY-2	E-11-DC-1	Cyclone Separator	2007	65 TPH/0.5694 MMTPY	11-DC-1
11-SI-2	E-11-DC-1	Ag Lime Storage Silo	2007	150 Tons/0.5694 MMTPY	11-DC-1
11-DC-1	E-11-DC-1	Dust Collector	2007	NA	NA
11-SC-1	11-SC-1	Screw Conveyor	2007	1 TPH0.0028 MMTPY	FE
11-DC-4	E-11-DC-4	Dust Collector	2011	0.022 gr/dscf	NA
11-SI-5	E-11-DC-4	Rock Dust Silo	2007	400 Tons/0.5694 MMTPY	11-DC-4
11-SI-6	E-11-DC-2	Rock Dust Bulk Silo	2007	400 Tons/0.5694 MMTPY	11-DC-2
11-SC-3	E-11-DC-2	Screw Conveyor	2007	65 TPH/0.5694 MMTPY	11-DC-2
11-DC-2	E-11-DC-2	Dust Collector	2008/2011	NA	NA
11-DV-20	E-11-DC-2	Diverter	2011	65 TPH/0.5694 MMTPY	11-DC-2
11-DV-21	E-11-DC-2	Diverter	2011	65 TPH/0.5694 MMTPY	11-DC-2
11-SB-1	E-11-DC-2	Rock Dust Bin	2008	100 Tons/0.5694 MMTPY	11-DC-3
11-SSB-1	E-11-DC-3	Super Sack Bagger	2008	30 TPH/0.2628 MMTPY	11-DC-3
11-SI-7	E-11-DC-3	Ultra Fine Rock Dust Bin	2008	125 Tons/0.5694 MMTPY	11-DC-3
11-SC-7	E-11-DC-3	Screw Conveyor	2008	65 TPH/0.5694 MMTPY	11-DC-3
11-LS-4	E-11-DC-3	Truck Loading Spout	2008	65 TPH/0.5694 MMTPY	11-DC-3
11-DC-3	E-11-DC-3	Dust Collector	2008/2011	NA	NA
11-SC-4	E-11-DC-3	Screw Conveyor	2008	2 TPH/0.002934 MMTPY	11-DC-3
11-SC-5	E-11-DC-3	Screw Conveyor	2008	2 TPH/0.002934 MMTPY	11-DC-3
11-SC-6	E-11-DC-3	Screw Conveyor	2008	2 TPH/0.002934 MMTPY	11-DC-3
11-SI-4	E-11-DC-3	Baghouse Dust Bin	2008	50 Tons/0.002934 MMTPY	11-DC-3
11-LS-3	E-11-DC-2	Truck Loading Spout	2008	65 TPH/0.5694 MMTPY	11-DC-2
11-LS-2	E-11-DC-1	Truck Loading Spout	2007	65 TPH/0.5694 MMTPY	11-DC-1

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
11-LS-1	E-11-DC-1	Truck Loading Spout	2007	65 TPH/0.5694 MMTPY	11-DC-1
11-SC-20	E-11-DC-20	Screw Conveyor	2011	30 TPH/262,800 TPY	11-DC-20
11-BEL-20	E-11-DC-20	Bucket Elevator	2011	38 TPH/332,880 TPY	11-DC-20
11-BG-20	E-11-DC-20	Bagger	2011	30 TPH/262,800 TPY	11-DC-20
11-SC-21	E-11-DC-20	Screw Conveyor	2011	7.5 TPH/65,700 TPY	11-DC-20
11-WC-20	NA	Wire Conveyor	2011	30 TPH/262,800 TPY	No Emissions
11-BC-20	NA	Belt Conveyor (bagged product)	2011	30 TPH/262,800 TPY	No Permitted Emissions
11-BC-21	NA	Belt Conveyor (bagged product)	2011	30 TPH/262,800 TPY	
11-BC-22	NA	Belt Conveyor (empty bags)	2011	30 TPH/262,800 TPY	
11-DC-20	E-11-DC-20	Dust Collector	2011	0.014 gr/dscf	NA

Control Device abbreviations: FE = Full Enclosure, FE+FE = Full Enclosure in Building, PE = Partial Enclosure, NE = No Enclosure, BH = Baghouse, WT = Water Truck, WS = Water Spray, COM = Carry Over Moisture from an Upstream Water Spray, NA = Not Applicable

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-1396C	**August 29, 2013**
R13-1381A	**May 25, 2004**
R13-1685	**February 10, 1994**
R13-1788	**April 24, 1995**
R13-2113J	**June 22, 2011**
R13-2222-P2	**March 19, 2002**
R13-2670B	**May 1, 2014**

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10µm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a 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 conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. 61 and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.9. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 45CSR§§7- 3.2 (See Section 3.1.10.), 3.3, 3.4, 3.5, 3.6, and 3.7 (See Section 3.1.11.).
[45CSR§7-3.1.; 45CSR13, R13-1396, 4.1.10.]

3.1.10. The provisions of Section 3.1.9 [45CSR§7-3.1] shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§7-3.2; 45CSR13, R13-1396, 4.1.10.]

3.1.11. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to Section 3.1.14 [45CSR§7-5.1.] is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7.]

3.1.12. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in 45CSR7 Table 45-7A.
[45CSR§7-4.1.; 45CSR13, R13-1396, 4.1.10.]

3.1.13. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
[45CSR§7-4.12.]

3.1.14. No person shall cause, suffer, allow, or permit any manufacturing process generating fugitive particulate matter to operate that is not equipped with a system to minimize the emissions of fugitive particulate matter. To minimize means that a particulate capture or suppression system shall be installed to ensure the lowest fugitive particulate emissions reasonably achievable.
[45CSR§7-5.1.]

3.1.15. The owner or operator of a plant shall maintain dust control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary dust suppressants shall be applied in relation to stockpiling and general material handling to prevent dust generation and atmospheric entrainment.
[45CSR§7-5.2.]

3.1.16. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in this rule may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment

failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR§7-9.1.]

3.1.17. Maintenance operations (as defined in 45CSR7) shall be exempt from the provisions of 45CSR§7-4 provided that at all times the owner or operator shall conduct maintenance operations in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§7-10.3.]

3.1.18. An owner or operator may apply for an alternative visible emission standard for start-up and shutdown periods, on a case-by-case basis, by filing a written petition with the Director. The Director may approve an alternative visible emission standard for start-ups and shutdowns to the visible emission standard required under 45CSR§7-3. The petition shall include a demonstration satisfactory to the Director:

a. That it is technologically or economically infeasible to comply with 45CSR§7-3;

b. That establishes the need for approval of a start-up or shutdown plan based upon information including, but not limited to, monitoring results, opacity observations, operating procedures and source inspections.

c. That the particulate matter weight emission standards under section 4 are being met, as determined in accordance with 45CSR7A - "Compliance Test Procedures For 45CSR7 - ' To Prevent and Control Particulate Air Pollution From Manufacturing Process Operations'"; and

d. That during periods of start-ups and shutdowns the owner or operator shall, to the extent practicable, maintain and operate any manufacturing process including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.

[45CSR§7-10.4.]

3.1.19. Affected facilities as defined in 40 C.F.R. §§ 60.670 and 60.671 must meet the stack emission limits and compliance requirements in Table 2 of 40 C.F.R. Part 60 Subpart OOO within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under 40 C.F.R. § 60.8. The requirements in Table 2 of 40 C.F.R. Part 60 Subpart OOO apply for affected facilities with capture systems used to capture and transport particulate matter to a control device.

a. Affected facilities that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008 must meet the following stack emission limits:

1. A particulate matter (PM) limit of 0.05 g/dscm (0.022 gr/dscf), except for equipment identified in 40 C.F.R. §§ 60.672 (d) through (f); and

2. An opacity limit of 7 percent for dry control devices.

b. Affected facilities that commenced construction, modification, or reconstruction on or after April 22, 2008 must meet the following stack emission limits:

1. A particulate matter (PM) limit of 0.032 g/dscm (0.014 gr/dscf), except for equipment identified in 40 C.F.R. §§ 60.672 (d) through (f); and

2. An opacity limit of 7 percent for dry control devices on individual enclosed storage bins.

[45CSR16, 40 C.F.R. § 60.672 (a) and Table 2, Group (002, 004, 005, 008, 011)]

3.1.20. Affected facilities as defined in 40 C.F.R. §§ 60.670 and 60.671 must meet the fugitive emission limits and compliance requirements in Table 3 of 40 C.F.R. Part 60 Subpart OOO within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under 40 C.F.R. § 60.11. The requirements in Table 3 of 40 C.F.R. Part 60 Subpart OOO apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.

Affected facilities that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008 must meet the following fugitive emission limits:

a. Ten (10) percent opacity for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility.

b. Fifteen (15) percent opacity for crushers without a capture system.

Affected facilities that commenced construction, modification, or reconstruction on or after April 22, 2008 must meet the following fugitive emission limits:

c. Seven (7) percent opacity for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility.

d. Twelve (12) percent opacity for crushers without a capture system.

[45CSR16, 40 C.F.R. § 60.672 (b) and Table 3, Group (002, 004, 005, 008, 011)]

3.1.21. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of 40 C.F.R. § 60.672.

[45CSR16, 40 C.F.R. § 60.672 (d), Group (002 and 008)]

3.1.22. If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in 40 C.F.R. § 60.672 (a) and (b) [Sections 3.1.19 and 3.1.20.], or the building enclosing the affected facility or facilities must comply with the following emission limits:

1. Fugitive emissions from the building openings (except for vents as defined in 40 C.F.R. § 60.671) must not exceed 7 percent opacity; and

2. Vents (as defined in 40 C.F.R. § 60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of 40 C.F.R. Part 60 Subpart OOO (see Section 3.1.19.).

[45CSR16, 40 C.F.R. § 60.672 (e), Group (002, 004, 005, 008, 011)]

3.1.23. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2113, R13-2113A, R13-2113B, R13-2113C, R13-2113D, R13-2113E, R13-2113F, R13-2113G, R13-2113H, R13-0725, R13-1788 and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-2113, 2.5.1.]

3.1.24. The transfer points, as identified in the Process Flow Diagram included as Attachment F in Permit Application R13-1396C, shall use the following control devices:

a. The following transfer points shall be required to use partial enclosures: TP287 and TP292;

b. The following transfer points shall be required to use full enclosures: TP234A;

c. The following transfer points shall be required to use double full enclosures (FE/FE): TP257 - TP259; and

d. All other transfer points that have the potential to emit particulate matter, with the exception of TP260, shall use Dust Collectors as specified under in the Process Flow Diagram included as Attachment F in Permit Application R13-1396C.

[45CSR13, R13-1396, 4.1.7.]

3.2. Monitoring Requirements

3.2.1. The permittee shall implement the following maintenance and monitoring work practices in order to demonstrate continuous compliance with opacity requirements of 45CSR7 and 40 C.F.R. Part 60 Subparts OOO and HH. [Not required for open stockpiles (2-OS-1 and 4-OS-1), Coal and Limestone Feed Stockpile Common to 400 TPD & 500 TPD Lime Kilns, PSP1, PSP2, PSP3, PSP4, PSP5, and haulroads]

Visible emission observations shall be conducted at least once per calendar quarter by a certified Method 9 observer for all transfer points and fugitive dust sources during periods of operation for 5 minutes to determine if any of the emission units or transfer points have visible emissions. If emissions are evident and quantifiable, their opacity shall be determined by conducting a documented Method 9 observation. If any emission unit or transfer point has visible emissions exceeding the applicable regulatory limit, then it should be documented as such and the permittee shall initiate corrective actions to minimize emissions in a timely manner in accordance with the maintenance and monitoring work practice procedures established below.

a. Monitoring in the form of inspections shall be conducted at least once per calendar quarter on all transfer points and emission units subject to the opacity requirements of 45CSR7 and 40 C.F.R. Part 60 Subpart OOO or HH. The inspections shall utilize a certified Method 9 observer to evaluate each source of emissions using Method 22. If during the inspection or anytime the permittee recognizes visual emissions approaching opacity limits, maintenance activities shall be initiated to minimize PM emissions and maintain opacity within compliance levels based on the applicable opacity standard. Maintenance activities shall be completed and a satisfactory inspection documented before the end of the following quarterly inspection.

b. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. Part 60 Appendix A, Method 22 or Method 9, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall be maintained on site stating any

maintenance or corrective actions taken as a result of the quarterly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.
[45CSR§30-5.1.c., Emission Groups (002, 004, 005, 006, 007, 008, 011)]

3.2.2. The permittee shall conduct weekly visual emission observations on all dust collectors and the permitee shall maintain a pressure gauge on all dust collectors for pressure drop observations. The permittee shall maintain records of the maintenance performed on each baghouse. These records shall include all maintenance work performed on each dust collector including the frequency of bag/filter change outs. Records shall state the date and time of each dust collector inspection, the inspection results, and corrective action taken, if any. Records shall be maintained on site for five (5) years from its origination date.
[45CSR§30-5.1.c., Section 1.0 (Dust Collectors)]

3.2.3. Except as specified in 40 C.F.R. § 60.674 (e) [Section 3.2.4.], the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 C.F.R. Part 60, Appendix A–7). The Method 22 (40 C.F.R. Part 60, Appendix A–7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record each Method 22 (40 C.F.R. Part 60, Appendix A–7) test, including the date and any corrective actions taken, in the logbook required under 40 C.F.R. § 60.676 (b). The owner or operator of the affected facility may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to 40 C.F.R. § 60.675 (b) [Section 3.3.5.] simultaneously with a Method 22 (40 C.F.R. Part 60, Appendix A–7) to determine what constitutes normal visible emissions from that affected facility's baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of 40 C.F.R. Part 60 Subpart OOO. The revised visible emissions success level must be incorporated into the permit for the affected facility.
[45CSR16, 40 C.F.R. § 60.674 (c), (11-SI-7, 11-SC-7, 11-LS-4) (11-DC-3)]

3.2.4. As an alternative to the periodic Method 22 (40 C.F.R. Part 60, Appendix A–7) visible emissions inspections specified in 40 C.F.R. § 60.674 (c) [Section 3.2.3.], the owner or operator of any affected facility that is subject to the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 C.F.R. Part 63 Subpart AAAAA) may follow the continuous compliance requirements in row 1 items (ii) through (iii) of Table 6 to 40 C.F.R. Part 63 Subpart AAAAA [Section 12.2.5].
[45CSR16, 40 C.F.R. § 60.674 (e), (11-SI-7, 11-SC-7, 11-LS-4)]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.3.2. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.
[45CSR§7-8.1.]

3.3.3 The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.
[45CSR§7-8.2.]

3.3.4. In conducting the performance tests required in 40 C.F.R. § 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 C.F.R. Part 60 Appendices A–1 through A–7 or other methods and procedures as specified in this section, except as provided in 40 C.F.R. § 60.8 (b). Acceptable alternative methods and procedures are given in 40 C.F.R. § 60.675 (e) [Section 3.3.8.].
[45CSR16, 40 C.F.R. § 60.675 (a), 45CSR13, R13-1685, (B) (5) and (6), Group (002, 004, 005, 008, 011)]

3.3.5. The owner or operator shall determine compliance with the particulate matter (PM) standards in 40 C.F.R. § 60.672 (a) [Section 3.1.19.] as follows:

1. Method 5 of 40 C.F.R. Part 60 Appendix A–3 or Method 17 of 40 C.F.R. Part 60 Appendix A–6 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5 (40 C.F.R. Part 60, Appendix A–3), if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

2. Method 9 of 40 C.F.R. Part 60 Appendix A–4 and the procedures in 40 C.F.R. § 60.11 shall be used to determine opacity.

[45CSR16, 40 C.F.R. § 60.675 (b), 45CSR13, R13-1685, (B) (5) and (6), Group (002, 004, 005, 008, 011)]

3.3.6. 1. In determining compliance with the particulate matter standards in 40 C.F.R. § 60.672 (b) [Section 3.1.20.] or 40 C.F.R. § 60.672(e)(1) [Section 3.1.22.1.], the owner or operator shall use Method 9 of 40 C.F.R. Part 60 Appendix A–4 and the procedures in 40 C.F.R. § 60.11, with the following additions:

i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (*e.g.,* road dust). The required observer position relative to the sun (Method 9 of 40 C.F.R. Part 60 Appendix A–4, Section 2.1) must be followed.

iii. For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

2. i. In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under 40 C.F.R. § 60.672(f), using Method 9 (40 C.F.R. Part 60 Appendix A–4), the duration of the Method 9 (40 C.F.R. Part 60 Appendix A–4) observations shall be 1 hour (ten 6-minute averages).

ii. The duration of the Method 9 (40 C.F.R. Part 60 Appendix A–4) observations may be reduced to the duration the affected facility operates (but not less than 30 minutes) for baghouses that control storage bins or enclosed truck or railcar loading stations that operate for less than 1 hour at a time.

3. When determining compliance with the fugitive emissions standard for any affected facility described under 40 C.F.R. § 60.672 (b) [Section 3.1.20.] or 40 C.F.R. § 60.672(e)(1) [Section 3.1.22.1.], the duration of the Method 9 (40 C.F.R. Part 60 Appendix A–4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of 40 C.F.R. Part 60 Subpart OOO must be based on the average of the five 6-minute averages.

[45CSR16, 40 C.F.R. § 60.675 (c) and Table 3, 45CSR13, R13-1685, (B) (5) and (6), Group (002, 004, 005, 008, 011)]

3.3.7. To demonstrate compliance with the fugitive emission limits for buildings specified in 40 C.F.R. § 60.672 (e) (1) [Section 3.1.22.1.], the owner or operator must complete the testing specified in 40 C.F.R. § 60.675 (d) (1) and (2) [Section 3.3.7.1. and 2.]. Performance tests must be conducted while all affected facilities inside the building are operating.

1. If the building encloses any affected facility that commences construction, modification, or reconstruction on or after April 22, 2008, the owner or operator of the affected facility must conduct an initial Method 9 (40 C.F.R. Part 60 Appendix A–4) performance test according to this section and 40 C.F.R. § 60.11.

2. If the building encloses only affected facilities that commenced construction, modification, or reconstruction before April 22, 2008, and the owner or operator has previously conducted an initial Method 22 (40 C.F.R. Part 60 Appendix A–7) performance test showing zero visible emissions, then the owner or operator has demonstrated compliance with the opacity limit in 40 C.F.R. § 60.672 (e) (1) [Section 3.1.22. 1]. If the owner or operator has not conducted an initial performance test for the building before April 22, 2008, then the owner or operator must conduct an initial Method 9 (40 C.F.R. Part 60 Appendix A–4) performance test according to this section and 40 C.F.R. § 60.11 to show compliance with the opacity limit in 40 C.F.R. § 60.672 (e) (1) [Section 3.1.22.1.].

[45CSR16, 40 C.F.R. § 60.675 (d), 45CSR13, R13-1685, (B) (5) and (6), Group (002, 004, 005, 008, 011)]

3.3.8. The owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 C.F.R. § 60.675:

1. For the method and procedure of 40 C.F.R. § 60.675 (c) [Section 3.3.6.], if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

   i. Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

   ii. Separate the emissions so that the opacity of emissions from each affected facility can be read.

2. A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:

   i. No more than three emission points may be read concurrently.

   ii. All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

   iii. If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

3. Method 5I of 40 C.F.R. Part 60, Appendix A–3 may be used to determine the PM concentration as an alternative to the methods specified in 40 C.F.R. § 60.675 (b) (1). Method 5I (40 C.F.R. Part 60, Appendix A–3) may be useful for affected facilities that operate for less than 1 hour at a time such as (but not limited to) storage bins or enclosed truck or railcar loading stations.

4. In some cases, velocities of exhaust gases from building vents may be too low to measure accurately with the type S pitot tube specified in EPA Method 2 of 40 C.F.R. Part 60 Appendix A–1 of this part [*i.e.,* velocity head <1.3 mm H_2O (0.05 in. H_2O)] and referred to in EPA Method 5 of 40 C.F.R. Part 60 Appendix A–3. For these conditions, the owner or operator may determine the average gas flow rate

produced by the power fans (*e.g.,* from vendor-supplied fan curves) to the building vent. The owner or operator may calculate the average gas velocity at the building vent measurement site using Equation 1 of this section and use this average velocity in determining and maintaining isokinetic sampling rates.

$$\mathbf{V_e = Q_f / A_e} \qquad (Eq.\ 1)$$

Where:

V_e = average building vent velocity (feet per minute);
Q_f = average fan flow rate (cubic feet per minute); and
A_e = area of building vent and measurement location (square feet).

[45CSR16, 40 C.F.R. § 60.675 (e), 45CSR13, R13-1685, (B) (5) and (6), Group (002, 004, 005, 008, 011)]

3.3.9. For performance tests involving only Method 9 (40 C.F.R. Part 60 Appendix A–4) testing, the owner or operator may reduce the 30-day advance notification of performance test in 40 C.F.R. § 60.7 (a) (6) and 40 C.F.R. § 60.8 (d) to a 7-day advance notification.
[45CSR16, 40 C.F.R. § 60.675 (g), 45CSR13, R13-1685, (B) (5) and (6), Group (002, 004, 005, 008, 011)]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.
[45CSR§30-5.1.c.2.A.; 45CSR13, R13-1396, 4.4.1.; 45CSR13, R13-2670, 4.4.1.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. The permittee shall also inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs. The permittee shall maintain records of all

scheduled and non-scheduled maintenance and shall state any maintenance or corrective actions taken as a result of the weekly and/or monthly inspections, the times the fugitive dust control system(s) were inoperable and any corrective actions taken.
[45CSR§30-5.1.c.]

3.4.5. a. Each owner or operator seeking to comply with 40 C.F.R. § 60.670 (d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.

1. For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:

   i. The rated capacity in megagrams or tons per hour of the existing facility being replaced and

   ii. The rated capacity in tons per hour of the replacement equipment.

2. For a screening operation:

   i. The total surface area of the top screen of the existing screening operation being replaced and

   ii. The total surface area of the top screen of the replacement screening operation.

3. For a conveyor belt:

   i. The width of the existing belt being replaced and

   ii. The width of the replacement conveyor belt.

4. For a storage bin:

   i. The rated capacity in megagrams or tons of the existing storage bin being replaced and

   ii. The rated capacity in megagrams or tons of replacement storage bins.

[45CSR16, 40 C.F.R. § 60.676(a), Group (002, 004, 005, 008, 011)]

b. 1. Owners or operators of affected facilities for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under 40 CFR §60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.

2. The owner or operator of each affected facility demonstrating compliance according to 40 CFR §60.674(e) by following the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) must maintain records of visible emissions observations required by §63.7132(a)(3) and (b) of 40 CFR part 63, subpart AAAAA.

[45CSR16, 40 C.F.R. §§ 60.676(b)(1) and (3), (11-SI-7, 11-SC-7, 11-LS-4)]

3.4.6. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 C.F.R. § 60.672, including reports of opacity observations made using Method 9 (40 C.F.R. Part 60 Appendix A–4) to demonstrate compliance with 40 C.F.R. §§ 60.672 (b) and (e) [Sections 3.1.20 and 3.1.22] and 40 C.F.R. § 60.672 (f).
[45CSR16, 40 C.F.R. § 60.676 (f), Group (002, 004, 005, 008, 011)]

3.4.7. The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in 40 C.F.R. § 60.672 (b) and the emission test requirements of 40 C.F.R. § 60.11.
[45CSR16, 40 C.F.R. § 60.676 (g), Group (002, 004, 005, 008, 011)]

3.4.8. The 40 C.F.R. Part 60 Subpart A requirement under 40 C.F.R. § 60.7 (a) (1) for notification of the date construction or reconstruction commenced is waived for affected facilities under 40 C.F.R. Part 60 Subpart OOO.
[45CSR16, 40 C.F.R. § 60.676 (h), Group (002, 004, 005, 008, 011)]

3.4.9. A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.

1. For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

2. For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

[45CSR16, 40 C.F.R. § 60.676 (i), Group (002, 004, 005, 008, 011)]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class, or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Air Enforcement and Compliance
Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

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

4.0. Requirements for Primary and Secodary Crushing (Group 002) [Emission point IDs: 1-CR-1, 1-CR-2; 1-IH-1; 1-VS-1, 2-VS-1; 1-DH-1; 1-VGF-1; 1-VF-1, 2-VF-1, 2-VF-2, 2-VF-3, 2-VF-4; 1-SB-1; 1-SI-1, 1-SI-2, 2-SI-1; 1-BC-1, 1-BC-2, 1-BC-3, 1-BC-4, 1-BC-5, 2-BC-1, 2-BC-2, 2-BC-3, 2-BC-4, 2-BC-5, 2-BC-6, 2-BC-7, 2-BC-8, 2-BC-9; 2-OS-1, 2-OS-2]

4.1. Limitations and Standards

4.1.1. Input of stone to the primary crusher shall not exceed 800 tons per hour or 1,500,000 tons per year.
[45CSR13, R13-1685, (A) (1), (1-CR-1)]

4.1.2. Fugitive dust control equipment as proposed in Permit Application R13-1685 and its supplements shall be installed, operated and maintained in such a manner as to minimize fugitive dust generation and atmospheric entrainment. Such measures shall include:

a. Pressurized water sprays located at the primary and secondary crushers, primary and secondary screens, conveyor belt discharge for stockpile 2-OS-1, truck dump hopper, and truck dump hopper vibrating feeder.

b. Primary and secondary screens (1-VS-1 and 2-VS-1) shall be fully enclosed except for entry and discharge points.

c. Water sprays at stockpile, 2-OS-2, during material storage.

d. Water truck utilizing pressurized spray nozzles for dust control of haulroads and stockpile areas.
[45CSR13, R13-1685, (A) (2), (1-CR-1, 1-CR-2, 1-VS-1, 2-VS-1, 2-BC-4, 1-DH-1, 1-VGF-1, 2-OS-1, 2-OS-2)]

4.1.3. Pressurized water spray system shall be winterized by equipping each spray manifold with a drain and heat taping all exposed piping in accordance with Permit Application R13-1685.
[45CSR13, R13-1685, (A) (3)]

4.1.4. See Sections 3.1.19 through 3.1.22 for all affected facilities. The stone silos (1-SI-1 and 1-SI-2) and vibrating feeders (2-VF-3 and 2-VF-4) are not subject to NSPS, Subpart OOO, since construction of these facility commenced prior to 1983. The open stockpile (2-OS-1) is not subject to the NSPS, Subpart OOO.
[45CSR16, 40 C.F.R. 60 Subpart OOO]

4.1.5. The permitted facility must be constructed and operated in accordance with information filed in WVAPCC Permit Application No. 1685. The Director may cancel or suspend a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-1685, General Requirements (3)]

4.1.6. See Sections 3.1.19 and 3.1.20 for belt conveyor, transfer points and affected facilities (2-BC-5, 2-BC-6, 2-BC-7, 2-BC-8).
[45CSR16, 40 CFR §§60.672(a) and (b)]

4.2. Monitoring Requirements

4.2.1. See Section 3.2 for opacity and dust collector monitoring requirements

4.3. Testing Requirements

4.3.1. See Sections 3.3.4 through 3.3.9 for opacity and PM testing requirements from 40 C.F.R. Part 60 Subpart OOO.

4.4. Recordkeeping Requirements

4.4.1. For the purpose of determining compliance:

a. The applicant shall maintain certified daily records of the limestone charged through the primary and secondary crushing and screening circuit in tons per day.

b. The applicant shall maintain certified daily records of water used for particulate control in gallons per day.

Such records shall be retained by the permittee for at least five (5) years. Certified records shall be made available to the Director or the duly authorized representative upon request.
[45CSR13, R13-1685, (B) (8)., 45CSR§30-5.1.c.2.B.]

4.5. Reporting Requirements

4.5.1. None.

4.6. Compliance Plan

4.6.1. None.

5.0. Requirements for Limestone Grinding (Group 011) [Emission Point IDs: 11-BC-1, 11-BC-2, 11-BC-4; 11-SC-1, 11-SC-20, 11-SC-3, 11-SC-4, 11-SC-5, 11-SC-6, 11-SC-7; 11-WC-20; 11-BEL-1, 11-BEL-20; 11-SI-1, 11-SI-2, 11-SI-3, 11-SI-4, 11-SI-5, 11-SI-6, 11-SI-7; 11-SB-1, 11-SB-2; 11-DS-1; 11-CL-1; 11-HG-1; 11-BM-1; 11-CY-1, 11-CY-2; 11-DC-1, 11-DC-2, 11-DC-3, 11-DC-4; 11-LS-1, 11-LS-2, 11-LS-3, 11-LS-4; 11-BG-20; 11-SSB-1; 11-BL-2, 11-BL-3; 11-DH-1, 11-BC-20, 11-BC-21, 11-BC-22]

5.1. Limitations and Standards

5.1.1. The maximum processing rate of limestone to the Fine Grinding System from the Secondary Crushing System shall not exceed 400 tons per hour (TPH) and 600,000 tons per year (TPY).
[45CSR13, R13-2113, 4.1.1., (11-SI-3)]

5.1.2. The fine grinding circuit shall employ a hot air generator, grinding mill, dynamic separator, cyclone #1, cyclone #2, classifier separator and two centrifugal blowers identified as 11-HG-1, 11-BM-1, 11-DS-1, 11-CY-1, 11-CY-2, 11-CL-1, 11-BL-2, and 11-BL-3 respectively. The operation of this circuit shall not exceed the following maximum operating and emission limitations:

a. Emissions from the emission point E-11-DC-1 shall not exceed the maximum individual hourly and annual emission limits set forth below:

Emission Source ID	Pollutant	Maximum Emissions	
		Hourly (lb/hr)	Annual TPY
11-HG-1, 11-BM-1, 11-DS-1, 11-CY-1, 11-CY-2, 11-CL-1, 11-BL-2, 11-BL-3, 11-SI-1, 11-SI-2, 11-SI-3	PM	1.75	7.64
	PM_{10}	0.83	3.64
	SO_2	3.84	16.8
	NO_x	0.72	3.2
	CO	0.59	2.6

[40 C.F.R. § 60.672(a) (1) for PM and 45CSR§10-4.1 for SO_2]

b. The hot air generator shall not consume more than 54 gallons per hour or 473,040 gallons per year of No. 2 fuel oil;
c. The No. 2 fuel oil consumed by the hot air generator shall not contain sulfur greater than 0.5 percent by weight. This limit and the fuel restriction limit in 5.1.2.b coincides with the SO_2 limits in Table 5.1.2.a.;
d. The feed rate of material (limestone or lime) into the circuit shall not exceed 65 tons per hour or 569,400 tons per year;
e. Visible PM from emission point E-11-DC-1 shall not be exhibited greater than 7 percent opacity.

[45CSR13, R13-2113, 4.1.5., 45CSR16, 40 C.F.R. § 60.672 (a) (2), (11-HG-1, 11-BM-1, 11-DS-1, 11-CY-1, 11-CY-2, 11-CL-1, 11-BL-2, 11-BL-3, 11-SI-1, 11-SI-2, 11-SI-3)]

5.1.3. Emissions discharged to the atmosphere from emission points E-11-DC-20, E-11-DC-4, E-11-DC-3 and E-11-DC-2 shall be limited to the following maximum emission limitations:

a. PM concentration in the exhaust stream from the emission points E-11-DC-2, E-11-DC-4, and E-11-DC-3 shall not exceed 0.022 gr/dscf while emissions from emission point E-11-DC-20 shall not exceed 0.014 gr/dscf;

b. Annual PM_{10} and PM emissions from emission point E-11-DC-3 shall not exceed 1.18 TPY and 2.48 TPY respectively;

c. Annual PM_{10} and PM emissions from emission point E-11-DC-2/E-11-DC-4 (combined) shall not exceed 1.18 TPY and 2.48 TPY respectively;

d. Annual PM_{10} and PM emissions from E-11-DC-20 shall not exceed 1.00 TPY and 2.1 TPY respectively; and

e. Visible PM from the emission point shall not exceed greater than 7 percent opacity.

[45CSR13, R13-2113, 4.1.6., 45CSR16, 40 C.F.R. § 60.672 (a), (E-11-DC-3, E-11-DC-2, E-11-DC-4, E-11-DC-20)]

5.1.4. The equipment listed below shall not exhibit visible PM emissions greater than 10 percent opacity, unless the transfer points of belt conveyors or the unit is located in an enclosed building. Then, the enclosed building shall not exhibit visible PM emissions greater than 7 percent opacity.

Emission Unit ID	Emission Point ID	Emission Unit Description
11-BC-1	11-BC-1	Belt Conveyor
11-BEL-1	11-BEL-1	Bucket elevator
11-BC-2	11-BC-2	Belt Conveyor
11-BC-4*	11-BC-4	Belt Conveyor
11-SB-2	11-SB-2	Surge Bin
11-DH-1*	11-DH-1	Dump Hopper
11-SC-4	11-SC-1	Screw Conveyor

*Since 11-DH-1 and 11-BC-4 were installed after April 22, 2008, they are subject to 7 percent opacity requirement [see Section 3.1.20.(c)].

[45CSR13, R13-2113, 4.1.7., 45CSR16, 40 C.F.R. §§ 60.672 (a) (2), (b), and (e)]

5.1.5. Compliance with all annual limits stated in Section 5.1 shall be demonstrated using a 12 month rolling total.

[45CSR13, R13-2113, 4.1.8.]

5.1.6. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in the Fine Grinding Circuit [dust collectors (11-DC-1, 11-DC-2, 11-DC-3, 11-DC-4, 11-DC-20)] and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13, R13-2113, 4.1.10, 45CSR§13-5.11, (11-DC-1, 11-DC-2, 11-DC-3, 11-DC-4, 11-DC-20)]

5.1.7. The equipment listed below shall not exhibit visible PM emissions greater than 7 percent opacity.

Emission Unit ID	Emission Point ID	Emission Unit Description
11-BC-20	None	Belt Conveyor
11-BC-21	None	Belt Conveyor
11-BC-22	None	Belt Conveyor

[45CSR13, R13-2113, 4.1.9., 45CSR16, 40 C.F.R. §60.672(b)]

5.2. Monitoring Requirements

5.2.1. For the purpose of determining compliance with the opacity limits in Sections 5.1.2.e, 5.1.3.e and 5.1.4, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission sources subject to an opacity limit.

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. Part 60 Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. Part 60 Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are present at a source(s) for six (6) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of 45CSR7A for the sources subject to Condition 5.1.9., and Method 9 for all other sources as soon a practicable, but within seventy-two (72) hours of the final visual emission check. A 45CSR7A observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.
[45CSR13, R13-2113, 4.2.1., (E-11-DC-1, E-11-DC-3, E-11-DC-2, and Section 5.1.4 Transfer Points)]

5.2.2. The owner or operator shall determine compliance with the opacity limits in Section 5.1.7. in accordance with the requirements of 40 CFR Part 60, Subpart OOO, Section 60.675(b)(2) and Table 3 with an initial Method 9 performance test and a repeat performance test within 5 years from the previous performance test.
[45CSR13, R13-2113, 4.2.1., 45CSR16, and 40 CFR Part 60, Subpart OOO]

5.3. Testing Requirements

5.3.1. See Section 3.3.4 through 3.3.9 for 40 C.F.R. Part 60 Subpart OOO testing requirements.
[45CSR16, 40 C.F.R. Part 60 Subpart OOO, (Section 1.0, Emission Group 011)]

5.4. Recordkeeping Requirements

5.4.1. For the purpose of determining compliance with the maximum processing limits set forth in Sections 5.1.1 and 5.1.2.d., the company shall maintain certified monthly and annual records of limestone processing rates of the Fine Grinding System. An example data form is given in Appendix A of R13-2133J. Such records shall be maintained in accordance with Section 3.4.2.
[45CSR13, R13-2113, 4.4.4., (2-OS-2, 11-BM-1)]

5.4.2. For the purpose of determining compliance with the maximum fuel consumption limit set forth for in Section 5.1.2.b, the company shall maintain certified monthly and annual records of #2 fuel oil consumption. An example data form is given in Appendix B of R13-2113J. Such records shall be maintained in accordance with Section 3.4.2.
[45CSR13, R13-2113, 4.4.5., (11-HG-1)]

5.4.3. The permittee shall maintain records from fuel oil supplier certifying the fuel sulfur content in order to demonstrate compliance with Section 5.1.2.c.
[45CSR§30-5.1.c., (11-HG-1)]

5.4.4. The permittee shall maintain records of all monitoring data required by Section 5.2.1 documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80 ^{o}F, 6 - 10 mph NE wind) during the visual emission check(s). An example data form is given in Appendix C of R13-2113J. Should a visible emission observation be required to be performed per the requirements specified in 45CSR7A, the data records of each observation shall be maintained per the requirements of 45CSR7A. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.
[45CSR13, R13-2113, 4.4.6., (E-11-DC-1, E-11-DC-2, E-11-DC-3, and Section 5.1.4. Transfer Points)]

5.4.5. Record of Maintenance of Air Pollution Control Equipment. 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), the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-2113, 4.4.2.]

5.4.6. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed Emission Group (011) of Section 1.0 as dust collectors (11-DC-1, 11-DC-2, and 11-DC-3), the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
[45CSR13, R13-2113, 4.4.3.]

5.5. Reporting Requirements

5.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observations using 45CSR7A must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the

following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
[45CSR13, R13-2113, 4.5.1.]

5.5.2. The permittee shall submit a written report of the results of testing required in 40 CFR Part 60, Subpart OOO before the close of business on the 60th day following the completion of such testing to the Director and U.S. EPA Administrator. Such report(s) shall include all records of the opacity observations made during such testing.
[45CSR13, R13-2113, 4.5.2., 45CSR16, 40 CFR §60.676(f)]

5.6. Compliance Plan

5.6.1. None.

6.0. Requirements for 400 TPD Rotary Lime Kiln (Group 004) [Emission point IDs: 4-BC-1, 4-BC-2, 4-BC-3, 4-BC-4, 5-BC-2, 5-BC-3; 4-SC-1, 4-SC-2, 4-SC-3, 4-SC-4; 4-BEL-1; 4-TC-1; 4-PH-1; 4-STB-1, 4-SI-1; 5-SI-2; 4-VF-1, 4-VF-2, 4-VF-3, 4-VF-4; 5-BM-1; 5-AS-1; 5-WF-1; 5-CS-1; 4-NC-1; 4-RK-1; 4-DC-1; 4-PC-1; 4-LS-2; 4-OS-1]

6.1. Limitations and Standards

6.1.1. Total particulate emissions to the atmosphere from the one (1) stack (4-DS-2) which constitute emission point 1E (emissions from the 400 TPD lime kiln 105 [4-RK-1] after baghouse 112 [4-DC-1]) shall not exceed the more stringent limitation of either 0.6 pounds particulate matter per ton of limestone feed according to 40 C.F.R. Part 60 Subpart HH (following), "Standards of Performance for Lime Manufacturing Plants," or that particulate matter emission limitation in Section 6.1.2.

On and after the date on which the performance test required to be conducted by 40 C.F.R. § 60.8 is completed, no owner or operator subject to the provisions of this 40 C.F.R. Part 60, Subpart HH, shall cause to be discharged into the atmosphere from any rotary lime kiln any gases which:

1. Contain particulate matter in excess of 0.30 kilogram per megagram (0.60 lb/ton) of stone feed.

2. Exhibit greater than 15 percent opacity when exiting from a dry emission control device.

Compliance with Section 6.1.1 (1) is streamlined by demonstrating compliance with 40 C.F.R. Part 63 Subpart AAAAA [0.12 lb/ton stone feed (tsf)] incorporated within Section 12.1.1.

[45CSR16, 40 C.F.R. § 60.342 (a), 45CSR13, R13-1381, A.1., 1E]

6.1.2. Emissions to the atmosphere from emission point 1E [4-DS-2] that is controlled by the 4 module baghouse (4-DC-1) shall not exceed the following maximum rates:

Pollutant	lb/hr	TPY
Particulate Matter	0.5	2.19
Sulfur Dioxide	16	70
Nitrogen Oxides	30	131.4
Carbon Monoxide	17	74.5
Non-Methane Hydrocarbons	4	17.5

[45CSR13, R13-1381, A.2.]

6.1.3. The maximum throughputs associated with the 400 TPD lime kiln (4-RK-1) shall not exceed:

Substance	TPH	TPD	TPY
Limestone Feed	31.5	756.16	275997
Bituminous Coal Burned	3	72	26280
Lime Product	16.7	400	146000

[45CSR13, R13-1381, A.3, (4-RK-1)]

6.1.4. Bituminous coal as fired in the rotary lime kiln 4-RK-1 shall not exceed 1.1% sulfur by weight and 10% by weight in ash content.

[45CSR13, R13-1381, A.4., R13-1788, (A) 6., (4-RK-1)]

6.1.5. No person shall cause, suffer, allow, or permit the emission into open air from any source operation an in-stack sulfur dioxide concentration exceeding 2000 ppm by volume from existing source operations, except as provided in subdivisions of 45CSR§10-4.1.
[45CSR§10-4.1., 45CSR13, R13-1381, B.3., R13-1788, (B) 3., (4-RK-1)]

6.1.6. Compliance with the allowable sulfur dioxide concentration limitations from manufacturing process source operation(s) set forth in this rule shall be based on a block three (3) hour averaging time.
[45CSR§10-4.2., 45CSR13, R13-1381, B.3.]

6.1.7. See Sections 3.1.19 and 3.1.20 for belt conveyor, transfer points and affected facilities (4-BC-3 and 4-BC-4).
[45CSR16, 40 C.F.R. §§ 60.672(a) and (b), (Limestone transfer operations into kiln)]

6.1.8. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1., 45CSR13, R13-1381, B.4.]

6.1.9. The permitted facility must be constructed and operated in accordance with information filed in Permit Application No. 1106, 1381, 1381R, and 1381A. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-1381, C.3.]

6.1.10. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) shall demonstrate compliance with 45CSR§§10-3, 4 and 5 by testing and /or monitoring in accordance with one or more of the following: 40 C.F.R. Part 60, Appendix A, Method 6, Method 15, continuous emissions monitoring systems (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit. Compliance with this requirement may be satisfied through compliance with the requirements of the approved 45CSR10 Monitoring Plan (Appendix A) submitted on March 30, 2001 and any amendments thereto.
[45CSR§10-8.2.c, (4-RK-1 and 4-RK-2)]

6.1.11. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) subject to 45CSR§§10-3, 4 and 5 shall maintain on-site a record of all required monitoring data as established in a monitoring plan pursuant to 45CSR§10-8.2.c. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years. Compliance with this requirement may be satisfied through compliance with the requirements of the approved 45CSR10 Monitoring Plan (Appendix A) submitted on March 30, 2001 and any amendments thereto.
[45CSR§10-8.3.a, (4-RK-1 and 4-RK-2)]

6.1.12. The owner or operator shall submit a periodic exception report to the Director, in a manner specified by the Director. Such an exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken. Compliance with this requirement may be satisfied through compliance with the requirements of the approved 45CSR10 Monitoring Plan (Appendix A) submitted on March 30, 2001 and any amendments thereto.
[45CSR§10-8.3.b, (4-RK-1 and 4-RK-2)]

6.1.13. The owner or operator of a fuel burning unit(s) or a combustion source(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each unit in a manner specified by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request. Compliance with this requirement may be satisfied through compliance with the requirements of the approved 45CSR10 Monitoring Plan (Appendix A) submitted on March 30, 2001 and any amendments thereto.
[45CSR§10-8.3.c, (4-RK-1 and 4-RK-2)]

6.1.14. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR§10-9.1., (4-RK-1 and 4-RK-2)]

6.2. Monitoring Requirements

6.2.1. The owner or operator of a facility that is subject to the provisions of 40 C.F.R. Part 60 Subpart HH, shall install, calibrate, maintain, and operate a continuous monitoring system (4-OM-2), except as provided in 40 C.F.R. §§ 60.343 (b) and (c), to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere from any rotary lime kiln. The span of this system shall be set at 40% opacity
[45CSR16, 40 C.F.R. § 60.343 (a), 45CSR13, R13-1381, B.2., (Emission Point 1E)]

6.2.2. For the purpose of conducting a performance test under 40 C.F.R. § 60.8, the owner or operator of any lime manufacturing plant subject to the provisions of 40 C.F.R. Part 60 Subpart HH, shall install, calibrate, maintain, and operate a device for measuring the mass rate of stone feed to any affected rotary lime kiln. The measuring device used must be accurate to within ±5 percent of the mass rate over its operating range.
[45CSR16, 40 C.F.R. § 60.343 (d), 45CSR13, R13-1381, B.2., (4-RK-1), R13-1788, (B) 2., (4-RK-2)]

6.2.3. At the request of the Director the owner and/or operator of a source shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of 45CSR§10-8.2.a. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of 45CSR10.
[45CSR§10-8.2.a., 45CSR13, R13-1381, (B) 3., R13-1788, (B) 3., (4-RK-1 and 4-RK-2)]

6.3. Testing Requirements

6.3.1. 45CSR10 testing requirements.

a. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s), manufacturing process source(s) or combustion source(s) may be required to conduct or have conducted tests to determine the compliance of such source(s) with the emission limitations of 45CSR10 sections 3, 4 or 5. Such tests shall be conducted in accordance with the appropriate test method set forth in 40 C.F.R. Part 60, Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Director. The Director, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Director exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director

may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

b. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions other than those noted in section 3 of 45CSR10.
[45CSR§§10-8.1.a. and b., 45CSR13, R13-1381, (B)3., R13-1788, (B) 3., (4-RK-1 and 4-RK-2)]

c. Prior to the installation of calibrated stack gas monitoring devices, sulfur dioxide emission rates shall be calculated on an equivalent fuel sulfur content basis.
[45CSR§10-8.2.b., 45CSR13, R13-1381, B. 3., R13-1788, (B) 3., (4-RK-1 and 4-RK-2)]

6.3.2. In conducting the performance tests required in 40 C.F.R. § 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 C.F.R. Part 60 Appendix A or other methods and procedures as specified in 40 C.F.R. § 60.344, except as provided in 40 C.F.R. § 60.8 (b).
[45CSR16, 40 C.F.R. § 60.344 (a), 45CSR13, R13-1381, B. 2., R13-1788, (B) 2.]

6.3.3. The owner or operator shall determine compliance with the particulate matter standards in 40 C.F.R. § 60.342 (a) [Section 6.1.1.] as follows:

1. The emission rate (E) of particulate matter shall be computed for each run using the following equation:

$$E = (cs\ Qsd) / PK)$$

where:

E = emission rate of particulate matter, kg/Mg (1b/ton) of stone feed.
cs = concentration of particulate matter, g/dscm (gr/dscf).
Qsd = volumetric flow rate of effluent gas, dscm/hr (dscf/hr).
P = stone feed rate, Mg/hr (ton/hr).
K = conversion factor, 1000 g/kg (7000 gr/lb).

2. Method 5 (40 C.F.R. Part 60 Appendix A) shall be used at negative-pressure fabric filters and other types of control devices and Method 5D (40 C.F.R. Part 60 Appendix A) shall be used at positive-pressure fabric filters to determine the particulate matter concentration (cs) and the volumetric flow rate (Qsd) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).

3. The monitoring device of 40 C.F.R. § 60.343(d) [Section 6.2.2.] shall be used to determine the stone feed rate (P) for each run.

4. Method 9 (40 C.F.R. Part 60 Appendix A) and the procedures in 40 C.F.R. § 60.11 shall be used to determine opacity.
[40CFR16, 40 C.F.R. § 60.344 (b), 45CSR13, R13-1381, B.2., R13-1788, (B) 2.]

6.3.4. The permittee shall conduct tests to determine compliance with the nitrogen oxides (NO_x) and carbon monoxide (CO) emission limitations in Section 6.1.2 for the one (1) vent stack (4-DC-1). The Methods listed below from Appendix A of 40 C.F.R. Part 60 shall be utilized for purposes of conducting performance tests, unless the Director approves an alternate or equivalent method. Requirements shall be met with respect to submission of a test protocol and notification of testing.

Pollutant	Method
Carbon Monoxide	10
Nitrogen Oxides	7

Testing to determine compliance with the nitrogen oxides (NO_x) and carbon monoxide (CO) limitations of Section 6.1.2 shall be conducted in accordance with the schedule set forth in the following table.

Test	Test Results	Testing Frequency
Annual	If annual testing is required, after two successive tests indicate mass emission rates between 50% and 90% of nitrogen oxides (NO_x) or carbon monoxide (CO) limit	Once/3 years
Annual	If annual testing is required, after three successive tests indicate mass emission rates ≤50% of nitrogen oxides (NO_x) or carbon monoxide (CO) limit	Once/5 years
Once/3 years	If testing is required once/3 years, after two successive tests indicate mass emission rates ≤50% of nitrogen oxides (NO_x) or carbon monoxide (CO) limit	Once/5 years
Once/3 years	If testing is required once/3 years and any test indicates a mass emission rate ≥90% of nitrogen oxides (NO_x) or carbon monoxide (CO) limit	Annual
Once/5 years	If testing is required once /5 years and any test indicates mass emission rates between 50% and 90% of nitrogen oxides (NO_x) or carbon monoxide (CO) limit	Once/3 years
Once/5 years	If testing is required once/5 years and any test indicates a mass emission rate ≥90% of nitrogen oxides (NO_x) or carbon monoxide (CO) limit	Annual

[45CSR§30-5.1.c., (4-RK-1)]

6.3.5. In the event that the Secretary requests emissions tests to be conducted to determine the particulate matter, sulfur dioxide, nitrogen oxides, carbon monoxide, and total hydrocarbon emissions from emission point 1E, the methods listed below from Appendix A of 40 C.F.R. Part 60 shall be utilized for purposes of conducting performance tests, unless the Secretary approves an alternate or equivalent method. For any tests to be conducted by the permittee, a test protocol shall be submitted to the DAQ by the permittee at least thirty (30) days prior to the test and shall be approved by the Secretary. The Secretary shall be notified at least fifteen (15) days in advance of the actual dates and times during which the test will be conducted.

Pollutant	Method
Particulate Matter	5D
Sulfur Dioxide	6B
Nitrogen Oxides	7
Carbon Monoxide	10
Total Non-methane Hydrocarbons	25

[45CSR13, R13-1381, B.5., 4-DC-1 with 1E]

6.3.6. See Sections 3.3.4 through 3.3.9 for NSPS testing requirements.

6.4. Recordkeeping Requirements

6.4.1. For the purpose of determining compliance with Sections 6.1.1 through 6.1.6, the company shall maintain certified monthly and annual records on the following for the 400 TPD Rotary Lime Kiln. Such records shall

be retained by the permittee for at least five (5) years. Certified records shall be made available to the Director or the duly authorized representative upon request.

1. daily usage of the amount of coal purchased to determine the monthly usage and the twelve (12) month rolling total

2. sulfur content on a weight basis of the coal purchased

3. ash content on a weight basis of the coal purchased

4. the approximate heating value of the coal purchased

5. limestone feed rates to determine the monthly usage and the twelve (12) month rolling total

6. lime production to determine the monthly usage and the twelve (12) month rolling total

[45CSR§30-5.1.c., 45CSR§30-5.1.c.2.B., 45CSR13, R13-1381, B.1., (4-RK-1)]

6.4.2. Compliance with the emission limits set forth in Section 6.1.2., for VOC, SO_2 and PM from bag houses (4-DC-1 and 4-DC-2) shall be demonstrated by complying with Sections 6.1.4. and 7.1.2.
[45CSR13, R13-1381, B.1., (4-RK-1), R13-1788, (B) 1., (4-RK-2)]

6.4.3. In accordance with Greer's 45CSR10 Monitoring Plan that was submitted on March 30, 2001, Greer will maintain sulfur content statements from the fuel suppliers on-site for a period of at least five (5) years in accordance with 45CSR10A, Section 7. Greer will submit a "Monitoring Summary Report" and an "Excursion and Monitoring Plan Performance Report" on a quarterly basis to the Director by the 30th day of the month following the calendar quarter. Greer's 45CSR10 Monitoring Plan for the 400 and 500 TPD Rotary Lime Kilns (4-RK-1 and 4-RK-2) is attached in Appendix A.
[45CSR§10-8.3., 45CSR13, R13-1381, B.3. and R13-1788, (B) 3., (4-RK-1 and 4-RK-2)]

6.5. Reporting Requirements

6.5.1. For the purpose of reports required under 40 C.F.R. § 60.7 (c), periods of excess emissions that shall be reported are defined as all 6-minute periods during which the average opacity of the visible emissions from any lime kiln Section 6.1.1. [40 C.F.R. § 60.342 (a)] is greater than 15 percent.
[45CSR16, 40 C.F.R. § 60.343(e)]

6.6. Compliance Plan

6.6.1. None

7.0. Requirements for 500 TPD Rotary Lime Kiln (Group 005) [Emission point IDs: 4-BC-5, 5-BC-4; 4-SC-5, 4-SC-6, 4-SC-7, 4-SC-8, 4-SC-9, 4-SC-10; 4-BEL-2; 4-VF-5, 4-VF-6, 4-VF-7, 4-VF-8; 4-SI-2, 5-SI-3, 4-STB-2; 5-AS-2; 5-WF-2; 5-BM-2; 4-PC-2; 4-LS-1; 4-TC-2; 4-NC-2; 4-PH-2; 4-RK-2; 4-DC-2; 4-DC-3; 500-BOB]

7.1. Limitations and Standards

7.1.1. Total particulate emissions to the atmosphere from emission point 500-115 [4-DS-1], the 500 TPD lime kiln (500-105) [4-RK-2] baghouse [4-DC-2], shall not exceed the more stringent limitation of either 0.6 pounds of particulate matter per ton of limestone feed according to 40 C.F.R. 60 Subpart HH, "Standards of Performance for Lime Manufacturing Plants," or that particulate matter emission limitation in Section 7.1.3.

On and after the date on which the performance test required to be conducted by 40 C.F.R. § 60.8 is completed, no owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart HH, shall cause to be discharged into the atmosphere from any rotary lime kiln any gases which:

1. Contain particulate matter in excess of 0.30 kilogram per megagram (0.60 lb/ton) of stone feed.

2. Exhibit greater than 15 percent opacity when exiting from a dry emission control device

Compliance with Section 7.1.1 (1) is streamlined by demonstrating compliance with 40 C.F.R. Part 63 Subpart AAAAA [0.12 lb/ton stone feed (tsf)] incorporated within Section 12.1.1.
[45CSR16, 40 C.F.R. § 60.342 (a) (1), 45CSR13, R13-1788, (A) (1), 40 C.F.R. § 60.342 (a) (2), 45CSR13, R13-1788, (A) (7)., (500-115)]

7.1.2. Bituminous coal as fired in the rotary lime kiln, 4-RK-2, shall not exceed 1.1% sulfur by weight and 10% by weight in ash content.
[45CSR13, R13-1381, A.4., and R13-1788, (A) 6., (4-RK-2)]

7.1.3. Emissions to the atmosphere from the emission point 500-115 [vent stack (4-DS-1)], the 500 TPD lime kiln (500-105) baghouse (500-110 [4-DC-2]), shall not exceed the following maximum rates.

Pollutant	lb/hr	TPY
Particulate Matter	4.1	16.2
Sulfur Dioxide	12.08	47.8
Nitrogen Oxides	42	166
Carbon Monoxide	21	83.2
Non-Methane Hydrocarbons	5	19.8

[45CSR13, R13-1788, (A) 7.]

7.1.4. The maximum throughputs associated with lime kiln 500-105 (4-RK-2) shall not exceed.

Substance	TPH	TPD	TPY
Limestone Feed	38.62	926.88	305870
Bituminous Coal Burned	3.5	84	27720
Lime Product	20.8	500	165000

[45CSR13, R13-1788, (A) 3., (4-RK-2)]

7.1.5. The bituminous coal fuel stockpile, common to both lime kilns 400-105 (4-RK-1) (R13-1381) and 500-105 (4-RK-2) (R13-1788), shall not exceed 5,000 tons at any given time.
[45CSR13, R13-1788, (A) 4., (4-RK-1 and 4-RK-2)]

7.1.6. The limestone feed stockpile (4-OS-1) common to both lime kilns 500-105 (4-RK-2) and 400-105 (4-RK-1) (R13-1381), shall not exceed 6,000 tons at any given time.
[45CSR13, R13-1788, (A) 5., Limestone Stockpile common to the 400 TPD and 500 TPD Rotary Lime Kilns (KSS1)]

7.1.7. Baghouse 500-110 (4-DC-2) controls shall include equipment to monitor and maintain a negative pressure drop of 16 inches of water across the baghouse.
[45CSR13, R13-1788, A) 8., (4-DC-2)]

7.1.8. The following equipment shall vent to baghouse 500-119 (4-DC-3).

Identification Number	Equipment Description
4-SI-2 (500-114)	Baghouse Dust Bin
4-SC-7 (500-119b)	Dust Screw Conveyor #1
4-SC-8 (500-119b)	Dust Screw Conveyor #2
4-BEL-2 (500-119b)	Dust Bucket Elevator
4-LS-1 (500-119b)	Dust Truck Loading Spout

[45CSR13, R13-1788, (A) 9., (4-DC-3)]

7.1.9. Maximum particulate emissions from the truck cleaning blow off bin and 50 ton dust bin baghouse 500-119 (4-DC-3) emission point 500-119b shall not exceed 0.273 lb/hr.
[45CSR13, R13-1788, (A) 10., (4-DC-3)]

7.1.10. Side of baghouse 500-119 (4-DC-3) emission point 500-119b shall be equipped in such a manner as to discharge emissions vertically into the atmosphere.
[45CSR13, R13-1788, (A) 11., (4-DC-3)]

7.1.11. The following equipment shall vent to baghouse 500-P1 (6-DC-4).

Identification Number	Equipment Description
6-BC-15 (500-P1)	Product Conveyor #1
6-BC-16 (500-P1)	Product Conveyor #2
6-BC-4 (500-P1)	Product Conveyor #3

[45CSR13, R13-1788, (A) 12., (6-DC-4, 6-BC-15, 6-BC-16, 6-BC-4)]

7.1.12. Maximum particulate emissions from baghouse 500-P1 (6-DC-4) emission point 500-P1 shall not exceed 1.885 lb/hr.
[45CSR13, R13-1788, (A) 13., (6-DC-4)]

7.1.13. Side of baghouse 500-P1 emission point 500-P1 shall be equipped in such a manner as to discharge emissions vertically into the atmosphere.
[45CSR13, R13-1788, (A) 4.1.4., (6-DC-4)]

7.1.14. The maximum processing rate of material to or from the Blow Off Bin (500-BOB) shall not exceed 20 TPH and 3,000 TPY.
[45CSR13, R13-2113, 4.1.4., (500-BOB)]

7.1.15. In accordance with the information filed in amended Permit Application R13-2113, the following process/transfer rates shall not be exceeded, and the following methods of control shall be installed, maintained, and operated so as to minimize PM emissions. See the following table for the Blow-Off Bin, Group 005.

Equipment ID Number	Year Constructed	Description	Maximum Capacity		Control Equipment
			TPH	TPY x 10^6	
Blow Off Bin (Group 005)					
500-BOB	1997	One 30 ton bin (500-BOB). Material to be blown out of trucks into bin. Material in bin to be dumped to truck.	20	0.003	Vented through the existing dust collector 500-119 (4-DC-3) that services the 500 TPD Kiln (see Permit R13-1788). Emissions during load out are to be controlled by minimizing drop height.

[45CSR13, R13-2113, 1.0]

7.1.16. No person shall cause, suffer, allow, or permit the emission into open air from any source operation an in-stack sulfur dioxide concentration exceeding 2000 ppm by volume from existing source operations, except as provided in subdivisions of 45CSR§10-4.1.
[45CSR§10-4.1., 45CSR13, R13-1381, B.3., R13-1788, (B) 3., (4-RK-2)]

7.1.17. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 45CSR§7-5.1 is required to have a full enclosure and be equipped with a particulate matter control device. Compliance with this streamlined opacity limit assures compliance with 40 C.F.R. 60 Subpart OOO.
[45CSR§7-3.7., 45CSR13, R13-1788, (B) 4.a., (4-SI-2 and 30 Ton Blow-Off Tank)]

7.1.18. The permitted facility must be constructed and operated in accordance with information filed in Permit Application No. 1788. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-1788, General Requirements 3.]

7.1.19. Refer to Sections 6.1.10 – 6.1.14 for 45CSR10 sulfur dioxide monitoring requirements, which also pertain to the 500 TPD kiln.

7.2. Monitoring Requirements

7.2.1. The owner or operator of a facility that is subject to the provisions of this 40 C.F.R. Part 60 Subpart HH, shall install, calibrate, maintain, and operate a continuous monitoring system (4-OM-1), except as provided in 40 C.F.R. §§ 60.343 (b) and (c), to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere from any rotary lime kiln. The span of this system shall be set at 40 percent opacity.
[45CSR16, 40 C.F.R. § 60.343 (a), R13-1788, (B) 2.a.]

7.2.2. See Section 6.2.2 for 40 C.F.R. Part 60 Subpart HH, operating requirements for devices measuring mass rate of stone feed.

7.2.3. See Section 6.2.3 for the 500 TPD Rotary Lime Kiln, (4-RK-2), 45CSR10 stack monitoring provisions.

7.3. Testing Requirements

7.3.1. See Section 3.3.4 through 3.3.9 for NSPS testing requirements.

7.3.2. See Sections 6.3.2 and 6.3.3 for 40 C.F.R. Part 60 Subpart HH testing requirements.

7.3.3. See Sections 6.3.1 for 45CSR10 SO_2 testing requirements.

7.3.4. The permittee shall conduct tests to determine compliance with the nitrogen oxides (NO_x) and carbon monoxide (CO) emission limitations in Section 7.1.3 for the one (1) vent stack (4-DC-2). The Methods listed below from 40 C.F.R. Part 60 Appendix A shall be utilized for purposes of conducting performance tests, unless the Director approves an alternate or equivalent method. Requirements shall be met with respect to submission of a test protocol and notification of testing.

Pollutant	Method
Carbon Monoxide	10
Nitrogen Oxides	7

Testing to determine compliance with the nitrogen oxides (NO_x) and carbon monoxide (CO) limitations of Section 7.1.3 shall be conducted in accordance with the schedule set forth in the following table.

Test	Test Results	Testing Frequency
Annual	If annual testing is required, after two successive tests indicate mass emission rates between 50% and 90% of nitrogen oxides (NO_x) or carbon monoxide (CO) limit	Once/3 years
Annual	If annual testing is required, after three successive tests indicate mass emission rates $\leq$50% of nitrogen oxides (NO_x) or carbon monoxide (CO) limit	Once/5 years
Once/3 years	If testing is required once/3 years, after two successive tests indicate mass emission rates 50% of nitrogen oxides (NO_x) or carbon monoxide (CO) limit	Once/5 years
Once/3 years	If testing is required once/3 years and any test indicates a mass emission rate $\geq$90% of nitrogen oxides (NO_x) or carbon monoxide (CO) limit	Annual
Once/5 years	If testing is required once /5 years and any test indicates mass emission rates between 50% and 90% of nitrogen oxides (NO_x) or carbon monoxide (CO) limit	Once/3 years
Once/5 years	If testing is required once/5 years and any test indicates a mass emission rate $\geq$90% of nitrogen oxides (NO_x) or carbon monoxide (CO) limit	Annual

[45CSR§30-5.1.c., (4-RK-2)]

7.4. Recordkeeping Requirements

7.4.1. For the purpose of determining compliance with Sections 7.1.1 through 7.1.6, the company shall maintain certified monthly and annual records on the following for the 500 TPD Rotary Lime Kilns. Such records shall be retained by the permittee for at least five (5) years. Certified records shall be made available to the Director or the duly authorized representative upon request.

1. daily usage of the amount of coal purchased to determine the monthly usage and the twelve- (12) monthly rolling total

2. sulfur content on a weight basis of the coal purchased

3. ash content on a weight basis of the coal purchased

4. the approximate heating value of the coal purchased

5. limestone feed rates to determine the monthly usage and the twelve- (12) monthly rolling total

6. lime production to determine the monthly usage and the twelve- (12) monthly rolling total

[45CSR§30-5.1.c., 45CSR§30-5.1.c.2.B., 45CSR13, R13-1788, (B) 1., (4-RK-2)]

7.4.2. For the purpose of determining compliance with the maximum processing limits set forth in Section 7.1.14, the company shall maintain certified monthly and annual records of blow off processing rates from the Blow Off Bin. An example data form is given in Appendix A of R13-2113J. Such records shall be maintained in accordance with Section 3.4.2.
[45CSR§30-5.1.c., 45CSR13, R13-2113, 4.4.4., (500-BOB)]

7.4.3. See Section 6.4.3. for 45CSR10 SO_2 recordkeeping requirements.

7.5. Reporting Requirements

7.5.1. For the purpose of reports required under 40 C.F.R. § 60.7(c), periods of excess emissions that shall be reported are defined as all 6-minute periods during which the average opacity of the visible emissions from any lime kiln in Section 7.1.1 [40 C.F.R. § 60.342(a)] is greater than 15 percent.
[45CSR16, 40 C.F.R. § 60.343 (e)]

7.6. Compliance Plan

7.6.1. None

8.0. Requirements for Lime Handling System (Group 006) [Emission point IDs: 6-BC-1, 6-BC-2, 6-BC-3, 6-BC-4, 6-BC-5, 6-BC-6, 6-BC-7, 6-BC-8, 6-BC-9, 6-BC-10, 6-BC-11, 6-BC-13, 6-BC-14, 6-BC-15, 6-BC-16; 6-SC-1, 6-SC-2, 6-SC-3, 6-SC-4A, 6-SC-4B, 6-SC-5, 6-SC-6A, 6-SC-6B, 6-SC-8, 6-SC-9; 6-BEL-1, 6-BEL-3, 6-BEL-4, 6-BEL-5; 6-SI-1, 6-SI-2, 6-SI-3, 6-SI-4, 6-SI-5, 6-SI-6, 6-SI-7, 6-SI-8, 6-SI-9A, 6-SI-9B, 6-SI-10; 6-BB-1; 6-VF-1, 6-VF-2, 6-VF-3, 6-VF-4, 6-VF-5, 6-VF-6; 6-GB-1; 6-DC-1, 6-DC-2, 6-DC-3, 6-DC-4; 6-CR-2 and 6-CR-3; 6-VS-3 , 6-VS-4, 6-VS-5; 6-LS-1; 6-BL-1]

8.1. Limitations and Standards

8.1.1. In accordance with the information filed in amended Permit Application R13-2113, the following process/transfer rates shall not be exceeded, and the following methods of control shall be installed, maintained, and operated so as to minimize PM emissions. See the following table for the Lime Handling Area Group 006.

Lime Handling Area (Group 006)					
Equipment ID Number	**Year Constructed**	**Description**	**Maximum Capacity**		**Control Equipment**
			TPH	**TPYx10^6**	
6-BC-3	Existing	Existing 24" Belt Conveyor (6-BC-3) transfers lime from existing 24" Belt Conveyor (6-BC-2) to new 50 TPH Roll Crusher (6-CR-3).	50	0.311	None
6-CR-3	1998	New 50 TPH Roll Crusher (6-CR-3) takes lime from the existing Belt Conveyor (6-BC-3) and also, oversized lime from the top (1st) screen of new 5 deck Vibrating Screen (6-VS-4), and processes/crushes it, and sends it to the new bucket elevator (6-BEL-1). The new 50 TPH Roll Crusher (6-CR-3) is vented to Dust Collector (6-DC-1).	50	0.311	Fully enclosed. Vented to existing Dust Collector (6-DC-1)
6-BEL-1	1998	New Bucket Elevator (6-BEL-1) takes lime from the new 50 TPH Roll Crusher (6-CR-3) and transfers it to the new 5 deck Vibrating Screen (6-VS-4).	50	0.311	Fully enclosed.
6-VS-4	1998	New 5 Deck Vibrating Screen (6-VS-4) receives lime from the new Bucket Elevator (6-BEL-1) and processes/ screens it into 6 different fractions/ streams. The new 5 Deck Vibrating Screen (6-VS-4) is vented to Dust Collector (6-DC-3).	50	0.311	Fully enclosed. Vented to existing Dust Collector (6-DC-3)
6-SC-2	Extended 1998	Extended Screw Conveyor (6-SC-2) receives screened lime passing through and too big to pass through the bottom (5th) screen of the new 5 Deck Vibrating Screen (6-VS-4) and transfers it to the newly extended Screw Conveyor (6-SC-4) and/or to two of the six existing125 ton storage silos (6-SI-6 and 6-SI-5).	50	0.311	Fully enclosed.
6-SC-4A 6-SC-4B	Extended 1998	Newly extended Screw Conveyor (6-SC-4) receives lime passing through the top (1st), 2nd, 3rd,and 4th screens of the new 5 Deck Vibrating Screen (6-VS-4) and from new Screw Conveyor and feeds it to the 3 existing 500 ton hydrate feed storage tanks (6-SI-7, 6-SI-8, and 6-SI-9).	50	0.100 each	Fully enclosed.

Equipment ID Number	Year Constructed	Description	Maximum Capacity		Control Equipment
			TPH	TPYx10^6	
6-SC-3	Extended 1998	Newly Extended Screw Conveyor (6-SC-3) receives lime passing through the top (1st) screen of the new 5 Deck Vibrating Screen (6-VS-4) and transfers it to three of the six 125 ton lime storage silos (6-SI-3, 6-SI-2, 6-SI-1).	50	0.311	Fully enclosed.
6-SC-5	Existing	Existing Screw Conveyor (6-SC-5) receives lime passing through the 2nd screen of the new 5 Deck Vibrating Screen (6-VS-4) and transfers it to the existing Granular Lime Bagging Bin (6-BB-1).	50	0.311	Fully enclosed.
6-VF-6	1998	New Vibrating Feeder (6-VF-6) receives lime from one of the six 125 ton Lime Storage Silos (6-SI-6) and transfers it to the new Screw Conveyor (6-SC-8).	150	0.311	Fully enclosed.
6-VF-5	1998	New Vibrating Feeder (6-VF-5) receives lime from one of the six 125 ton Lime Storage Silos (6-SI-5) and transfers it to the new Screw Conveyor (6-SC-8).	150	0.311	Fully enclosed.
6-VF-4	1998	New Vibrating Feeder (6-VF-4) receives lime from one of the six 125 ton Lime Storage Silos (6-SI-4) and transfers it to the new Screw Conveyor (6-SC-8) or the existing 24" Belt Conveyor (6-BC-13).	150	0.311	Fully enclosed.
6-SC-8	1998	New Screw Conveyor (6-SC-8) receives lime from three of the six 125 ton Lime Storage Silos (6-SI-6, 6-SI-5, and 6-SI-4) and transfers it to new Screw Conveyor (6-SC-9).	150	0.311	Fully enclosed.
6-SC-9	1998	New Screw Conveyor (6-SC-9) receives lime from new Screw Conveyor (6-SC-8) and transfers it through the Retractable Loading Spout (6-LS-1) to trucks.	150	0.311	Fully enclosed.
6-LS-1	1998	New Retractable Loading Spout (6-LS-1) receives lime from new Screw Conveyor (6-SC-9) and transfers it to trucks. Emissions from the Loading Spout are routed to the Dust Collector (6-DC-3).	150	0.311	Vented to Dust Collector (6-DC-3)
6-VF-3	1998	New Vibrating Feeder (6-VF-3) receives lime from one of the six 125 ton Lime Storage Silos (6-SI-3) and transfers it to the existing 24" Belt Conveyor (6-BC-13).	150	0.311	Fully enclosed.
6-VF-2	1998	New Vibrating Feeder (6-VF-2) receives lime from one of the six 125 ton Lime Storage Tanks (6-SI-2) and transfers it to the existing 24" Belt Conveyor (6-BC-13).	150	0.311	Fully enclosed.
6-VF-1	1998	New Vibrating Feeder (6-VF-1) receives lime from one of the six 125 ton Lime Storage Silos (6-SI-1) and transfers it to the existing 24" Belt Conveyor (6-BC-13).	150	0.311	Fully enclosed.
6-BC-13	Existing	Existing 24" Belt Conveyor (6-BC-13) receives lime from four of the six 125 tons Lime Storage Silos (6-SI-4, 6-SI-3, 6-SI-2, and 6-SI-1) and transfers it to existing Belt Conveyor (6-BC-14).	150	0.311	Partially enclosed.

Equipment ID Number	Year Constructed	Description	Maximum Capacity		Control Equipment
			TPH	TPYx10^6	
6-BC-14	Existing	Existing Belt Conveyor (6-BC-14) receives lime from existing 24" Belt Conveyor (6-BC-13) and transfers it through a dust sock to trucks.	150	0.311	Partially enclosed.
6-FG-6	1998	New Flop Gate (6-FG-6) diverts lime leaving the existing Bucket Elevator (6-BEL-3) to the new 50 TPH Roll Crusher (6-CR-2).	50	0.311	Fully enclosed.
6-CR-2	1998	New 50TPH Roll Crusher (6-CR-2) receives lime from the 1200 ton Lime Storage Silo (6-SI-10)	50	0.311	Fully enclosed. Vented to Dust Collector (6-DC-2)

[45CSR13, R13-2113, 1.0]

8.1.2. In the Lime Handling Area, the maximum processing rate of lime through the replacement Roll Crusher (6-CR-3) and the new Roll Crusher (6-CR-2) shall not exceed 50 TPH and 311,000 TPY.
[45CSR13, R13-2113, 4.1.2., (6-CR-2 and 6-CR-3)]

8.1.3. Emission points identified as E-6-DC-1, E-6-DC-2, E-6-DC-3, and 6-VS-5 shall not emit visible particulate matter greater than 20% opacity except for visible particulate matter emission less than 40% for a period or periods aggregating no more than 5 minutes in any 60 minute period.
[45CSR13, R13-2113, 4.1.3., 45CSR§7-3.1. and 45CSR§7-3.2., (6-CR-3, 6-CR-2, 6-VS-4, 6-VS-5)]

8.2. Monitoring Requirements

8.2.1. See Sections 3.2.1 and 3.2.2 for 45CSR7 opacity monitoring requirements and dust collector monitoring.

8.3. Testing Requirements

8.3.1. See Sections 3.3.1 and 3.3.2.

8.4. Recordkeeping Requirements

8.4.1. For the purpose of determining compliance with the limestone processing rates for the Lime Handling Area, Lime Storage and Truck Loading Systems in Sections 8.1.1 and 8.1.2, the company shall maintain certified monthly and annual records. The monthly amounts of limestone processed shall be maintained on a monthly basis. A twelve- (12) month rolling average shall be maintained; so that, there maximum tons per year of limestone and lime processing are not exceeded.
[45CSR§30-5.1.c., 45CSR13, R13-2113, 4.4.4]

8.5. Reporting Requirements

8.5.1. Reserved

8.6. Compliance Plan

8.6.1. None

9.0. Requirements for Hydrate System (Group 007) [Emission point IDs: 7-BC-1, 7-BC-2, 7-BC-3; 7-SC-0, 7-SC-1, 7-SC-2, 7-SC-8, 7-SC-9, 7-SC-10, 7-SC-11, 7-SC-12, 7-SC-13, 7-SC-14, 7-SC-15, 7-SC-16, 7-SC-17, 7-SC-18, 7-SC-23, 7-SC-24, 7-SC-25; 7-WR-1, 7-WR-2; 7-BEL-1, 7-BEL-2, 7-BEL-3, 7-BEL-4, 7-BEL-5; 7-SB-1, 7-SI-1, 7-SI-2, 7-SI-4, HBB; HB; 7-AS-20; 7-LS-1, 7-LS-2; 7-MT-1; 7-HY-1; 7-BM-1; 7-DC-1, 7-DC-2, 7-DC-3, 7-DC-4, 7-DC-5, 7-DC-20; 7-SCR-1)]

9.1. Limitations and Standards

9.1.1. Hydrated Lime production shall not exceed 100,000 tons per year.
[45CSR13, R13-1396, 4.1.2.]

9.1.2. Only those emission units/sources as identified in Table 1.0 of R13-1396, with the exception of any de minimis sources as identified under Table 45-13B of 45CSR13, are authorized at the Hydrate Plant. In accordance with the information filed in Permit Application R13-1396C, the emission units/sources identified under Table 1.0 of R13-1396 shall be installed, maintained, and operated so as to minimize any fugitive escape of pollutants, shall not exceed the listed maximum design capacities, and shall use the specified control devices.
[45CSR13, R13-1396, 4.1.1.]

9.1.3. Emissions of particulate matter for the listed emission points shall not exceed the limits given in the following table:

Table 9.1.3.: Hydrate Plant Point Source Emission Limits[(1)]

Emission Point	PM		PM_{10}		$PM_{2.5}$	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
7-DC-1	0.85	3.72	0.85	3.72	0.85	3.72
7-DC-2	0.64	2.82	0.64	2.82	0.64	2.82
7-DC-3	0.39	1.69	0.39	1.69	0.39	1.69
7-DC-4	0.39	1.69	0.39	1.69	0.39	1.69
7-DC-5	0.41	1.8	0.41	1.8	0.41	1.8
7-DC-20	0.47	2.06	0.47	2.06	0.47	2.06
7-SCR-1[(2)]	2.25	7.5	1.74	5.82	0.35	1.16

(1) Condensables assumed to be zero from these sources.
(2) PM_{10} and $PM_{2.5}$ emissions based on particle size distribution of hydrated lime provided by the permittee.

Compliance with these limits will ensure compliance with 45CSR§7-4.1
[45CSR13, R13-1396, 4.1.3.]

9.1.4. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 45CSR§7-5.1 is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7., (7-SB-1, 7-SI-1, 7-SI-2, 7-SI-4, and Hydrate Bagging Bin)]

9.1.5. Dust collectors 7-DC-1, 7-DC-2, 7-DC-3, 7-DC-4, and 7-DC-5 shall be installed, operated, and maintained so as to not exceed a maximum particulate matter stack emission concentration of 0.03 grains/ACF.
[45CSR13, R13-1396, 4.1.4.]

9.1.6. See Sections 3.1.9 through 3.1.18 for 45CSR7 limitation and standard requirements for the Hydrate System.

9.1.7. Dust collector 7-DC-20 shall be installed, operated, and maintained so as to not exceed a maximum particulate matter stack emission concentration of 0.01 grains/ACF.
[45CSR13, R13-1396, 4.1.5.]

9.1.8. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 of R13-1396 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-1396, 4.1.11.]

9.1.9. The permittee shall maintain a water truck on site and in good operating condition, and shall utilize same to apply water as often as is necessary in order to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from haulroads and other work areas where mobile equipment is used. The spraybar shall be equipped with commercially available spray nozzles, of sufficient size and number, so as to provide adequate coverage to the area being treated.

The pump delivering the water, shall be of sufficient size and capacity so as to be capable of delivering to the spray nozzle(s) an adequate quantity of solution, and at a sufficient pressure, so as to assure that the treatment process will minimize the atmospheric entrainment of fugitive particulate emissions generated from the haulroads and work areas where mobile equipment is used.
[45CSR13, R13-1396, 4.1.8.]

9.1.10. The permittee shall properly install, operate and maintain winterization systems for all water trucks and/or water sprays in a manner that all such fugitive dust control systems remain effective and functional, to the maximum extent practicable, during winter months and cold weather. At all times, including periods of cold weather, the registrant shall comply with the water trucks and/or water sprays requirements of this permit.
[45CSR13, R13-1396, 4.1.9.]

9.2. Monitoring Requirements

9.2.1. For the purpose of demonstrating compliance with the maximum production limit set forth in 9.1.1, the permittee shall monitor and record the monthly and rolling twelve month amount of hydrated lime produced.
[45CSR13, R13-1396, 4.2.1.]

9.2.2. For the purposes of demonstrating compliance with visible emissions limitations set forth in 3.1.9, the permittee shall:

a. Conduct monthly Method 22 visible emission observations of the applicable units (or associated control devices) to ensure proper operation for a sufficient time interval, but no less than one (1) minute each month the units are in operation.

b. In the event visible emissions are observed in excess of the limitations given under 3.1.9, take immediate corrective action.

c. Maintain records of all visual emission observations pursuant to the monitoring required under 9.2.2. including any corrective action taken.

d. In the event of any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22, report in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

[45CSR13, R13-1396, 4.2.2.]

9.3. Testing Requirements

9.3.1. At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3 of this permit, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations established in the permit application and/or applicable regulations.
[45CSR13, R13-1396, 4.3.1.]

9.3.2. The permittee shall meet all applicable Performance Testing Requirements as given under 45CSR7.
[45CSR13, R13-1396, 4.3.2.]

9.4. Recordkeeping Requirements

9.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0 of R13-1396, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-1396, 4.4.2.]

9.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0 of R13-1396, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-1396, 4.4.3.]

9.5. Reporting Requirements

9.5.1. None

9.6. Compliance Plan

9.6.1. None

10.0. Requirements for Portable Crushing and Screening Plant (Group 008) [Emission point IDs: GF1; PC1, PC2; BC1, BC2, BC3, BC4, BC5, BC6, BC7, BC8, BC9, BC10, BC11; PS1, PS2; PSP1, PSP2, PSP3, PSP4, PSP5; B1]

10.1. Limitations and Standards

10.1.1. In accordance with the information filed in Permit Application R13-2222-P2, the following process/transfer rates shall not be exceeded, and the following methods of control shall be installed, maintained, and operated so as to minimize particulate matter (PM) emissions:

Equipment ID (Emission Point ID)	Description	Control Method[1]	Maximum Permitted Processing Rate		Associated Transfer Points or Equipment		
			TPH	TPY	Location	ID No.	Control Method[1]
Grizzly Feeder	Grizzly Feeder - Receives limestone from front endloader, transfers it to Jaw Crusher (PC1)	N	300	600000	Before After	TP1 ---	WS ---
PC1	450 TPH Jaw Crusher - Receives limestone from the Grizzly Feeder, transfers it to Under Crusher Belt Conveyor (BC1)	WS	300	600000	Before After	--- TP2	--- WS
BC1	Under Crusher Belt Conveyor - Receives limestone from Jaw Crusher (PC1), transfers it to Screen Feed Radial Stacker (RS2)	WS	300	600000	Before After	TP2 TP3	WS COM
RS2	Screen Feed Radial Stacker - Receives limestone from Under Crusher Belt Conveyor (BC1), transfers it to Double-deck Scalping Screen (PS1)	COM	300	600000	Before After	TP3 TP4	COM COM
PS1	550 TPH Double-deck Scalping Screen - Receives limestone from Screen Feed Radial Stacker (RS2), transfers it to three (3) different locations	FE/WS	300	600000	Before After	TP4 TP5 TP8 TP11	COM WS WS WS
RS3	Radial Stacker - Receives crusher run limestone from Scalping Screen (PS1), transfers it to Stockpile (PSP1)	WS	110	600000	Before After	TP5 TP6	WS COM
PSP1	Stockpile - Receives crusher run limestone from Radial Stacker (RS3), transfers it by front endloader into dump trucks	COM	110	600000	Before After	TP6 TP7	COM MD
RS4	Radial Stacker - Receives gabion (lime-stone) from Scalping Screen (PS1), transfers it to Stockpile (PSP2)	WS	190	600000	Before After	TP8 TP9	WS COM
PSP2	Stockpile - Receives gabion (limestone) from Radial Stacker (RS4), transfers it by front endloader into dump trucks	COM	190	50000	Before After	TP9 TP10	COM COM
BC5	Under Screen Belt Conveyor - Receives limestone from Scalping Screen (PS1), transfers it to Surge Bin Feed Radial Stacker (RS6)	WS	300	600000	Before After	TP11 TP12	WS COM

Equipment ID (Emission Point ID)	Description	Control Method[1]	Maximum Permitted Processing Rate		Associated Transfer Points or Equipment		
			TPH	TPY	Location	ID No.	Control Method[1]
RS6	Surge Bin Feed Radial Stacker - Receives limestone from Belt Conveyor (BC5), transfers it to 50 Ton Bin	COM	300	600000	Before After	TP12 TP13	COM COM
B1	50 Ton Bin - Receives limestone from Radial Stacker (RS6), transfers it to Under-Bin Belt Conveyor (BC7)	COM	300	600000	Before After	TP13 TP14	COM MD
BC7	Under-Bin Main Feed Belt Conveyor to screen - Receives limestone from 50 Ton Bin and Belt Conveyor (BC8), transfers it to Three Deck (TD) Screen (PS2)	COM	300	1200000	Before After	TP14 TP17 TP15	COM COM COM
PS2	600 TPH Three Deck (TD) Screen - Receives limestone from Belt Conveyors (BC7 and BC8), transfers it to four (4) different locations	FE/WS	300	1200000	Before After	TP15 TP16 TP18 TP19 TP20	COM WS WS WS WS
PC2	350 TPH Cone Crusher - Receives limestone from Chute exiting TD Screen (PS2), transfers it to Belt Conveyor (BC8)	WS	300	600000	Before After	--- TP16	--- WS
BC8	Belt Conveyor - Receives limestone from Cone Crusher (PC2), transfers it to back to Belt Conveyor (BC7) for reprocessing through TD Screen (PS2)	WS	300	600000	Before After	TP16 TP7	WS COM
RS9	Radial Stacker - Receives 57's (limestone) from TD Screen (PS2), transfers it to Stockpile (PSP3)	WS	150	600000	Before After	TP18 TP25	WS COM
PSP3	Stockpile - Receives 57's (limestone) from Radial Stacker (RS9), transfers it with a front endloader into dump trucks	COM	150	600000	Before After	TP25 TP26	COM MD
RS10	Radial Stacker - Receives crusher limestone from TD Screen (PS2), transfers it to Stockpile (PSP4)	WS	190	600000	Before After	TP19 TP21	WS COM
PSP4	Stockpile - Receives crusher run limestone from Radial Stacker (RS10), transfers it with a front endloader into dump trucks	COM	190	600000	Before After	TP21 TP22	COM MD
RS11	Radial Stacker - Receives 8's (limestone) from TD Screen (PS2), transfers it to Stockpile (PSP5)	WS	75	600000	Before After	TP20 TP23	WS COM
PSP5	Stockpile - Receives 8's (limestone) from Radial Stacker (RS11), transfers it with a front endloader into dump trucks	COM	75	600000	Before After	TP23 TP24	COM MD

[1] Control Equipment Abbreviations: N - None, COM - Carry Over Moisture, FE - Full Enclosure, MD - Minimize Drop Height, WS - Water Spray.

[45CSR13, R13-2222, A.1.]

10.1.2. In the event that this facility is modified for any reason(s), the facility and its associated emissions shall be reviewed in their entirety for 45CSR14 applicability.
[45CSR13, R13-2222, A.1.]

10.1.3. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-2222-P2 and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-2222, C.3.]

10.1.4. See Sections 3.1.19 through 3.1.22 for 40 C.F.R. Part 60 Subpart OOO requirements.

10.2. Monitoring Requirements

10.2.1. See Sections 3.1.20 (b) and (d) for fugitive emissions from any crushers without a capture system.
[45CSR16, 40 C.F.R. § 60.672 (b) and Table 3, 45CSR13, R13-2222, B.4.c., (PC1 and PC2)]

10.3. Testing Requirements

10.3.1. Reserved

10.4. Recordkeeping Requirements

10.4.1. The company shall maintain certified monthly and annual records of limestone processing rate by the Portable Limestone Crushing and Sizing facility. The annual limestone processing rate shall be calculated using a rolling total for any continuous span of twelve (12) months. The company may use the forms identified as Attachment A in Permit R13-2222-P2.
[45CSR13, R13-2222, B.3.]

10.5. Reporting Requirements

10.5.1. Reserved

10.6. Compliance Plan

10.6.1. None

11.0. Source-Specific Requirements for Coal Handling [Emission Point IDs: 5-DH-1; 5-VF-1, 5-VF-2; 5-CR-1; 5-BC-0, 5-BC-1; 5-SI-1; 5-CS-1; 5-CS-1A, 5-CS-2]

11.1. Limitations and Standards

11.1.1. The amount of coal processed or conveyed shall not exceed 54,000 tons per year. Compliance with the throughput limit shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of coal throughput at any given time for the previous twelve (12) consecutive calendar months.
[45CSR13, R13-2670, 4.1.1.]

11.1.2. The permittee shall maintain a water truck on site and in good operating condition, and shall utilize same to apply water, or a mixture of water and an environmentally acceptable dust control additive, hereinafter referred to as solution, as often as is necessary in order to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from haulroads and other work areas where mobile equipment is used.

The spraybar shall be equipped with commercially available spray nozzles, of sufficient size and number, so as to provide adequate coverage to the area being treated. The pump delivering the water, or solution, shall be of sufficient size and capacity so as to be capable of delivering to the spray nozzle(s) an adequate quantity of water, or solution, and at a sufficient pressure, so as to assure that the treatment process will minimize the atmospheric entrainment of fugitive particulate emissions generated from the haulroads and work areas where mobile equipment is used.

The permittee shall properly install, operate and maintain designed winterization systems for all water trucks and/or water sprays in a manner that all such fugitive dust control systems remain functional during winter months and cold weather.
[45CSR13, R13-2670, 4.1.2.]

11.1.3. **Opacity Limit.** No person shall cause, suffer, allow or permit emission of particulate matter into the open air from any fugitive dust control system which is twenty percent (20%) opacity or greater.
[45CSR13, R13-2670, 4.1.3., 45CSR§5-3.4]

11.1.4. **Standards for Particulate Matter.**

a. On and after the date on which the performance test is conducted or required to be completed under 40 CFR § 60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit ≥20% opacity. [5-DH-1, 5-VF-1, 5-VF-2, 5-CR-1, 5-BC-0, 5-BC-1, 5-SI-1, 5-CS-1]

b. On and after the date on which the performance test is conducted or required to be completed under 40 CFR § 60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs b.1. through 3. of this section, as applicable to the affected facility. [5-CS-1A, 5-CS-2]

1. Except as provided in paragraph b.3. of this section, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit ≥10% opacity.

2. The owner or operator must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf).

3. Equipment used in the loading, unloading, and conveying operations of open stprage piles are not subject to the opacity limitations of paragraph b.1. of this section.

[45CSR13, R13-2670, 4.1.4.1. and 4.1.4.2., 45CSR16, 40 C.F.R. §§60.254(a) and (b)]

11.1.5. The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions as specified in paragraphs 1. through 6 of this section.

1. The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile.

2. For open coal storage piles, the fugitive coal dust emissions control plan must require that one or more of the following control measures be used to minimize to the greatest extent practicable fugitive coal dust: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents on the source (when the provisions of paragraph 6. of this section are met), use of a wind barrier, compaction, or use of a vegetative cover. The owner or operator must select, for inclusion in the fugitive coal dust emissions control plan, the control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.

3. Any owner or operator of an affected facility that is required to have a fugitive coal dust emissions control plan may petition the Administrator to approve, for inclusion in the plan for the affected facility, alternative control measures other than those specified in paragraph 2. of this section as specified in paragraphs 3.i. through iv. of this section.

   i. The petition must include a description of the alternative control measures, a copy of the fugitive coal dust emissions control plan for the affected facility that includes the alternative control measures, and information sufficient for EPA to evaluate the demonstrations required by paragraph 3.ii. of this section.

   ii. The owner or operator must either demonstrate that the fugitive coal dust emissions control plan that includes the alternate control measures will provide equivalent overall environmental protection or demonstrate that it is either economically or technically infeasible for the affected facility to use the control measures specifically identified in paragraph 2.

   iii. While the petition is pending, the owner or operator must comply with the fugitive coal dust emissions control plan including the alternative control measures submitted with the petition. Operation in accordance with the plan submitted with the petition shall be deemed to constitute compliance with the requirement to operate in accordance with a fugitive coal dust emissions control plan that contains one of the control measures specifically identified in paragraph 2. of this section while the petition is pending.

   iv. If the petition is approved by the Administrator, the alternative control measures will be approved for inclusion in the fugitive coal dust emissions control plan for the affected facility. In lieu of amending this subpart, a letter will be sent to the facility describing the specific control measures approved. The facility shall make any such letters and the applicable fugitive coal dust emissions control plan available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

4. The owner or operator must submit the fugitive coal dust emissions control plan to the Administrator or delegated authority as specified in paragraphs 4.i. and 4.ii. of this section.

i. The plan must be submitted to the Administrator or delegated authority prior to startup of the new, reconstructed, or modified affected facility, or 30 days after the effective date of this rule, whichever is later.

ii. The plan must be revised as needed to reflect any changing conditions at the source. Such revisions must be dated and submitted to the Administrator or delegated authority before a source can operate pursuant to these revisions. The Administrator or delegated authority may also object to such revisions as specified in paragraph 5. of this section.

5. The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as specified in paragraphs 5.i. and 5.ii. of this section.

i. The Administrator or delegated authority may object to any fugitive coal dust emissions control plan that it has determined does not meet the requirements of paragraphs 1. and 2. of this section.

ii. If an objection is raised, the owner or operator, within 30 days from receipt of the objection, must submit a revised fugitive coal dust emissions control plan to the Administrator or delegated authority. The owner or operator must operate in accordance with the revised fugitive coal dust emissions control plan. The Administrator or delegated authority retain the right, under paragraph 5. of this section, to object to the revised control plan if it determines the plan does not meet the requirements of paragraphs 1. and 2. of this section.

6. Where appropriate chemical dust suppression agents are selected by the owner or operator as a control measure to minimize fugitive coal dust emissions, (1) only chemical dust suppressants with Occupational Safety and Health Administration (OSHA)-compliant material safety data sheets (MSDS) are to be allowed; (2) the MSDS must be included in the fugitive coal dust emissions control plan; and (3) the owner or operator must consider and document in the fugitive coal dust emissions control plan the site-specific impacts associated with the use of such chemical dust suppressants. [5-CS-1A, 5-CS-2]

[45CSR13, R13-2670, 4.1.4.3., 45CSR16, 40 C.F.R. §60.254(c)]

11.1.6. The amount of coal loaded into open stockpiles 5-CS-1A and 5-CS-2 shall not exceed 15,000 tons per year.
[45CSR13, R13-2670, 4.1.5.]

11.1.7. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 of R13-2670B and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-2670, 4.1.6, 45CSR§13-5.11, Equipment ID (5-DH-1 Partial Enclosure, 5-VF-1 Partial Enclosure, 5-BC-0 Full Enclosure, 5-CR-1 Full Enclosure, 5-SI-1 Full Enclosure, 5-VF-2 Full Enclosure, 5-BC-1 Full Enclosure)]

11.2. Monitoring Requirements

11.2.1. For the purpose of determining compliance with the maximum throughput limit set forth in Section 11.1.1, the permittee shall maintain certified monthly and annual records of the amount of coal transferred or processed. Such records shall be retained onsite by the permittee for at least five (5) years. Certified records shall be made available to the Director or his duly authorized representative upon request.
[45CSR13, R13-2670, 4.2.1.]

11.2.2. For the purposes of determining compliance with water truck usage set forth in Section 11.1.2, the permittee shall monitor water truck activity and maintain certified daily records. Such records shall be retained onsite by

the permittee for at least five (5) years. Certified records shall be made available to the Director or his duly authorized representative upon request.
[45CSR13, R13-2670, 4.2.2.]

11.2.3. For the purpose of determining compliance with the opacity limits of Section 11.1.3 or 11.1.4, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission sources subject to an opacity limit.

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 CFR Part 60 Appendix A, Method 22 or from the lecture portion of the 40 CFR Part 60 Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source (stacks, conveyors, crushers, silos, bins, and screens) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are present at a source(s) for six (6) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of Method 9 as soon a practicable, but within seventy-two (72) hours of the final visual emission check. Method 9 checks shall be performed on the source for at least six (6) minutes. A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.
[45CSR13, R13-2670, 4.2.3., 45CSR7]

11.2.4. For the purpose of determining compliance with the maximum throughput limit set forth in Section 11.1.6., the permittee shall maintain certified monthly and annual records of the amount of coal transferred to open stockpiles 5-CS-1A and 5-CS-2. Such records shall be retained onsite by the permittee for at least five (5) years. Certified records shall be made available to the Director or his duly authorized representative upon request.
[45CSR13, R13-2670, 4.2.4.]

11.3. Testing Requirements

11.3.1. The permittee shall conduct tests to determine compliance with the visible emission limitation of Section 11.1.3; tests shall be conducted by certified visible emission observers in accordance with Method 9 of 40 CFR Part 60 Appendix A.
[45CSR13, R13-2670, 4.3.1., 45CSR§5-12.4.]

11.3.2. The owner or operator must determine compliance with Section 11.1.4. opacity standards as specified in paragraphs 1. through 3. of this section.

1. Method 9 of 40CFR60, appendix A-4 and the procedures in 40 CFR §60.11 must be used to determine opacity, with the exceptions specified in paragraphs 1.i. and ii. below:

   i. The duration of the Method 9 performance test shall be 1 hour (ten 6-minute averages).

ii. If, during the initial 30 minutes of the observation of a Method 9 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

2. To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs 2.i. through iii. must be used.

   i. The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.

   ii. The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.

   iii. The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

3. A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs 3.i. through iii. of this section are met.

   i. No more than three emissions points may be read concurrently.

   ii. All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

   iii. If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

[45CSR16, 40 CFR §60.257(a)]

11.4. Recordkeeping Requirements

11.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0 of R13-2670B, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-2670, 4.4.2., Equipment ID (5-DH-1 Partial Enclosure, 5-VF-1 Partial Enclosure, 5-BC-0 Full Enclosure, 5-CR-1 Full Enclosure, 5-SI-1 Full Enclosure, 5-VF-2 Full Enclosure, 5-BC-1 Full Enclosure)]

11.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0 of R13-2670B, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2670, 4.4.3., (5-DH-1 Partial Enclosure, 5-VF-1 Partial Enclosure, 5-BC-0 Full Enclosure, 5-CR-1 Full Enclosure, 5-SI-1 Full Enclosure, 5-VF-2 Full Enclosure, 5-BC-1 Full Enclosure)]

11.4.3. The permittee shall maintain records of all monitoring data required by 11.2.3 documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6 - 10 mph NE wind) during the visual emission check(s). An example form is supplied as Appendix A of R13-2670B. Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note “out of service” (O/S) or equivalent.
[45CSR13, R13-2670, 4.4.4.]

11.4.4. The owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:

1. The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.

2. The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.

3. The amount and type of coal processed each calendar month.

4. The amount of chemical stabilizer or water purchased for use in the coal preparation and processing plant.

5. Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, shall be noted.

6. Monthly certification that the fugitive coal dust emissions control plan was implemented as described. Any variance from the plan, if any, shall be noted. A copy of the applicable fugitive coal dust emissions control plan and any letters from the Administrator providing approval of any alternative control measures shall be maintained with the logbook. Any actions, e.g., objections, to the plan and any actions relative to the alternative control measures, e.g., approvals, shall be noted in the logbook as well.

After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the owner or operator of the affected facility must submit the test data to EPA. For opacity performance tests, the owner or operator of the affected facility must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711.
[45CSR16, 40 CFR §§60.258(a) and (d)]

11.5. Reporting Requirements

11.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observations using 40 CFR Part 60 Appendix A, Method 9 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
[45CSR13, R13-2670, 4.5.1.]

11.6. Compliance Plan

11.6.1. None

12.0. Source-Specific Requirements Pertaining to National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Facilities (40 C.F.R. Part 63 Subpart AAAAA) [Equipment IDs: 4-RK-1, 4-RK-2; 4-BC-1; 4-BC-2; 4-BC-4, 4-BC-5; 4-STB-1, 4-STB-2 and Control Equipment: Fabric Filters 4-DC-1, 4-DC-2; Emission Point ID 1E, 500-115]

12.1. Limitations and Standards

12.1.1. Lime kilns 4-RK-1, 4-RK-2 and their associated lime coolers shall limit PM emissions not to exceed 0.12 pounds per ton of stone feed (lb/tsf).
[45CSR34, 40 C.F.R. § 63.7090(a), Table 1-#1, (1E and 500-115)]

12.1.2. Fugitive emissions from all process stone handling (PSH) operations must not exceed 10 percent opacity.
[45CSR34, 40 C.F.R. § 63.7090(a), Table 1-#7, (4-BC1, 4-BC-2, 4-BC-4, 4-BC-5, 4-STB-1, 4-STB-2)]

12.1.3. The permittee shall meet the following operating limits from Table 2 of 40 C.F.R. Part 63 Subpart AAAAA:

(a) Each lime kiln equipped with a fabric filter (FF) shall maintain a 6-minute average opacity for any 6-minute block period that does not exceed 15% percent; and comply with the requirements in 40 C.F.R. §§ 63.7113 (f) and (g) and Table 5 of 40 C.F.R. Part 63 Subpart AAAAA. The referenced requirements are incorporated in Sections 12.2.1 and 12.2.2.
[45CSR34, 40 C.F.R. § 63.7090(b), Table 2 - #1, (1E and 500-115)]

(b) The permittee shall prepare and implement for each lime manufacturing plant (LMP) a written operations, maintenance, and monitoring (OM&M) plan in accordance with 40 C.F.R. § 63.7100 (d). This plan has been approved and is provided for reference as Appendix B. Any subsequent changes to the plan must be submitted to the applicable permitting authority, WVDEP Division of Air Quality, for review and approval. Pending approval of an initial or amended plan, the permittee must comply with the provisions of the submitted plan. Each plan must contain the information listed in 40 C.F.R. §§ 63.7100 (d) (1) through (7).
[45CSR34, 40 C.F.R. § 63.7090(b), Table 2 - #5, 40 C.F.R. § 63.7100 (d)]

(c) Each emission unit equipped with an add-on air pollution control device shall vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter (FF); and operate each capture/collection system in accordance with the procedures and requirements defined in the OM&M plan required by Section 12.1.3.(b).
[45CSR34, 40 C.F.R. § 63.7090(b), Table 2 - #6, (4-DC-1, 4-DC-2)]

12.1.4. The permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR §63.6(e)(3). This SSM plan is provided for reference as Appendix C.
[45CSR34, 40 C.F.R. § 63.7100(e)]

12.1.5. Consistent with 40 CFR §§63.6(e) and 63.7(e) (1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with 40 CFR §63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in 40 CFR §63.6(e).
[45CSR34, 40 C.F.R. § 63.7121(d)]

12.1.6. You must report each instance in which you did not meet each operating limit, opacity limit, and VE limit in Tables 2 and 6 of 40 CFR Part 63 Subpart AAAAA that applies to you. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in 40 CFR §63.7131 incorporated herein as Section 12.5.2.
[45CSR34, 40 C.F.R. § 63.7121(b)]

12.1.7. At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in 40 C.F.R. § 63.6 (e) (3), review of operation and maintenance records, and inspection of the source.
[45CSR34, 40 C.F.R. § 63.6(e)(1)(i)]

12.1.8. The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of 40 C.F.R. Part 63 or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by 40 C.F.R. § 63.10 (d) (5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.
[45CSR34, 40C.F.R. § 63.6(e)(3)(viii)]

12.1.9. The permittee shall comply with the General Provisions of 40 C.F.R. § 63.1 through § 63.15 that apply in accordance with Table 8 of 40 C.F.R. Part 63 Subpart AAAAA. When there is overlap between 40 C.F.R. Part 63 Subpart A and 40 C.F.R. Part 63 Subpart AAAAA, as indicated in the Explanations" column in Table 8, 40 C.F.R. Part 63 Subpart AAAAA takes precedence.
[45CSR34, 40 C.F.R. § 63.7140]

12.2. Monitoring Requirements

12.2.1. The permittee must install, operate, and maintain each continuous opacity monitoring system (COMS) in accordance with the following:

For each COMS used to monitor an add-on air pollution control device, you must install the COMS at the outlet of the control device and install, maintain, calibrate, and operate the COMS as required by 40 C.F.R. Part 63 Subpart A, General Provisions and according to 40 C.F.R. Part 60 Appendix B, Performance Specifications (PS)-1. Facilities that operate COMS installed before February 6, 2001, may continue to meet the requirements in effect at the time of COMS installation unless specifically required to recertify the COMS by their permitting authority.

Continuous compliance shall be established by collecting the COMS data at a frequency of at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating for each 6-minute block period the average opacity does not exceed 15 percent.
[45CSR34, 40 C.F.R. §§ 63.7113(a) and (g), 40 C.F.R. § 63.7121(a), Table 5, Item 4, (1E and 500-115)]

12.2.2. For each emission unit equipped with an add-on air pollution control device you must inspect each capture/collection and closed vent system at least once each calendar year to ensure each system is operating in accordance with the operating requirements of 40 C.F.R. Part 63 Subpart AAAAA, Table 2 Item 6, incorporated herein as Section 12.1.3 (c), and record the results of each inspection.
[45CSR34, 40 C.F.R. § 63.7113(f), (4-RK-1 and 4-RK-2)]

12.2.3. Except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments), and except for PSH operations subject to monthly VE testing, you must monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating.
[45CSR34, 40 C.F.R. § 63.7120(b)]

12.2.4. Data recorded during the conditions described in 40 C.F.R. §§ 63.7120 (c) (1) through (3) [Section 12.2.4.] may not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

(1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;

(2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and

(3) Start-ups, shutdowns, and malfunctions.
[45CSR34, 40 C.F.R. § 63.7120 (c)]

12.2.5. Ongoing compliance with the fugitive opacity requirements referenced in Section 12.1.2 shall be demonstrated by conducting monthly visual emission checks for at least 1 minute per each emission unit while the affected source is in operation in accordance with 40 C.F.R. § 63.7121 (e), which is stated as follows:

(e) For each PSH operation subject to an opacity limit as specified in 40 C.F.R. Part 63 Subpart AAAAA, Table 1, and any vents from buildings subject to an opacity limit, you must conduct a VE check according to item 1 in 40 C.F.R. Part 63 Subpart AAAAA, Table 6, and as follows:

(1) Conduct visual inspections that consist of a visual survey of each stack or process emission point over the test period to identify if there are VE, other than condensed water vapor.

(2) Select a position at least 15 but not more 1,320 feet from the affected emission point with the sun or other light source generally at your back.

(3) The observer conducting the VE checks need not be certified to conduct 40 C.F.R. Part 60 Appendix A, Method 9, but must meet the training requirements as described in 40 C.F.R. Part 60 Appendix A, Method 22.

Additionally, 40 C.F.R. Part 63 Subpart AAAAA, Table 6, items 1 (a) (ii), (iii), and (iv) allows a tiered monitoring frequency to be utilized in accordance with the following criteria:

(ii) If no VE are observed in 6 consecutive monthly checks for any emission unit, you may decrease the frequency of VE checking from monthly to semi-annually for that emission unit; if VE are observed during any semiannual check, you must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks;

(iii) If no VE are observed during the semiannual check for any emission unit you may decrease the frequency of VE checking from semi-annually to annually for that emission unit; if VE are observed during any annual check, you must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks; and

(iv) If VE are observed during any VE check, you must conduct a 6-minute test of opacity in accordance with 40 C.F.R. Part 60 Appendix A, Method 9; you must begin the method 9 test within 1 hour of any observation of VE and the 6-minute opacity reading must not exceed the applicable opacity limit.

[40 C.F.R. § 63.7121(a) and Table 6 of 40 C.F.R. Part 63 Subpart AAAAA, (4-BC-1, 4-BC-2, 4-BC-4, 4-BC-5, 4-STB-1, 4-STB-2)]

12.3. Testing Requirements

12.3.1. The permittee shall conduct a subsequent performance test for sources defined in 40 C.F.R. Part 63 Subpart AAAAA, Table 4, which is currently PM and fugitive opacity testing, within 5 years following the initial performance test, conducted October 25, 2006 and within 5 years following each subsequent performance test thereafter.

[45CSR34, 40 C.F.R. § 63.7111, (E1, 500-115) and Fugitive Unit IDs (4-BC-1, 4-BC-2, 4-BC-4, 4-BC-5, 4-STB-1, 4-STB-2)]

12.4. Recordkeeping Requirements

12.4.1. (a) You must keep the records specified in 40 CFR §§ 63.7132(a)(1) through (3) [Section 12.4.1 (a)] .

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in 40 CFR § 63.10(b)(2) (xiv).

(2) The records in 40 CFR §§ 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity and VE observations as required in 40 CFR § 63.10(b)(2)(viii).

(b) You must keep the records in 40 CFR § 63.6(h)(6) for VE observations. Compliance with this condition shall be satisfied by documenting the VE monitoring required by Section 12.2.5.

(c) You must keep the records required by 40 C.F.R. Part 63 Subpart AAAAA, Tables 5 and 6 incorporated as Sections 12.2.1, 12.2.2, and 12.2.5, to show continuous compliance with each emission limitation that applies to you.

[45CSR34, 40 C.F.R. §§ 63.7132(a), (b), and (c)]

12.4.2. (a) Your records must be in a form suitable and readily available for expeditious review, according to 40 CFR § 63.10(b)(1).

(b) As specified in 40 CFR § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR § 63.10(b)(1). You may keep the records offsite for the remaining 3 years.

[45CSR34, 40 C.F.R. §§ 63.7133(a), (b), and (c)]

12.5. Reporting Requirements

12.5.1. When conducting performance test, such as those incorporated by Section 12.3.1, the permittee shall submit a notification of intent to conduct such testing at least 60 calendar days before the performance test is scheduled to begin, as required in 40 CFR § 63.7(b)(1).
[45CSR34, 40 C.F.R. § 63.7130(d)]

12.5.2. The permittee shall submit each report listed in 40 C.F.R. Part 63 Subpart AAAAA, Table 7 as applicable.

Table 7 as referenced above as well as 40 C.F.R. § 63.7131 defines the following reporting requirements:

(a) Semiannual compliance reports shall be submitted in accordance with the Title V schedule defined by Section 3.5.6.

Each semiannual compliance report must contain the information specified by 40 C.F.R. §§ 63.7131 (c), (d), and (e) as follows.

40 C.F.R. § 63.7131(c)

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 40 C.F.R. § 63.10 (d)(5)(i).

(5) If there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and VE limit) that apply to you, the compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring systems (CMS) were out-of-control as specified in 40 C.F.R. § 63.8 (c) (7), a statement that there were no periods during which the CMS were out-of-control during the reporting period.

The permittee shall also report any deviations as applicable according to the following criteria:

40 C.F.R. § 63.7131(d)

For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) that occurs at an affected source where you are not using a CMS to comply with the emission limitations in this subpart, the compliance report must contain the information specified in 40 CFR §§ 63.7131(c)(1) through (4) and 40 CFR §§ 63.7131(d)(1) and (2). The deviations must be reported in accordance with the requirements in 40 CFR § 63.10(d).

(1) The total operating time of each emission unit during the reporting period.
(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

40 C.F.R. § 63.7131(e)

For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) occurring at an affected source where you are using a CMS to comply with the emission limitation in this subpart, you must include the information specified in 40 CFR §§ 63.7131(c)(1) through (4) and 40 CFR §§ 63.7131(e)(1) through (11). This includes periods of startup, shutdown, and malfunction.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time and duration that each CMS was out-of-control, including the information in 40 CFR § 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period.

(8) A brief description of the process units.

(9) A brief description of the CMS.

(10) The date of the latest CMS certification or audit.

(11) A description of any changes in CMS, processes, or controls since the last reporting period.

(b) The permittee must also submit an immediate startup, shutdown, and malfunction (SSM) report if the affected source has a SSM event during the reporting period that results in actions that deviate from those prescribed within the applicable SSM plan. This report shall be submitted by fax or telephone within 2 working days after starting actions inconsistent with the SSM plan.

Within 7 working days after the end of the event, unless alternative arrangements have been made with the permitting authority, the permittee shall submit the information required by 40 CFR § 63.10(d)(5)(ii). The information required by 40 CFR § 63.10(d)(5)(ii) is provided here for reference as follows:

… contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred (or could have occurred in the case of malfunctions), and actions taken to minimize emissions in conformance with 40 CFR § 63.6(e)(1)(i).

[45CSR34, 40 C.F.R. §§ 63.7131(a), (b), (c), (d), and (e), 40 C.F.R. Part 63 Subpart AAAAA, Table 7]

12.5.3. Each facility that has obtained a title V operating permit pursuant to 40 C.F.R. Part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report 40 C.F.R. §§ 70.6(a)(3)(iii)(A) or 71.6 (a)(3)(iii)(A). If you submit a compliance report specified in 40 C.F.R. Part 63 Subpart AAAAA, Table 7 along with, or as part of, the semiannual monitoring report required by 40 CFR §§ 70.6(a)(3)(iii)(A) or 71.6 (a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation you may have to report deviations from permit requirements to the permit authority.
[45CSR34, 40 C.F.R. § 63.7131 (f)]

12.6. Compliance Plan

12.6.1. None

APPENDIX A

45CSR10 Monitoring Plan for Greer Industries, Inc. d.b.a. Greer Lime

- **No. 2 Fuel Oil Fired 65 TPH Rotary Dryer (AOS "A")**
- **Coal Fired 400 TPD Lime Kiln**
- **Coal Fired 500 TPD Lime Kiln**

March 30, 2001

Ms. Laura Crowder, Enforcement
West Virginia Office of Air Quality
7012 MacCorkle Avenue, S.E.
Charleston, West Virginia 25304

RE: Greer Industries, Inc.
45CSR10 Monitoring Plan for Manufacturing Processes
Hand Delivered

Dear Ms. Crowder:

Potesta & Associates, Inc. (POTESTA), on behalf of Greer Industries, Inc. (Greer), is submitting a monitoring plan, in accordance with 45CSR10, for Greer's manufacturing process sources for the following operations and affected equipment for the West Virginia Office of Air Quality's approval:

Greer Industries, Inc. d.b.a. Greer Lime
Riverton, Pendleton County, West Virginia
Plant ID No.: 071-00001

No. 2 fuel oil fired 65 tph rotary dryer
Coal fired 400 tpd lime kiln
Coal fired 500 tpd lime kiln

Regulation 10 Testing Requirements

Greer hereby petitions the Director for an alternative to stack testing and requests that fuel analysis for sulfur and the corresponding calculation of in-stack sulfur dioxide concentration be used as a substitute in demonstrating compliance with the 2,000 ppm standard from 45CSR10, Section 4. The attached calculations, based on existing permit limits, demonstrate that each affected unit operated by Greer has maintained and will continue to maintain compliance with the in-stack sulfur dioxide concentration. The results of the in-stack concentration calculations are shown in Table 1:

Table 1: In-stack SO_2 concentration calculation results

Plant	Unit	Result (ppm)
Greer Lime	65 tph rotary dryer	22.27
Greer Lime	400 tpd lime kiln	51.15
Greer Lime	500 tpd lime kiln	31.67

By maintaining compliance with existing permit conditions and limitations, it can be reasonably expected that the in-stack sulfur dioxide concentration will be well below the 2,000 ppm standard. Greer requests that the Director accept these results for the initial test as they are a reliable indication of Greer's ability to meet the standard.

Regulation 10 Monitoring Requirements

Greer proposes to monitor the sulfur content percentage of permitted fuels in the affected units by obtaining sulfur content statements from the fuel suppliers. Operating these permitted units as they were intended while utilizing fuels with sulfur contents at or below existing permitted levels will assure that Greer continues to maintain compliance with the 2,000 ppm standard from 45CSR10, Section 4. Maximum sulfur content percentages for each affected unit for the given, permitted fuels are shown below in Table 2:

Table 2: Maximum sulfur content percentages

Plant	Unit	Fuel Type	Max. Sulfur Content (%)
Greer Lime	65 tph rotary dryer	No. 2 fuel oil	0.5
Greer Lime	400 tpd lime kiln	coal	1.1
Greer Lime	500 tpd lime kiln	coal	1.1

By utilizing fuels that do not exceed the maximum sulfur content percentages listed in Table 2, which maintains compliance with existing permit conditions and limitations, it can be reasonably expected that the in-stack sulfur dioxide concentration will be well below the 2,000 ppm standard as indicated in Table 1. Greer requests that the Director accept fuel sulfur content as the trackable basis of a Regulation 10 monitoring plan for the affected units.

Regulation 10 Recordkeeping and Reporting Requirements

Greer will maintain sulfur content statements from the fuel suppliers on-site at each affected facility for a period of at least five (5) years in accordance with 45CSR10A, Section 7. Upon approval of this monitoring plan by the Director, Greer will submit a "Monitoring Summary Report" and an "Excursion and Monitoring Plan Performance Report". In accordance with 45CSR10A, Section 7.2.b., Greer will submit these reports on a quarterly basis to the Director by the 30th day of the month following the calendar quarter. The purpose of these reports is to provide the Director with sulfur content statements for the fuels utilized during the quarter and to report any excursions in accordance with 45CSR10A, Section 7.2.b.3.

If you have any questions, or require additional information, please contact me at (304) 342-1400.

Sincerely,

Scott R. Kisner
Senior Engineer

Attachments: SO_2 in-stack concentration calculations

c: Mr. Joseph B. Dean
Greer Industries, Inc.

Appendix B

40 C.F.R. Part 63 Subpart AAAAA

Operating, Maintenance and Monitoring (OM&M) Plan

2. Operations, Maintenance, and Monitoring Plan

The OM&M plan requirements of 40 CFR §63.7100(d) are discussed in detail below. The actual regulatory language appears in *italic* font. Greer's response to each requirement appears in plain text.

(d) You must prepare and implement for each LMP, a written operations, maintenance, and monitoring (OM&M) plan. You must submit the plan to the applicable permitting authority for review and approval as part of the application for a 40 CFR part 70 or 40 CFR part 71 permit. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, you must comply with the provisions of the submitted plan. Each plan must contain the following information:

(1) Process and control device parameters to be monitored to determine compliance, along with established operating limits or ranges, as applicable for each emission unit.

Emission Unit	Discussion
Rotary Lime Kiln – 400 TPD 4-RK-1 Rotary Lime Kiln – 500 TPD 4-RK-2	The opacity from the fabric filter dust collectors serving each lime kiln system is continuously monitored with a continuous opacity monitoring system (COMS). A computerized data acquisition system records all opacities in electronic form. The opacity limit is 15% per 6-minute block average (as per Item 1 in Table 2 of the Lime MACT rule), but the actual opacity is typically less. Measured opacity for compliance purposes will be taken from the data acquisition system.
Tunnel Belt: 4-BC-1 Reclaim Belt: 4-BC-2 4-STB-1 Feed Belt: 4-BC-4 4-STB-2 Feed Belt: 4-BC-5 Stone Bin: 4-STB-1 Stone Bin: 4-STB-2	The opacity limit for processed stone handling (PSH) equipment is 10% (as per Item 7 in Table 1 of the Lime MACT rule). Dust emissions from the affected equipment are minimized through full enclosures.

(2) A monitoring schedule for each emission unit.

Emission Unit	Discussion
Rotary Lime Kiln – 400 TPD 4-RK-1 Rotary Lime Kiln – 500 TPD 4-RK-2	The opacity from each fabric filter dust collector serving its respective lime kiln is continuously monitored with a COMS. Data is stored electronically.
Tunnel Belt: 4-BC-1 Reclaim Belt: 4-BC-2 4-STB-1 Feed Belt: 4-BC-4 4-STB-2 Feed Belt: 4-BC-5 Stone Bin: 4-STB-1 Stone Bin: 4-STB-2	The Title V permit (R30-07100001-2004) requires weekly visible emission observations for these sources. Data is stored in a written log and maintained on-site.

(3) Procedures for the proper operation and maintenance of each emission unit and each air pollution control device used to meet the applicable emission limitations and operating limits in Tables 1 and 2 to this subpart, respectively.

Emission Unit	Discussion
Rotary Lime Kiln – 400 TPD 4-RK-1 Rotary Lime Kiln – 500 TPD 4-RK-2	These units are subject to Item 1 in Table 1 of the Lime MACT rule. The dust collectors are operated in conjunction with the lime kilns due to the system's physical design and process control interlocks. The induced draft fan is the first item in sequence of process equipment to be started on kiln startup and the last item to shut down after lime kiln shutdown. This must occur to control preheat and cool down of the kilns to prevent damage to internal refractory. Computer system interlocks are used to assure proper startup and shutdown. The condition of the fabric filter bags is monitored continuously by the COMS. Each dust collector is constructed with four independent modules. Operation of either kiln requires three of the four modules to be in operation when operating at full production levels. If the 6-minute block average opacity is greater than 12% (80% of the standard) for five or more 6-minute periods during any 1-hour period, the

Emission Unit	Discussion
	dust collector modules will be isolated in order to determine which module is responsible for the increase in opacity. Once identified, the fabric filter bags within that module will be inspected for leaks and replaced as necessary, as soon as is practicable. Kilns are shutdown for scheduled, preventative maintenance approximately every six months. During this time, kiln systems, including the induced draft fan and dust collector are inspected with work conducted as needed. Preventative maintenance is performed by Greer's on-site maintenance crew.
Tunnel Belt: 4-BC-1 Reclaim Belt: 4-BC-2 4-STB-1 Feed Belt: 4-BC-4 4-STB-2 Feed Belt: 4-BC-5 Stone Bin: 4-STB-1 Stone Bin: 4-STB-2	The PSH equipment has an opacity limit of 10% per Item 7 in Table 1 of the Lime MACT rule. Full enclosures are used to minimize dust generation from the affected equipment. The Title V permit requires weekly visible emission observations and fugitive dust control system inspections for these sources. This schedule is more stringent than the inspection schedule required by the Lime MACT rule which requires monthly checks.

(4) Procedures for the proper installation, operation, and maintenance of monitoring devices or systems used to determine compliance, including:

(i) Calibration and certification of accuracy of each monitoring device;
(ii) Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems;
(iii) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), and (4)(ii); and
(iv) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d).

Emission Unit	Discussion
Rotary Lime Kiln – 400 TPD 4-RK-1 Rotary Lime Kiln – 500 TPD 4-RK-2	The opacity of the exhaust gas released via stack from the dust collectors is continuously monitored with a COMS. Data is maintained in electronic format by the plant's data acquisition system. The COMS are installed, maintained, calibrated, and operated in accordance with PS-1 of 40 CFR Part 60, Appendix B (specification in effect at the time the monitor was installed). Information pertaining to this system is contained in Sections 5 & 6 of this document.

Tunnel Belt: 4-BC-1 Reclaim Belt: 4-BC-2 4-STB-1 Feed Belt: 4-BC-4 4-STB-2 Feed Belt: 4-BC-5 Stone Bin: 4-STB-1 Stone Bin: 4-STB-2	There are no monitoring devices on these fugitive emissions sources. The Title V permit requires weekly visible emission observations.

(5) Procedures for monitoring process and control device parameters.

Emission Unit	**Discussion**
Rotary Lime Kiln – 400 TPD 4-RK-1 Rotary Lime Kiln – 500 TPD 4-RK-2	The kilns utilize an Optimizing Control System (OCS) to supplement traditional PLC controls. The OCS continuously determines and implements optimized set points to maintain a required product quality. The system assists the kiln operator is determining the necessary balance of fuel, air, and stone input that results in consistent operation. Over 70 parameters on each kiln are continuously monitored, recorded, and displayed on the kiln operator's computer screens with other remote access terminals available within the plant. Opacity from the dust collectors serving the lime kilns is continuously monitored with a COMS. The measurements are continuously recorded from the monitor and displayed to the kiln operator's computer screens and other remote access plant terminals as with the process parameters. The measurements are viewable as an instantaneous opacity and 6-minute average. Exceedances of the 6-minute block average are recorded and maintained for compliance determination. The kiln operator is in nearly continuous attendance to monitor system alarms and is trained to take any necessary corrective action. Fault conditions occurring with the COMS are also recorded in order to determine if data collected is valid. Total fault condition time will be used to determine if the 95% data availability standard is being met.

Tunnel Belt: 4-BC-1 Reclaim Belt: 4-BC-2 4-STB-1 Feed Belt: 4-BC-4 4-STB-2 Feed Belt: 4-BC-5 Stone Bin: 4-STB-1 Stone Bin: 4-STB-2	The Title V permit requires weekly visible emission observations. The results of these observations are recorded in a log that is maintained on site.

(6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the operating limits specified in Table 2 to this subpart, including:

(i) Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and

(ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date the corrective action was completed.

Emission Unit	**Discussion**
Rotary Lime Kiln – 400 TPD 4-RK-1 Rotary Lime Kiln – 500 TPD 4-RK-2	Item 1 in Table 2 of the Lime MACT rule requires that the emissions from the fabric filter not exceed 15% opacity (6-minute average for any 6-minute block period). The COMS will be used to determine if a deviation of the operating limit has occurred. If a deviation occurs, the dust collector will be inspected as soon as practicable. If the cause of the deviation is determined to be limited to one module then it may be possible to implement repairs without shutting down the kiln. If a shutdown is necessary to implement repairs then the kiln will not restart until those repairs are complete. If the exceedance was the result of a startup, shutdown, or malfunction, then the SSMP recordkeeping forms will be completed as required. The SSMP forms will be used to record the cause of the deviation, the time the deviation began and ended, and the corrective action taken. If the exceedance is found not to be the result of a startup, shutdown, or malfunction, repairs will still be made as described in this section. The SSMP may be revised after this unanticipated incidence to include the

Emission Unit	Discussion
	cause of the deviation once that cause is known.
Tunnel Belt: 4-BC-1 Reclaim Belt: 4-BC-2 4-STB-1 Feed Belt: 4-BC-4 4-STB-2 Feed Belt: 4-BC-5 Stone Bin: 4-STB-1 Stone Bin: 4-STB-2	These are fugitive emissions sources. The only requirement for these sources is to follow this OM&M plan (Item 5 in Table 2 of the Lime MACT rule).

(7) A maintenance schedule for each emission unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

Emission Unit	Discussion
Rotary Lime Kiln – 400 TPD 4-RK-1 Rotary Lime Kiln – 500 TPD 4-RK-2	The opacity monitor provides an indication of the internal condition of each dust collector module along with the performance of the collector as a whole. The opacity monitor thereby acts as a predictive tool. Maintenance functions, bag usage, inventory, and parts purchase orders are tracked and recorded. Maintenance history is used to determine semi-annual outage needs. Kilns are shutdown for scheduled, preventative maintenance approximately every six months. Preventative maintenance is performed by Greer's on-site maintenance crew. Additionally, in accordance with 40 CFR §63.7113(f), an annual inspection of the ductwork leading to the fabric filter dust collector will be conducted. The results of this annual inspection will be recorded in a log that is maintained on site.

Tunnel Belt: 4-BC-1 Reclaim Belt: 4-BC-2 4-STB-1 Feed Belt: 4-BC-4 4-STB-2 Feed Belt: 4-BC-5 Stone Bin: 4-STB-1 Stone Bin: 4-STB-2	Potential fugitive emissions are minimized by full enclosures. The Title V permit requires weekly fugitive dust control system inspections.

Appendix C

40 C.F.R. Part 63 Subpart AAAAA

Startup, Shutdown and Malfunction (SS&M) Plan

A startup, shutdown, and malfunction plan (SSMP) is required by 40 CFR §63.7100(e). The requirements of the SSMP are contained in 40 CFR §63.6(e)(3).

3.1 SSMP Requirements Checklist

The critical elements of the SSMP are shown in the following table.

Item	Summary	Discussion
§63.6(e)(3)(i)	Develop and implement written SSMP.	Written SSMP contained in this document.
§63.6(e)(3)(ii)	During periods of SSM, operate in accordance with SSMP.	
§63.6(e)(3)(iii)	Keep records of SSM events.	Recordkeeping forms contained in this document.
§63.6(e)(3)(iv)	Immediate reporting of unusual SSM events.	A description of the reporting requirements are contained in this document.
§63.6(e)(3)(v)	Maintain current and previous versions of SSMP.	Current and previous versions contained in this binder.
§63.6(e)(3)(vi)	May use other documents to satisfy SSMP requirements.	
§63.6(e)(3)(vii)	Administrator may require changes in SSMP.	
§63.6(e)(3)(viii)	Permitee may periodically revise SSMP as necessary.	
§63.6(e)(3)(ix)	Title V permit must address requirement for SSMP.	This requirement will be addressed in the Title V application update to be submitted to WVDAQ as required by the Lime MACT rule.

3.2 Startup and Shutdown Procedures

Emission Unit	Startup and Shutdown Procedures
Rotary Lime Kiln – 400 TPD 4-RK-1 Rotary Lime Kiln – 500 TPD 4-RK-2	Startup: Before starting a kiln, ensure that the respective fabric filter dust collector and continuous opacity monitoring system (COMS) is operating properly.* If the dust collector and COMS was operating properly prior to shutdown it will be assumed that this equipment is working properly prior to startup. For purposes of startup, proper operation is defined as no 6-minute block average of 15% or greater for the previous 24-hour period of operation. Shutdown: Before intentionally taking the fabric filter dust collector and COMS out of operation, ensure that the kiln is out of operation.* * The fabric filter dust collector is interlocked via controls with the lime kiln. COMS operation will be verified by the Kiln Control Operator.
Tunnel Belt: 4-BC-1 Reclaim Belt: 4-BC-2 4-STB-1 Feed Belt: 4-BC-4 4-STB-2 Feed Belt: 4-BC-5 Stone Bin: 4-STB-1 Stone Bin: 4-STB-2	The full enclosures are in place to minimize fugitive dust regardless if equipment is operating or not.

3.3 Malfunction Events

Emission Unit	Malfunction Events
Rotary Lime Kiln – 400 TPD 4-RK-1 Rotary Lime Kiln – 500 TPD 4-RK-2	Fabric filter dust collector malfunction: If a fabric filter dust collector system is malfunctioning in a manner that causes the opacity limit (15% 6-minute block average) to be exceeded, the dust collector will be inspected by Greer's maintenance crew and repaired as soon as safely practicable. If the malfunction is determined to be limited to one module then it may be possible to implement repairs without shutting down the kiln since the dust collector is designed to operate with only three of the four modules operational. If a shutdown is necessary to implement repairs then the kiln will not

Emission Unit	Malfunction Events
	restart until those repairs are complete. The cause of the malfunction, malfunction start and end times, and corrective action taken will be recorded. <u>COMS malfunction:</u> If the continuous opacity monitoring system (COMS) is malfunctioning, repairs will be made as soon as practicable. A COMS malfunction is identified by a fault alarm. Fault conditions are recorded by the data acquisition system. Most faults can be cleared by performing the manufacturer's prescribed routine maintenance followed by an on-stack calibration. If this does not correct the fault condition then the COMS manufacturer will be contacted to secure their technical services. Visible emissions observations by a Method 9 certified observer will be conducted at least once per day (daylight hours) during the COMS outage. The results will be kept in a written log.
Tunnel Belt: 4-BC-1 Reclaim Belt: 4-BC-2 4-STB-1 Feed Belt: 4-BC-4 4-STB-2 Feed Belt: 4-BC-5 Stone Bin: 4-STB-1 Stone Bin: 4-STB-2	If dust emissions are evident and the 10% opacity limit is in jeopardy of being violated, the full enclosures will be inspected for defects and corrected as necessary.