

West Virginia Department of Environmental Protection

Harold D. Ward

Cabinet Secretary

Permit to Operate



Pursuant to

Title V

of the Clean Air Act

Issued to:

U. S. Silica Company

Berkeley Springs Plant

R30-06500001-2024

Laura M. Crowder

Director, Division of Air Quality

*Issued: Draft/Proposed • Effective: [Equals issue date plus two weeks]
Expiration: [5 years after issuance date] • Renewal Application Due: [6 months prior to expiration]*

Permit Number: **R30-06500001-2024**
Permittee: **U. S. Silica Company**
Facility Name: **Berkeley Springs Plant**
Permittee Mailing Address: **P.O. Box 187, Berkeley Springs, WV 25411**

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:	Berkeley Springs, Morgan County, West Virginia
Facility Mailing Address:	P.O. Box 187, Berkeley Springs, WV 25411
Telephone Number:	(304) 258-2500
Type of Business Entity:	Corporation
Facility Description:	Silica Sand Processing Plant
SIC Codes:	1446
UTM Coordinates:	739.59 km Easting • 4,393.48 km Northing • Zone 17

Permit Writer: Dan Roberts

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.

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

1.1 Emission Units

Emission Unit ID ^(1, 2, 3)	Emission Point ID	Emission Unit Description ⁽⁴⁾	Design Capacity		Year Installed/Modified	Control Device ⁽⁵⁾	PFD ID
			TPH	TPY x 10 ⁶			
Primary Crushing Plant							
VIBFD1	T1, T2	Primary Crusher- Feed Bin and Vibratory Feeder	1000	8.8	Pre - 1970	MD, IMC	1
CRUSH 2	Stack #1	4' Jaw Crusher	800	7	Pre- 1970	Bldg. #3, CF #1-Torit DF-T4-32	2
CONV3	Stack #1	42" Short Belt under primary crusher	800	7	Pre-1970	IMC, BE (Bldg. #3), particle size, CF #1-Torit DF-T4-32	3
CONV 2	Stack #1	42" Incline Belt	800	7	Pre-1970	IMC, BE (Bldg. #3), particle size, CF #1-Torit DF-T4-32	4
CONV1	T3	42" Stacker Belt to Reclaim Stockpile	800	7	Pre-1970	PE, particle size. IMC	5
Reclaim Stockpile	Reclaim Stockpile	Reclaim Stockpile	800	7	Pre-1970	PE, particle size. IMC	6
Secondary Crushing Plant							
VIBFD2	N/A	Vibratory Feeders #1 thru #5 in reclaim tunnel	400	3.5	Pre-1970	Tunnel enclosure, IMC, particle size	7
CONV4	N/A	36" Reclaim Conveyor	400	3.5	Pre-1970	Tunnel enclosure, IMC, particle size	8
CONV5	N/A	42" Conveyor to Secondary Crusher	400	3.5	Pre- 1970	Full Enclosure, BE (Bldg. #5), IMC, particle size	9
CRUSH 3	Stack #2	Symons Secondary Crusher and Surge Bin	400	3.5	Pre- 1970	Full Enclosure, BE (Bldg. #5), IMC, particle size Wsc #2 Sly Impinjet 270	10
CONV 6	N/A	36 "conveyor	400	3.5	Pre-1970	FE, IMC, BE (Bldg. #5)	11.1
CONV 7	N/A	30" Transfer Conveyor	400	3.5	Pre-1970	FE, IMC, BE (Bldg. #5)	12.1
CONV 8	T4	#2 Stone Tank	400	3.5	Pre-1970	FE, IMC	13
Wet Processing Plant (Rod Mill Building)							
CONV12	N/A	24" #2 Stone Tank discharge conveyor C-1	200	1.75	Pre-1970	FE, BE (Bldg. #4), IMC	14
CONV13	N/A	24" Conveyor C-2	200	1.75	Pre-1970	FE, BE (Bldg. #4), IMC	15
CONV14	N/A	24" Conveyor C-3	200	1.75	Pre-1970	FE, BE (Bldg. #4), IMC	16
MILL1	N/A	Hardinge Rod Mill	200	1.75	Pre-1970	FE, BE (Bldg. #4), SS	17
CONV15	N/A	18" conveyor C-4 to Rod Mill tailings	150	1.3	Pre-1970	SS	18
SCREN 1	N/A	METSO 8x20 Screen	200	1.75	2011	FE, BE (Bldg. #4), SS	19.1
TANK 2	N/A	Vessels, Bins, tanks and slurry boxes in Rod Mill Building	200	1.75	Pre-1970	FE, BE (Bldg. #4), SS	20
WETSE1 thru WETSE5	N/A	#1 to #5 Linatex Separators	200	1.75	Pre-1970	FE, BE (Bldg. #6), SS	21
FERRO1	N/A	Ferro Filters	200	1.75	Pre-1970	SS	22
CLASS3 & 4	N/A	Hydrosizers	200	1.75	Pre-1970	SS	23.1
FCell	N/A	Outokumpo Flotation Cells	160	1.40	2004	SS	24
CONV54	N/A	Feed conveyor to Denver Ball Mill	50	0.44	2000	FE, BE (Bldg. #4), Damp Sand	25
MILL 8	N/A	Denver 4' X 8" Ball Mill	50	0.44	2000	FE, BE (Bldg. #4), Damp Sand	26
PIPE 1	N/A	Wet Process Sand Slurry Piping	50	0.44	Pre-1970	SS	27
CONV 18	N/A	30" Stationary Conveyor in Fluid Bed Drain Shed (Bldg. #6)	200	1.75	Pre-1970	SS	28
CONV 19	N/A	30" Shuttle Conveyor in Fluid Bed Drain Shed	200	1.75	Pre-1970	FE, (BE) Bldg. #6, SS	29.2
CONV 20 & CONV 22	N/A	30" F-1 feed hopper conveyor and 30" F-2 feed hopper conveyor	200	1.75	1975	FE, Bldg. #6	30
CONV 21	T5	24" C-1 outside conveyor	200	1.75	1975	PE	31
CONV 23	T6	24" C-2 outside conveyor	200	1.75	1975	PE	32
CONV 24	T7	24" C-3 conveyor	200	1.75	1975	FE	33
VIBFD4	T8	C3 Belt, Vibratory feeder	200	1.75	1975	FE	34.1
DRYER 1 (3S)	Stack #3	Fluid Bed Dryer - 71 MMBtu/hr	200	1.75	1975	WSc#3 Sly Impinjet Model 1130	35
CONV 25	Stack #25	30" C-4 tunnel conveyor	200	1.75	1975	Cartridge Filter #25 Torit DF-4DF-48	36
SCREN16	Stack #25	Tyler Ty-Speed shaker screen	200	1.75	1995	Cartridge Filter #25 Torit DF-4DF-48	37
Screening and Unground Sand Processing							
CONV26	Stack #25	24" #3 dryer conveyor	200	1.75	Pre-1975	FE, CF #25-Torit DF-4DF-48	122
CONV 27	Stack #25	24" #2 tunnel conveyor	200	1.75	Pre-1975	FE, CF #25-Torit DF-4DF-48	123
ELEV 4	Stack #6	Elevator #1	200	1.75	Pre-1975	FE, Bldg. #7, CF #6-Torit M/N 2DFA-155	124

Emission Unit ID ^(1, 2, 3)	Emission Point ID	Emission Unit Description ⁽⁴⁾	Design Capacity		Year Installed/Modified	Control Device ⁽⁵⁾	PFD ID
			TPH	TPY x 10 ⁶			
VIBFD5	Stack #6	Grasshopper Vibrating Feeder	200	1.75	1973	Totally enclosed, equipment also enclosed in Bldg. #7, CF #6-Torit M/N 2DFA-155	125
CONV 39-41	Stack #6	#1 to #3 Magnet Rolls	200	1.75	Pre-1975	Chutes and piping are totally enclosed, equipment also enclosed in Bldg. #7, CF #6-Torit M/N 2DFA-155	126
SCREN 7-9,14-15 (1E)	Stack #36	#1 to #5 Rotex Screens (1S-5S)	375	0.65	1995-1997	Chutes and piping are totally enclosed, equipment also enclosed in Bldg. #7, CF #36-Torit DF-T2-8 (1C)	127
BE01 (E2)	Stack #6	Bucket Elevator #1 ¹	150	1.314	2012	Fabric filter - CF #6 (Torit M/N 2DFA-155)	119
BE02 (E2)	Stack #6	Bucket Elevator #2 ¹	150	1.314	2012	Fabric filter - CF #6 (Torit M/N 2DFA-155)	120
LS01 (FE3)	Stack #6	Dust Suppression Hopper (DSH) System Load out Spout	150	1.314	2012	ID, MD	121
MOB-CONV	N/A	342D Mobile Conveyor	300	2.63	2017	None	
BE-03	N/A	Cristobalite Bucket Elevator #3	100	0.88	2017	None	
C Silo	N/A	Cristobalite Silo	150 tons		2017	None	
CONV 55	N/A	Damp Conveyor from High Iron Sand	40		2019	None	
CONV 30	Stack #6	20" Tailings Conveyor	30	0.263	Pre-1975	FE (Bldg. #7), CF #6 – Torit M/N 2DFA-155	128
CONV 29	Stack #6	#1 Dry sand conveyor	175	1.533	Pre-1975	FE (Bldg. #7), CF #6 – Torit M/N 2DFA-155	129
ELEV 2	Stack #7	#3 Elevator	30	0.263	Pre-1975	FE (Bldg. #7), CF #7-M/N DFT4-32-SH Cartridge Filter	130
ELEV 1	Stack #7	#2 Elevator	75	0.66	Pre-1975	FE (Bldg. #7), CF #7-M/N DFT4-32-SH Cartridge Filter	131
ELEV 3	Stack #7	#4 Elevator	75	0.66	Pre-1975	Chutes and piping are totally enclosed, equipment also enclosed in Bldg. #7, CF #7-M/N DFT4-32-SH Cartridge Filter	132
SCREN 10-13 and SCREN 22-23 and SCREN 4	Stack #7	SCREN 10-13: #71 thru #74 Rotex Screens; SCREN 22-23: #61 and #62 Rotex Screens and SCREN 4: Tyler Hummer Screen	75	0.66	Modified 1996 Pre-1975	Chutes and piping are totally enclosed, equipment also enclosed in Bldg. #7, CF#7 (M/N DFT4-32-SH Cartridge Filter)	133.1
SCREN 17 (1E)		#1 Rotex Screen (1S)	50	0.44	1999		
CONV 31	Stack #7	24" #9 and #10 Tank conveyor	75	0.66	Pre-1975	Chutes and piping are totally enclosed, FE (Bldg. #7), CF #7-M/N DFT4-32-SH Cartridge Filter	134
CONV32	N/A	24" #11 and #12 Tank conveyor	75	0.66	Pre-1975	Chutes and piping are totally enclosed, Building Enclosure #7	135
CONV36	N/A	20" C-10 conveyor	110	0.96	Pre-1975	Chutes and piping are totally enclosed, Building Enclosure #7	136
CONV 37	N/A	20" C-11 conveyor belt	110	0.96	Pre-1975	FE, BE (Bldg. #7)	137
CONV33	Stack #7	24" #1 Pulverizer Tank belt conveyor	200	1.75	Pre-1975	FE (Bldg. #7), CF #7-M/N DFT4-32-SH Cartridge Filter	138
CONV34	N/A	24" #2 Pulverizer Tank belt conveyor	200	1.75	Pre-1975	FE	139
CONV 51	Stack #27	24" 30 mesh loadout conveyor	200	1.75	Pre-1975	FE, CF #27-Torit DF-T2-8	140
PACKR1	Stack #40	Palletizing Automatic Bagger/Packaging Equipment— 50 lb Bagger	36	0.32	2018	Piping is totally enclosed, BE, CF #40-Torit DF-T2-8	141
Milling Process							
Pulverizer Tank #19	Stack #27	Feed Silo for #1-#4 pebble mills	150	1.32	Pre-1970	FE, CF#27-Torit DF-T2-8	60
SCREW3	Stack #10	1-2 Screw Conveyor	30	0.26	Pre-1970	FE, BE (Bldg. #11), CF#10-Mikropul CFH 40T-20-B	61
SCREW5	N/A	Generic EUID for Screw Conveyors	30	0.26	Pre-1970	FE	62.1
SCREW4	Stack #11 and Stack #10 (2 Collection Points)	Mills #3 & #4 Screw Conveyors	30	0.26	Pre-1970	FE, BE (Bldg. #11), CF#11 (Torit DFT 4-48), and CF#10 (Mikropul CFH 40T-20-B)	63.1

¹ Only one Bucket Elevator (BE01 or BE02) can operate at a time.

Emission Unit ID ^(1, 2, 3)	Emission Point ID	Emission Unit Description ⁽⁴⁾	Design Capacity		Year Installed/Modified	Control Device ⁽⁵⁾	PFD ID
			TPH	TPY x 10 ⁶			
#1 Mill Feed Bin	Stack #10	#1 Mill Feed Bin	100	0.88	Pre-1970	FE, BE (Bldg. #11), CF#10-Mikropul CFH 40T-20-B	64
#2 Mill Feed Bin	Stack #10	#2 Mill Feed Bin	100	0.88	Pre-1970	FE, BE (Bldg. #11), CF#10-Mikropul CFH 40T-20-B	65
#3 Mill Feed Bin	Stack #11	#3 Mill Feed Bin	100	0.88	Pre-1970	FE, BE (Bldg. #11), CF#11 (Torit DFT 4-48)	66.1
#4 Mill Feed Bin	Stack #11	#4 Mill Feed Bin	100	0.88	Pre-1970	FE, BE (Bldg. #11), CF#11 (Torit DFT 4-48)	67.1
FEEDB1	Stack #10	Feeder Belt for #1 Pebble Mill	15	0.13	Pre-1970	FE, BE (Bldg. #11), CF#10-Mikropul CFH 40T-20-B	68
FEEDB2	Stack #10	Feeder Belt for #2 Pebble Mill	15	0.13	Pre-1970	FE, BE (Bldg. #11), CF#10-Mikropul CFH 40T-20-B	69
FEEDB3	Stack #11	Feeder Belt for #3 Pebble Mill	15	0.13	Pre-1970	FE, BE (Bldg. #11), CF#11 (Torit DFT 4-48)	70.1
FEEDB4	Stack #11	Feeder Belt for #4 Pebble Mill	15	0.13	Pre-1970	FE, BE (Bldg. #11), CF#11 (Torit DFT 4-48)	71.1
MILL2	Stack #10	#1 Pebble Mill	100	0.88	Pre-1970	FE, BE (Bldg#11), CF#10-Mikropul CFH 40T-20-B	72.1
MILL3	Stack #10	#2 Pebble Mill	100	0.88	Pre-1970	FE, BE (Bldg#11), CF#10-Mikropul CFH 40T-20-B	73.1
MILL4	Stack #11	#3 Pebble Mill	100	0.88	Pre-1970	FE, BE (Bldg#11), CF#11- Torit DFT 4-48	74.1
MILL5	Stack #11	#4 Pebble Mill	100	0.88	Pre-1970	FE, BE (Bldg#11), CF#11- Torit DFT 4-48	75.1
SCREW6	Stack #10	Screw Conveyor for #1 Mill discharge	100	0.88	Pre-1970	FE, BE (Bldg. #11), CF #10-Mikropul CFH 40T-20-B	76
AIRSD7	Stack #10	Airslide for #2 Mill discharge	100	0.88	Pre-1970	FE, BE (Bldg. #11), CF #10-Mikropul CFH 40T-20-B	77
SCREW7	Stack #11	Screw Conveyor for #3 Mill discharge	100	0.88	Pre-1970	FE, BE (Bldg. #11), CF #11 (Torit DFT 4-48)	78.1
AIRSD8	Stack #11	Airslide for #4 Mill discharge	100	0.88	Pre-1970	FE, BE (Bldg. #11), CF #11 (Torit DFT 4-48)	79.1
ELEV 6	Stack #10	#1 Mill Elevator	100	0.88	Pre-1970	FE, BE (Bldg. #11), CF #10-Mikropul CFH 40T-20-B	80
ELEV 7	Stack #10	#2 Mill Elevator	100	0.88	Pre-1970	FE, BE (Bldg. #11), CF #10-Mikropul CFH 40T-20-B	81
ELEV 8	Stack #11	#3 Mill Elevator	100	0.88	Pre-1970	FE, BE (Bldg. #11), CF #11 (Torit DFT 4-48)	82.1
ELEV 9	Stack #11	#4 Mill Elevator	100	0.88	Pre-1970	FE, BE (Bldg. #11), CF #11 (Torit DFT 4-48)	83.1
AIRSE 1	N/A	#1 Air Separator	100	0.88	Pre-1970	BE, FE (Bldg. #11)	84
AIRSE 2	N/A	#2 Air Separator	100	0.88	Pre-1970	BE, FE (Bldg. #11)	85
AIRSE 3	N/A	#3 Air Separator	100	0.88	Pre-1970	BE, FE (Bldg. #11)	86
AIRSE 4	N/A	#4 Air Separator	100	0.88	Pre-1970	BE, FE (Bldg. #11)	87
AIRSD9	N/A	Airslide for #1 Separator Feed	100	0.88	Pre-1970	BE, FE (Bldg #11)	88
SCREW16	N/A	#3 Separator Screw Conveyor	100	0.88	Pre-1970	BE, FE (Bldg. #11)	89
SCREW17	N/A	#4 Separator Screw Conveyor	100	0.88	Pre-1970	BE, FE (Bldg. #11)	90
ELEV14	Stack #39	#14 Elevator	150	1.32	Pre-1970	BE (Bldg. #11), FE, CF #39-Mikropul 8-20-V	91
Pulverizer Tank #20	Stack #27	Feed Silo for #5 and #6 pebble mills	150	1.32	Pre-1970	BE (Bldg. #11), FE, CF #27 (Torit DF-T2-8)	92
#5 Mill Feed Bin	Stack #12	#5 Mill Feed Bin	100	0.88	Pre-1970	BE (Bldg. #11), FE, CF #12-(Mikropul CFH 40T-20-B)	93
FEEDB5	Stack #12	#5 Mill Feeder Belt	15	0.13	Pre-1970	BE (Bldg. #11), FE, CF #12-(Mikropul CFH 40T-20-B)	94
MILL6	Stack #12	#5 Pebble Mill	100	0.88	Pre-1970	BE (Bldg. #11), FE, CF #12-(Mikropul CFH 40T-20-B)	95
AIRSD 2	N/A	Airslide discharge for #5 Mill	100	0.88	Pre-1970	BE (Bldg. #11), FE	96
ELEV10	Stack #12	#5 Mill Elevator	100	0.88	Pre-1970	BE (Bldg. #11), FE, CF #12-(Mikropul CFH 40T-20-B)	97
AIRSE 5	N/A	#5 Air Separator	100	0.88	Pre-1970	BE, FE (Bldg. #11)	98
SCREW18	N/A	Screw Conveyor for #5 Air Separator	100	0.88	Pre-1970	BE, FE (Bldg. #11)	99
#6 Mill Feed Bin	Stack #12	#6 Mill Feed Bin	100	0.88	Pre-1970	BE (Bldg. #11), FE, CF #12 (Mikropul CFH 40T-20-B)	100
FEEDB6	Stack #12	#6 Mill Feeder Belt	15	0.13	Pre-1970	BE (Bldg. #11), FE, CF #12 (Mikropul CFH 40T-20-B)	101
MILL7	Stack #12	#6 Pebble Mill	100	0.88	Pre-1970	BE (Bldg. #11), FE, CF #12 (Mikropul CFH 40T-20-B)	102.1

Emission Unit ID ^(1, 2, 3)	Emission Point ID	Emission Unit Description ⁽⁴⁾	Design Capacity		Year Installed/Modified	Control Device ⁽⁵⁾	PFD ID
			TPH	TPY x 10 ⁶			
AIRSD 3	Stack #12	Airslide discharge for #6 Mill	100	0.88	Pre-1970	BE (Bldg. #11), FE, CF #12 Mikropul CFH 40T-20-B	103
ELEV11	Stack #12	#6 Mill Elevator	100	0.88	Pre-1970	BE (Bldg. #11), FE, CF #12 Mikropul CFH 40T-20-B	104
AIRSE 6	N/A	#6 Air Separator	100	0.88	Pre-1970	BE (Bldg. #11), FE	105
SCREW19	N/A	Screw Conveyor for #6 Air Separator	100	0.88	Pre-1970	BE (Bldg. #11), FE	106
Microsizer #3	Stack #42	MS-20 Microsizer #3	25	0.219	2005	CF #42 (Torit M/N DFT 3-6), BE (Bldg. #11)	107.1
BFI	Stack #41	Belt Feeder for Microsizer #3	20	0.175	2005	CF #41 (Torit M/N DFT 2-4-155 (2C)), BE (Bldg. #11)	108
ELEV22	Stack #41	Ground Fines Bucket Elevator #1	20	0.175	2005	CF #41 (Torit M/N DFT 2-4-155 (2C)), BE (Bldg. #11)	109.1
ELEV24	Stack #41	CGS Elevator #2	20	0.175	2005	CF #41 (Torit M/N DFT 2-4-155 (2C)), BE (Bldg. #11)	110.1
Screen 21	Stack #41	CGS Rotex Screen	25	0.22	2005	CF #41 (Torit M/N DFT 2-4-155 (2C)), BE (Bldg. #11)	111
AIRSD1	Stack #41	Airslide 2 for Ground Fine	20	0.175	2005	CF #41 (Torit M/N DFT 2-4-155 (2C)), BE (Bldg. #11)	112.1
Airslide 100	Stack #41	Airslide (2s) for CGS	8	0.07	2005	CF #41 (Torit M/N DFT2-4-155(2C))	115
AIRSD1-GENERIC	N/A (FE)	Generic EUID for Air Slides	100	0.88	N/A	FE	205.1
ELEV15	Stack #12	#9 Bucket Elevator	100	0.88	Pre-1970	BE (Bldg. #11), FE, CF #12 (Mikropul CFH 40T-20-B)	206.1
BIN2	Stack #12	Surge Bin	100	0.88	Pre-1970	BE (Bldg. #11), FE, CF #12 (Mikropul CFH 40T-20-B)	207.1
ELEV25	Stack #15	Bucket Elevator	25	0.22	2015	CF #15	209
FEEDB25		Feed Conveyor Belt	25	0.22	2015		210
FEEDB26		Feed Conveyor Belt	10	0.09	2015		211
SCREN25		Scalping Screen	10	0.09	2015		212
BIN25		Feed Bin	10	0.09	2015		213
PNEU25		Pneumatic Conveyor	10	0.09	2015		214
HOPPR25	Stack #46	Feed Hopper	10	0.09	2015	CF #46	215
TANK25	Stack #47	Feed Bin	25	0.22	2015	CF #47	216
AIRSE25	Stack #45	Air Classifier	10	0.09	2015	CF #45	217
Classification (10/15/30/40 Micron)							
PNEU2	Stack #12	#1 Macawber Pneumatic Pumping Stations	15	0.13	1990	BE (Bldg. #11), FE, CF #12 Mikropul CFH 40T-20-B	145
PNEU4	Stack #11	#2 Macawber Pneumatic Pumping Stations	15	0.13	1996	BE (Bldg. #11), FE, CF #11 (Torit DFT 4-48)	146.1
BIN7	Stack #12	#1 & #2 Pump Feed Bins	15	0.13	Pre-1975	BE (Bldg. #11), FE, CF #12 Mikropul CFH 40T-20-B	147
#1 & #2 pumps	Stack #12	#1 & #2 pneumatic pumps	15	0.13	1996	BE (Bldg. #11), FE, CF #12 Mikropul CFH 40T-20-B	148
PNEU1 (Tech Air pumping system/station)	Stack #42	#3 Macawber Pneumatic Pumping Station (#3 Microsizer)	15	0.13	2005	CF #42 (Torit DFT3-6), BE (Bldg. #11)	208.1
AIRSL 12	Stack #12	Airslide and #1 MS-20 Microsizer	85	0.75	1990	BE (Bldg. #13), FE, CF #12 (Mikropul CFH 40T-20-B)	142.1
AIRSL 13	Stack #11	Airslide from #2 MS-20 Microsizer	85	0.75	1996	BE (Bldg. #13), FE, CF #11(Torit DFT 4-48)	143.1
Tailing Bins	Stack #12	Tailing Bins	130	1.14	Pre-1975	BE (Bldg. #11), FE, CF #12 (Mikropul CFH 40T-20-B)	144
5 Micron Classification							
ELEV16	Stack #11	5 Micron Feed Elevator	150	1.32	1996	BE (Bldg. #9), FE, CF #11 (Torit DFT 4-48)	151.1
5 Micron Feed Bin	Stack #37	5 Micron Feed Bin (6S)	150	1.32	1996	BE (Bldg. #9), FE, CF #37(Mikropul M/N CFH-8-20 (1D))	152
AIRSE 8-16, 18-19	N/A	Air Separators	20	0.18	1973	BE (Bldg. #9), FE	153
ELEV 17	Stack #37	5 Micron Return Elevator (7S & 8S)	150	1.32	1996	BE (Bldg. #9), FE, CF #37(Mikropul M/N CFH-8-20 (1D))	154
BIN 5	Stack #37	5 Micron Product Feed Bin (1S)	10	0.09	1996	BE (Bldg. #9), FE, CF #37 (Mikropul M/N CFH -8-20(1D))	155
BIN 4	Stack #38	Bulk Storage Loading Bin and Loadout Spout (2S)	10	0.09	1996	CF #38 (Mikropul M/N CFH 18-20-V-B (1C))	156.1
MIN-U-SIL	Stack #38	Bagger Bin (4S)	15	0.13	1996	BE (Bldg. #9), FE, CF #38 (Mikropul	157.1

Emission Unit ID ^(1, 2, 3)	Emission Point ID	Emission Unit Description ⁽⁴⁾	Design Capacity		Year Installed/Modified	Control Device ⁽⁵⁾	PFD ID
			TPH	TPY x 10 ⁶			
Bagger Bin						M/N CFH 18-20-V-B (1C))	
PACKR 7	Stack #38	MIN-U-SIL Bagger (5S)	15	0.13	1996	BE (Bldg. #9), FE, CF #38 (Mikropul M/N CFH 18-20-V-B (1C))	158.1
ELEV23	Stack #13	PEMCO Elevator/CGS Tanks, and Bulk Loadout Spout (3S1)	150	1.32	Pre 1983	FE, CF #13 (Torit DF-T3-24)	159.1
PACKR 4	Stack #20	#2 Autobagger and feed Bin	20	0.18	1981	Full Enclosure Bldg. #14 BE, CF #20 (Torit DF-T4-16)	160
PACKR 3	Stack #20	#1 Autobagger and Feed Bin	20	0.18	1981	Full Enclosure Bldg. #14 BE, CF #20 (Torit DF-T4-16)	161.1
PACKR 5 (1e & 2e)	Stack #34	Bulk Bagger and Feed Bin (1s and 2s)	15	0.13	1988	Full Enclosure Bldg. #14 BE, CF #34 (Torit DF-2D-F4 (1c))	162
Wet Float Plant							
Slurry Pumps	N/A	Slurry Pumps	25	0.22	Pre-1948	SS	38
CYCLO 4 and CYCLO 5	N/A	#1 & #2 Wet Cyclones	25	0.22	Pre-1948	SS	39
FERRO 2	N/A	Ferro Filters	25	0.22	Pre-1948	SS	40
CYCLO 3	N/A	#4 Wet Cyclone	25	0.22	Pre-1948	SS	41
CYCLO 2	N/A	Wet Cyclone Overrake	25	0.22	Pre-1948	SS	41.1
Drain Shed	N/A	Drain Shed	25	0.22	Pre-1948	SS	42
CONV46	N/A	24" Conveyor Belt	25	0.22	Pre-1970	SS	43
CONV47	N/A	24" Long Conveyor Belt	25	0.22	Pre-1970	SS	44
CLASS 5	N/A	Rake Classifier	25	0.22	Pre-1970	BE (Bldg. #16), SS	45
Conditioner	N/A	Conditioner	25	0.22	Pre-1970	BE (Bldg. #16), SS	46
Floatation	N/A	Floatation	25	0.22	Pre-1970	BE (Bldg. #16), SS	47
Vacuum Table	N/A	Vacuum Table	25	0.22	Pre-1970	BE (Bldg. #16), MC	48
CONV 48	N/A	18" Thrower Conveyor Belt	25	0.22	Pre-1970	BE (Bldg. #16), MC	49
CONV 50	N/A	30" Damp Loadout Conveyor Belt	25	0.22	Pre-1970	BE (Bldg. #17), MC	50
CONV 49	N/A	24" Conveyor	25	0.22	Pre-1970	BE (Bldg. #17), MC	51
DRYER 2 (8S)	Stack #8	Rotary Dryer 17.1 mmBTU/hr	25	0.22	Pre-1970	BE, FE, WSc #8 (Homemade)	52
SCREW21	N/A	#1 Screw Conveyor	25	0.22	Pre-1970	BE (Bldg. #17) FE	53
ELEV 19	Stack #9	#1 Elevator	25	0.22	Pre-1970	BE (Bldg. #17/18), FE CF #9 (Torit 4 DFT 32-155)	54
SCREN 18 (1E)	Stack #9	#2 Rotex Screen (2S)	50	0.44	1999	BE (Bldg. #17/18), FE CF #9 (Torit 4 DFT 32-155)	56
SCREW22	N/A	#2 Screw Conveyor	25	0.22	Pre-1970	BE (Bldg. #17), FE	57
ELEV 20	Stack #9	#2 Elevator	25	0.22	Pre-1970	FE, CF #9 (Torit 4 DFT 32-155)	58
PACKR8 (1E)	Stack #9	BFS Bulk Bagger	30	0.22	1998	FE, CF #9 (Torit 4 DFT 32-155)	59
Storage Structures							
Tank #7 and Tank #15	Stack #7	Storage Tank #15 intervented to Tank #7 at the New Screen Tower	150 Tons Each		Pre-1948	Particle size, PE, CF #7 (M/N DFT4-32-SH)	163.1
Tank #8 and Tank #16	Stack #7	Storage Tank #16 intervented to Tank #8 at the New Screen Tower	150 Tons Each		Pre-1948	Particle size, PE, CF #7 (M/N DFT4-32-SH)	163.2
Tanks #13 and #17	Stack #7	Storage Tank #17 intervented to Tank #13 at the New Screen Tower	150 Tons Each		Pre-1970	particle size, PE, CF#7 (M/N DFT-32-SH)	164.1
Tanks #9 - #12	Stack #27	Storage tanks #9, #10, #11 & #12 at the New Screen Tower	150 Tons Each		Pre-1970	particle size, PE, MD, CF #27 (Torit DF-T2-8)	165
Tanks #14 and #18	Stack #7	Storage tank #18 intervented to Tank #14 at the New Screen Tower	150 Tons Each		Pre-1970	particle size, PE, CF #7 (M/N DFT-32-SH)	166.1
Steel Tank #21	Stack #27	Steel Tank at the New Screen Tower	100 Tons		Pre-1970	particle size, PE, MD, CF #27 (Torit DF-T2-8)	167
CGS Tank	Stack #13	CGS Tank	800 Tons		1998	FE, CF #13 (Torit DF-T3-24)	168.1
PEMCO Tank	Stack #13	PEMCO Tank	250 Tons		Pre 1983	FE, CF #13 (Torit DF-T3-24)	169
SIL-CO-SIL (Supersil) storage silos #1-#4 (1e-4e)	Stack #33	#1 - #4 Silos	125 Tons Each		1984	FE, CF #33 (Torit DF-T4-16)	170
MIN-U-SIL storage silo #5 (5e)	Stack #29	#5 Silo	125 Tons		1984	FE, CF #29 (Mikropul CFH-18-20-VB)	171
MIN-U-SIL storage silos #6 and #7 (6e and E1)	Stack #28	#6 and #7 Silos	100 Tons Each		1984 1999	FE, CF #28 (Torit DF-2D-F4)	172.1
MIN-U-SIL storage silo #8 (6e and E1)	Stack #28	#8 Silo	100 Tons		1984 1999	FE, CF #28 (Torit DF-2D-F4)	172.2

Emission Unit ID ^(1, 2, 3)	Emission Point ID	Emission Unit Description ⁽⁴⁾	Design Capacity		Year Installed/Modified	Control Device ⁽⁵⁾	PFD ID	
			TPH	TPY x 10 ⁶				
ISTANK18	Stack #9	Concrete Tank at the Float Plant	100 Tons		Pre-1970	FE, CF #9 (Torit4DF-32-155)	173.1	
Steel storage tank	Stack #9	Steel Tank at the Float Plant	100 Tons		Pre-1970	FE, CF #9 (Torit4DF-32-155)	174	
SPOUT1	Stack #27	30 mesh loadout spout (SPOUT1)	150		Pre-1970	PE, MD, CF #27 (Torit DF-T2-8)	175	
SPOUT2	Stack #27	Dry sand loadout spout (SPOUT2)	150		Pre-1970	PE, MD, CF #27 (Torit DF-T2-8)	176	
SPOUT3	Stack #34	DCL loadout spout (SPOUT3)	200		Pre-1970	FE, CF #34 (Torit DF-2D-F4(1C))	177.1	
SPOUT4	Stack #9	Float Plant loadout spout (SPOUT4)	150		Pre-1970	PE, MD, CF #9 (Torit4DF-32-155)	178	
SPOUT5	Stack #28	10 Micron loadout chute (SPOUT5)	150		Pre-1970	PE, MD, CF #28 (Torit DF-2D-F4)	179	
SPOUT6	Stack #13	CGS/DCL loadout system (SPOUT6)	250		Pre-1970	PE, MD, CF #13 (Torit DF-T3-24)	180.1	
Q ROK SPOUTS	N/A	Q ROK Bulk Loading Spouts (1)	150		Pre-1970	MD, ID, Inherent design lowers fugitive emissions	181.1	
Q ROK SPOUTS	N/A	Q ROK Bulk Loading Spouts (2)	150		Pre-1970	MD, ID, Inherent design lowers fugitive emissions	181.2	
#1 Stone Tank	N/A	#1 Stone Tank (Inside Building)	200		Before 1976	BE (Bldg. #5)	203.1	
#2 Stone Tank	N/A	#2 Stone Tank (Inside Building)	200		Before 1976	BE (Bldg. #5)	204.1	
Roads	N/A	Unpaved quarry haul roads and paved and unpaved plant roadways			Pre-1970	WT	182	
Golf Sand Stockpile	N/A	Stockpile				Particle Size, MD		
Float Sand Stockpile	N/A	Stockpile				Particle Size, MD		
Limestone Processing Operations								
STOCK1T	FP01	Stockpile totaling 7,000 ft2 >1" - 180,000 TPY 1"-1/4" - 540,000 TPY MFG. Sand - 180,000 TPY	---	15,000 tons/mo 45,000 tons/mo 15,000 tons/mo	900,000	2021	WS	N/A
CRUSH1T	E01	Hammermill Primary Crusher	300	899,000	2021	WS	N/A	
CRUSH2T	E02	Hammermill Secondary Crusher	350	720,000	2021	WS	N/A	
SCREN1T	E03	Double Deck Scalping Screen	450	899,000	2021	WS	N/A	
SCREN2T	E04	Double Deck Screen	450	899,000	2021	WS	N/A	
SCREN3T	E05	Double Deck Screen	350	720,000	2021	WS	N/A	
TRUCK1T	TP01	Loading the Feeder	450	899,000	2021	WS	N/A	
FEEDER1T	TP02	Feeder Transfer to Crusher	300	600,000	2021	WS	N/A	
CRUSH1T	TP03	Crusher Transfer to Conveyor Belt	300	600,000	2021	WS	N/A	
SCREN1T	TP04	Belt Conveyor Feeding Screen	450	899,000	2021	WS	N/A	
SCRENBC1T	TP05	Screen to Conveyor Belt Feeding Crusher	275	550,000	2021	WS	N/A	
SCRENBC2T	TP06	Middle Deck to Stacking Conveyor	50	100,000	2021	WS	N/A	
SCRENBC3T	TP07	Lower Deck to Stacking Conveyor	75	150,000	2021	WS	N/A	
STACKBC1T	TP08	Middle Deck to Conveyor Belt	50	100,000	2021	WS	N/A	
STACKBC2T	TP09	Lower Deck to Conveyor Belt	75	150,000	2021	WS	N/A	
CRUSH2T	TP10	Conveyor Belt Feeding Secondary Crusher	350	720,000	2021	WS	N/A	
CRUSHSCR1T	TP11	Secondary Crusher Feeding Conveyor Belt	350	720,000	2021	WS	N/A	
SCRENBC4T	TP12	Top Deck Feeding Conveyor	50	10,000	2021	WS	N/A	
SCRENBC5T	TP13	Middle Deck Feeding Conveyor Belt	25	50,000	2021	WS	N/A	
SCRENBC6T	TP14	Lower Deck Feeding Stacking Belt Conveyor	50	100,000	2021	WS	N/A	
SCRENBC7T	TP15	Feed Conveyor to Wash Plant	225	500,000	2021	WS	N/A	

Source ID	Equipment Description/Location	Design Capacity (Gallons)	Year Installed/Modified	PFD ID
Tank No. 1	Diesel Fuel Tank	10,000	Before 1976	185
Tank No. 2	Used Oil Tank at Maintenance garage	275	Before 1976	186
Tank No. 3	Used Oil Tank at Maintenance garage	275	Before 1976	187
Tank No. 4	#1 Oil Tank at Maintenance garage	275	Before 1976	188
Tank No. 5	#2 Oil Tank at Maintenance garage	275	Before 1976	189
Tank No. 6	#3 Oil Tank at Maintenance garage	275	Before 1976	190
Tank No. 7	#4 Oil Tank at Maintenance garage	275	Before 1976	191
Tank No. 8	Recycled Oil Tank near Float Plant	100,000	1975	192
Tank No. 11	Kerosene Tank at C & R Shop	275	1995	193
Tank No. 12	Gasoline Tank at Office Building	1000	1995	194
Tank No. 13	Lube Oil Tank at Secondary Crusher	300	Before 1976	195
Tank No. 24	Petroleum Sulfonate (Conditioner) Tank at Float Plant	275	Before 1976	198
Tank No. 25	Two Propane Tanks at the electric shop	30,000 each	Before 1976	199
Tank No. 26	Propane Tank at the Quarry	2,000	1999	200
Tank No. 27	Propane Tank at #6 Oil Building	1,000	Before 1976	201
Tank No. 28	Two Propane Tanks at the C&R Shop	1,000 Gallons each	Before 1976	202
Tank No. 16	Recycled Oil	30,000 Gallons	2003	196
Tank No. 17	Recycled Oil	30,000 Gallons	2003	197

- Notes: (1) If Emission Point ID is issued in an R-13 permit, it is provided in the Table, (i.e., 1e, 2e, ...)
 (2) Emission Points are identified by U. S. Silica internal inventory ID system
 (3) Emission Points are also identified by U. S. Silica stack ID numbering system
 (4) If Source ID is issued in an R-13 permit, it is provided in the Table, (i.e., 1s, 2s, ...)
 (5) If Control equipment ID is issued in an R-13 permit, it is provided in the Table, (i.e., 1c, 2c, ...)

Abbreviations:

FE=Full Enclosure, PE=Partial Enclosure, BE=Building Enclosure, T=Tunnel or Underground, IMC=Inherent Moisture Content(1-5%), MC=Moisture Content, SS=Saturated Sand(60% moisture), WS=Water Spray, WT=Water Truck, MD=Minimized Drop Height, ID=Inherent Design, EL=Enclosed Loading Station, WSc=Wet Scrubber, CF=Cartridge Filter

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
R13-3535	November 22, 2021
R13-2595B	April 20, 2016
R13-0715F	December 11, 2003
R13-0750	June 14, 1984
R13-1970	August 13, 1997
R13-0991	April 12, 1988
R13-1917	December 22, 1995
R13-2015C	November 20, 2009
R13-2145G	January 7, 2019
R13-2423B	July 24, 2017
R13-2299A	August 29, 2003
R13-0029A	November 19, 2018

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 other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.39.). 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	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant Deterioration
C.S.R. or CSR	Codes of State Rules	psi	Pounds per Square Inch
DAQ	Division of Air Quality	SIC	Standard Industrial Classification
DEP	Department of Environmental Protection	SIP	State Implementation Plan
FOIA	Freedom of Information Act	SO₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant	TAP	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	TPY	Tons per Year
HP	Horsepower	TRS	Total Reduced Sulfur
lbs/hr or lb/hr	Pounds per Hour	TSP	Total Suspended Particulate
LDAR	Leak Detection and Repair	USEPA	United States Environmental Protection Agency
m	Thousand	UTM	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	VEE	Visual Emissions Evaluation
mm	Million	VOC	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/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		

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§30-2.40]

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. Reserved

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.]

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, owner, or operator 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. §61.145(b) 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 45CSR§7-3.2. **[45CSR§7-3.1] [45CSR13, R13-0715, B.3, R13-1970, B.2, R13-1917, B.1, R13-2015, B.6, R13-2423, B.1, R13-2299, B.1, R13-0029, 4.1.2.a. and b.]**
- 3.1.10. 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] [45CSR13, R13-0715, B.3, R13-1970, B.2, R13-1917, B.1, R13-2015, B.6, R13-2423, B.1, R13-2299, B.1, R13-0029, 4.1.2.c.]**
- 3.1.11. 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 Table 45-7A found at the end of 45CSR7. **[45CSR§7-4.1] [45CSR13, R13-0715, B.3, R13-1970, B.2, R13-1917, B.1, R13-2015, B.6, R13-2423, B.1, R13-2299, B.1, R13-0029, 4.1.2.d.]**
- 3.1.12. No person shall circumvent the provisions of this rule by adding additional gas to any exhaust or group of exhausts for the purpose of reducing the stack gas concentration. **[45CSR§7-4.3]**
- 3.1.13. 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, R13-0715, B.3, R13-1970, B.2, R13-1917, B.1, R13-2015, B.6, R13-2423, B.1, R13-2299, B.1, R13-0029, 4.1.2.e.]**
- 3.1.14. The owner or operator of a plant shall maintain particulate matter 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 particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment. **[45CSR§7-5.2] [45CSR13, R13-0715, B.3, R13-1970, B.2, R13-1917, B.1, R13-2015, B.6, R13-2423, B.1, R13-2299, B.1, R13-0029, 4.1.2.f., R13-3535, 4.1.3.5.]**

3.2. Monitoring Requirements

- 3.2.1. Each Process Source Operation with a visible emissions limit contained in this permit shall be observed visually at least each calendar week during periods of facility operation for a sufficient time interval to determine if the unit has any visible emissions using 40 C.F.R. 60 Appendix A, Method 22. If visible emissions from any of the Process Source Operation are observed during these weekly observations, or at any other time, that appear to exceed the allowable visible emission requirement for the Process Source Operation, visible emissions evaluations in accordance with 45CSR7A shall be conducted as soon as practicable, but no later than 24 hours from the time of the observation. A visible emissions evaluation in accordance with 45CSR7A shall not be required under condition Section 3.2.1 if the visible emissions condition is corrected in a timely manner; the Process Source Operation is operating at normal operating conditions; and, the cause and corrective measures taken are recorded. **[45CSR§30-5.1.c.; 45CSR13, R13-0029, 4.2.1.]**
- 3.2.2. 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 monthly 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 monthly inspections, the times the fugitive dust control system(s) were inoperable and any corrective actions taken.

Preventive maintenance inspections of potential fugitive dust sources, such as outdoor conveying systems, transfer points, and bulk loadouts will be conducted on a periodic basis by operations personnel. This is in addition to the monthly inspections required above.

Parking lots, roadways, other vehicle travel areas, and storage piles will be regularly observed by trained personnel to determine the need for fugitive dust control. A water truck must be available for control of dust on roadways and parking lots on an as needed basis. The water truck will be included in the facility's preventive maintenance program. Dates of water truck usage will be provided on the Pre-Shift Inspection Reports maintained by the Quarry office.

U.S. Silica shall keep all maintenance and preventive maintenance records via a mainframe computer system.

[45CSR§30-5.1.c.]

Note: Process Source operations include the following: Primary Crushing Plant, Secondary Crushing Plant, Wet Processing Plant, Screening and unground sand Processing, Milling, 10/15/30/40 Micron Classification, 5 Micron Classification, Wet Float Plant & Storage Structures, and Limestone Processing Operations.

- 3.2.3. (Note: The following section numbers match those of 40 C.F.R. §64.7)
- (b) *Proper maintenance.* At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- (c) *Continued operation.* Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or

fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

- (d) *Response to excursions or exceedances.* (1) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (2) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
- (e) *Documentation of need for improved monitoring.* After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40CFR§64.7; 45CSR§30-5.1.c.]

Note: This requirement is applicable to sections 4, 5 & 6 of this permit.

3.2.4. (Note: The following section numbers match those of 40 C.F.R. §64.8)

§ 64.8 Quality improvement plan (QIP) requirements.

- (a) Based on the results of a determination made under § 64.7(d)(2), the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with § 64.6(c)(3), the part 70 or 71 permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

(b) Elements of a QIP:

- (1) The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
- (2) The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
 - (i) Improved preventive maintenance practices.
 - (ii) Process operation changes.
 - (iii) Appropriate improvements to control methods.
 - (iv) Other steps appropriate to correct control performance.
 - (v) More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (b)(2)(i) through (iv) of this section).
- (c) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
- (d) Following implementation of a QIP, upon any subsequent determination pursuant to § 64.7(d)(2) the Administrator or the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:
 - (1) Failed to address the cause of the control device performance problems; or
 - (2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (e) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

[40CFR§64.8; 45CSR§30-5.1.c.]

Note: This requirement is applicable to sections 4, 5 & 6 of this permit.

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. Except as provided in the terms and conditions of specific emission units, the permittee shall conduct stack tests upon request by Director, establish parameter indicator ranges, and furnish the Secretary a written report of the results of such testing and established indicator ranges. The permittee shall use Method 5 or an alternative method approved by the Secretary for such testing. For wet scrubber control devices, parameter indicator ranges shall be established for the water pressure to the control equipment and the pressure loss of the inlet airflow to the scrubber. The permittee shall establish parameter indicator ranges and operate within these ranges to provide a reasonable assurance that the emission unit is in compliance with opacity and particulate loading limits. The permittee shall take immediate corrective action when a parameter falls

outside the indicator range established for that parameter and shall record the cause and corrective measures taken. The permittee shall also record the following parameters during such testing:

- a. Opacity readings on the exhaust stack following the procedures of 45CSR7A;
- b. Amount of material processed;
- c. Water pressure to the control equipment; and
- d. Pressure loss of the inlet airflow to the scrubber. The pressure drop will be measured between the inlet airflow to the scrubber and outlet airflow of the scrubber, which is atmospheric loss through the venturi constriction of the control equipment.

These records shall be maintained on site and in accordance with 3.4.2.

[45CSR§30-5.1.c.]

- 3.3.3. 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; 45CSR13, R13-0029, 4.1.2.g.]

- 3.3.4. 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; 45CSR13, R13-0029, 4.1.2.h.]**

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, R13-2145, 4.4.1.] (SCREN 7-9, 14-15; BE01; BE02; LS01; CF #36; CF #6)

[45CSR13, R13-0029, 4.4.1.] (PACKR1)

[45CSR13, R13-2595, 4.4.1.]

[45CSR13, R13-3535, 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. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or 45CSR7A, 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 for a period of no less than five (5) years stating any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. [45CSR§30-5.1.c.]

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 compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 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, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Fees.** The permittee shall pay fees on an annual basis in accordance with 45CSR§30-8. [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 permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:
DEPAirQualityReports@wv.gov

US EPA:
R3_APD_Permits@epa.gov

[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. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:
DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Reserved.**

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. Reserved.

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 email. 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. N/A

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.

N/A

4.0 Source-Specific Requirements - Dryers [Fluid Bed Dryer (3S), Stack #3 and Rotary Dryer (8S), Stack #8]

4.1. Limitations and Standards

4.1.1. The 650 HP and 450 HP spreader stoker fired boilers are permanently shutdown. Any restart or reconstruction shall require a 45CSR13 preconstruction permit.
[45CSR13, R13-0715, A.1] [3S, 8S]

4.1.2. The Fluid Bed dryer (3S) and the Rotary dryer (8S) shall burn the following fuels: propane, #2 Fuel Oil, #4 Fuel Oil, #5 Fuel Oil, #6 Fuel Oil, natural gas and Recycled Fuel Oil.
[45CSR13, R13-0715, A.2] [3S, 8S]

4.1.3. The following sulfur limits shall not be exceeded:

#2 Fuel Oil shall have a maximum of 0.2% S by weight.
#4, #5 and #6 Fuel Oil and Recycled oil shall have a maximum of 1.5 % sulfur by weight.
[45CSR13, R13-0715, A.3] [3S, 8S]

4.1.4. Emissions from the fluid bed and rotary sand dryers shall not exceed the following hourly rates:

Emission Unit	Particulate Matter	SO ₂	NO _x	VOC	CO
	(lbs/hr)	(lbs/hr)	(lbs/hr)	(lbs/hr)	(lbs/hr)
Fluid Bed dryer	12.8	130.7	18.3	0.23	2.52
Rotary Dryer	9.0	26.3	3.7	0.06	0.62

[45CSR13, R13-0715, A.5] [3S, 8S]

4.1.5. Combined emissions from the Fluid Bed Dryer (3S) and Rotary Dryer (8S) shall not exceed the following annual limitations in Tons per year (TPY):

Particulate Matter – 95.48
SO₂ – 267.0
NO_x – 96.35
VOC – 1.27
CO – 13.75

[45CSR13, R13-0715, A.6] [3S, 8S]

4.1.6. The fuel rating of the recycled oil shall not exceed 150,000 BTU/gallon.
[45CSR13, R13-0715, A.7] [3S, 8S]

4.1.7. The following conditions shall be followed by the permittee for the use of Recycled Oil as dryer fuel:

- a. The registrant shall not receive, store, burn or fire any recycled oil which is considered a hazardous waste or does not meet the used oil specifications below (40 C.F.R. 279.11, Table 1 & Recycled Oil specification provided by U.S. Silica). The burning of recycled oil that does not meet these specifications shall constitute a violation of 45CSR25, 33CSR20 and the requirements, provisions, standards and conditions of this Permit.

<u>Constituent or Property</u>	<u>Maximum Allowable Specification</u>
Arsenic	<5.0 ppm
Cadmium	<2.0 ppm
Chromium	<10.0 ppm
Lead	<100.0 ppm
PCBs	<2.0 ppm
Total Halogen	<1000.0 ppm
Flash Point	>100.0 °F

b. The registrant shall receive a chemical analysis with each shipment or delivery of recycled oil from the supplier or marketer. The analysis shall identify the name and address of the supplier or marketer, the supplier or marketer's USEPA Identification Number and the following used or recycled oil information:

- i. Date of shipment or delivery
- ii. Quantity received
- iii. Arsenic content
- iv. Cadmium content
- v. Chromium content
- vi. Lead content
- vii. PCB content
- viii. Total Halogen content
- ix. Flash point
- x. Sulfur content

c. The Director or his or her duly authorized representative may conduct or require the permittee to conduct detailed chemical analyses of any used or recycled oil received, stored or fired in the dryer burner.

[45CSR13, R13-0715, A.9] [3S, 8S]

4.1.8. The permitted facility shall comply with all provisions of 45CSR10, provided that the permittee shall comply with any more stringent requirements as may be set forth under Sections 4.1.1 to 4.1.7, 4.2.1, and 4.4.1 to 4.4.4 of the permit. The principal provisions of 45CSR10 are as follows:

§45-10-3.3

Maximum Allowable Emission Rates for Similar Units in All Priority III Regions Except Region IV. No person shall cause, suffer, allow, or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

(3.3.f) For Type 'b' and Type 'c' fuel burning units, the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour.

§45-10-3.4.a.

Unless otherwise approved by the Director, the maximum allowable emission rate for an individual stack shall not exceed by more than twenty-five percent (25%) the emission rate determined by prorating the total allowable emission rate based on the basis of individual unit heat input at design capacity for all fuel burning units discharging through that stack.

§45-10-4.1.

No person shall cause, suffer, allow, or permit, the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations.

§45-10-8.2.a.

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 this rule. 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 this rule.

[45CSR13, R13-0715, B.4] [3S, 8S]

4.1.9. 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 sections 45CSR§§10-3, 4 or 5. Such tests shall be conducted in accordance with the appropriate test method set forth in 40 CFR 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.

[45CSR§10-8.1a] [3S, 8S]

4.1.10. 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 45CSR§10-3.

[45CSR§10-8.1b] [3S, 8S]

4.1.11. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) shall demonstrate compliance with sections 45CSR§§10-3, 4 and 5 of this rule by testing and /or monitoring in accordance with one or more of the following: 40 CFR 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.

[45CSR§10-8.2c] [3S, 8S]

4.1.12. Monitoring plans pursuant to subsection 45CSR§10-8.2.c shall be submitted to the Director within six (6) months of the effective date of this rule. Approval or denial of such plans shall be within twelve (12) months of the effective date of this rule. (Monitoring Plan approved on April 25, 2003. Compliance with terms and conditions of 45CSR13, R13-0715F assures compliance with 45CSR10 and 10A.

[45CSR§10-8.2.c.2] [3S, 8S]

4.1.13. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) subject to sections 45CSR§§10-3, 4 or 5 shall maintain on-site a record of all required monitoring data as established in a monitoring plan pursuant to subdivision 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.

[45CSR§10-8.3.a.] [3S, 8S]

4.1.14. 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.

[45CSR§10-8.3.b.] [3S, 8S]

4.1.15. The following scrubber pressure drop ranges obtained from stack test and historical data are an indicator of compliance for the scrubber to attain the required minimum particulate removal efficiency. Scrubber pressure drop shall be monitored at least once per day. The monitoring device is to be certified to be accurate within ±0.1 inch water gauge. An excursion shall be defined as when the scrubber pressure drop falls outside the following range. When an excursion occurs, the permittee shall conduct an inspection of the scrubber and corrective actions shall be taken to return the pressure drop within the following range:

Emission Unit	Control device	Indicator Range for Pressure Drop (in H ₂ O)
Fluid Bed Dryer (3S)	Sly Impinjet 1130 Wet Scrubber	2.0 to 5.8
Rotary Dryer (8S)	Homemade Wet Scrubber	0.5 to 2.0

According to the CAM plan submitted, the pressure gauges on the scrubbers shall be operated continuously during operation of the dryers.

[40 C.F.R. §64.3(a)(2); 45CSR§30-5.1.c.] [3S, 8S]

4.2. Monitoring Requirements

4.2.1. Compliance with Section 3 of 45CSR7 shall be determined by conducting daily visual emission observations in accordance with Method 22 of 40 CFR 60, Appendix A for the scrubber. These observations shall be conducted during periods of facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the survey, the permittee shall conduct an opacity evaluation as outlined in 45CSR7A-2.1.a,b, within 24 hours. A 45CSR7A-2.1.a,b evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions with no visible emissions being observed. Records shall be maintained on site reporting the results of each test. Said opacity evaluations of sources identified during the Method 22 survey shall only be conducted by an employee or contractor certified in 40 CFR 60 Appendix A, Method 9, Visible Emission observations. Upon observing any visible emissions in excess of twenty percent (20%) opacity, or excess of forty (40%) for any period or periods aggregating more than five (5) minutes in any sixty (60) minute period, the Company shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within five (5) days after taking said reading. When in compliance on a daily basis for four (4) consecutive weeks, then the observation frequency shall be decreased to a once-a-week sampling schedule. If an exceedance of the opacity limit is measured, then the observation frequency shall be reverted to the once-a-day sampling schedule.

[45CSR13, R13-0715, A.12] [3S, 8S]

- 4.2.2. The Fluid Bed Dryer and the Rotary dryer shall be observed visually at least each calendar week during periods of facility operation for a sufficient time interval to determine if the unit has any visible emissions using 40 CFR 60 Appendix A, Method 22. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, visible emissions evaluations in accordance with 40 CFR 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. However, a Method 9 evaluation shall not be required if the visible emissions condition is corrected in a timely manner; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.
[45CSR13, R13-0715, A.13] [3S, 8S]

4.3. Testing Requirements

- 4.3.1. Tests that are required by the Director to determine compliance with the emission limitations set forth in 4.1.4 and 4.1.5 of this permit shall be conducted in accordance with the methods as set forth below. The Director may require a different test method or approve an alternative method in light of any new technology advancements that may occur. Compliance testing shall be conducted at 100% of the peak load unless otherwise specified by the Director.
- a. Tests to determine compliance with PM emission limits shall be conducted in accordance with Method 5, 5A, 5B, 5C, 5D, 5E, 5F, 5G, or 5H as set forth in 40 CFR 60, Appendix A.
[45CSR13, R13-0715, B.7] [3S, 8S]
- 4.3.2. With regard to any testing required by the Director the permittee shall submit to the Director of the division of Air Quality a test protocol detailing the proposed test methods, the date, and the time the proposed testing is to take place, as well as identifying the sampling locations and other relevant information. The test protocol must be received by the Director no less than thirty (30) days prior to the date the testing is to take place. Test results shall be submitted to the Director no more than sixty (60) days after the date the testing takes place. **[45CSR13, R13-0715, B.8] [3S, 8S]**
- 4.3.3. Within 180 days of the permit approval, and once per permit term, the permittee shall conduct or have conducted test(s) on the fluid bed and rotary dryers to determine compliance with the Particulate Matter emission limitations as set forth in Sections 4.1.4 & 4.1.5 above. Such Test(s) shall be conducted in accordance with Sections 4.3.1 and 4.3.2 contained herein. The Director, or a duly authorized representative, may witness or conduct such tests. Should the Director exercise this option to conduct such test(s), the operator shall 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§30-5.1c] [3S, 8S]
Note: Rotary Dryer tested – 12-18-2012, Fluid Bed Dryer tested – 8-3-2017.

4.4. Recordkeeping Requirements

- 4.4.1. Records of quantity and type of fuel used and the fuel sulfur content analysis shall be retained on-site by the permittee for at least five (5) years.
[45CSR13, R13-0715, A.4] [3S, 8S]
- 4.4.2. Compliance with annual limitations of SO₂, NO_x, VOC and CO in Section 4.1.5 shall be demonstrated by recordkeeping of monthly fuel use reports and fuel usage limitations conforming to the following equations. Records will be maintained on-site for at least five years and shall be submitted to the Director upon request.

For SO₂

$$142 F_2 S_2 + 150 F_4 S_4 + 157 F_5 S_5 + 157 F_6 S_6 + 147 F_R S_R = 534,000 \text{ lbs/yr of SO}_2.$$

For NO_x

$$20 F_2 + 20 F_4 + 55 F_5 + 55 F_6 + 19 F_R + 100N + 19 P = 192,700 \text{ lbs/yr of NO}_x.$$

For CO

$$5 F_2 + 5 F_4 + 5 F_5 + 5 F_6 + 5 F_R + 84 N + 3.2 P = 27,507 \text{ lbs/yr of CO.}$$

For VOC

$$0.2 F_2 + 0.2 F_4 + 0.28 F_5 + 0.28 F_6 + 0.22 F_R + 5.5 N + 0.3 P = 2,541 \text{ lbs/yr of VOC.}$$

Where:

F₂ = #2 Fuel Oil use, in 1000 gallons, for last twelve month period.

F₄ = #4 Fuel Oil use, in 1000 gallons, for last twelve month period.

F₅ = #5 Fuel Oil use, in 1000 gallons, for last twelve month period.

F₆ = #6 Fuel Oil use, in 1000 gallons, for last twelve month period.

F_R = Recycled Fuel Oil use, in 1000 gallons, for last twelve month period.

P = Propane use, in 1000 gallons, for last twelve month period.

N = Natural gas use, in million cubic feet of gas, for last twelve month period.

S₂ = Weighted average sulfur content of all #2 Fuel Oil used in last twelve month period (by weight).

S₄ = Weighted average sulfur content of all #4 Fuel Oil used in last twelve month period (by weight).

S₅ = Weighted average sulfur content of all #5 Fuel Oil used in last twelve month period (by weight).

S₆ = Weighted average sulfur content of all #6 Fuel Oil used in last twelve month period (by weight).

S_R = Weighted average sulfur content of all Recycled Oil used in last twelve month period (by weight).

[45CSR13, R13-0715, A.8] [3S, 8S]

- 4.4.3. Records of each shipment of recycled oil chemical analyses, quantity and type of fuel used, maximum fuel rating (BTU/gallon), and the fuel sulfur analysis shall be retained on-site by the permittee for at least five (5) years. The owner or operator shall keep record of quality control and quality assurance program for the fuel analysis. If a certified lab is used to provide the fuel analysis, the quality control and assurance program is deemed to be satisfactory. The permittee will confirm the certified lab fuel analysis results by using an independent certified lab at least once in every six months to analyze the fuel.

[45CSR13, R13-0715, A.10] [3S, 8S]

- 4.4.4. The permittee shall monitor and record the pressure drop across each scrubber (during operation) on a daily basis. These records shall be kept on site for a minimum of 5 years and made available to the Director or Authorized Representative upon request.
[45CSR13, R13-0715, A.11] [40 C.F.R. §64.3(b); 45CSR§30-5.1.c.] [3S, 8S]
- 4.4.5. Qualified personnel shall perform visual inspections of the scrubbers at least monthly and perform routine maintenance to assure proper operation of the scrubbers. The results of inspection and performance of routine maintenance shall be recorded.
[40 C.F.R. §64.3(b); 45CSR§30-5.1.c.] [3S, 8S]
- 4.4.6. *General recordkeeping requirements.* (1) The owner or operator shall comply with the recordkeeping requirements specified in 40 C.F.R. §70.6(a)(3)(ii) of this chapter. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40CFR64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.
[40 C.F.R. §64.9(b); 45CSR§30-5.1.c.] [3S, 8S]

4.5. Reporting Requirements

- 4.5.1. *General reporting requirements.* (1) On and after the date specified in 40 C.F.R. §64.7(a) by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 C.F.R. §70.6(a)(3)(iii) of this chapter.
- (2) A report for monitoring under this part shall include, at a minimum, the information required under 40 C.F.R. §70.6(a)(3)(iii) of this chapter and the following information, as applicable:
- (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - (iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. §64.9(a); 45CSR§30-5.1.c.] [3S, 8S]

4.6. Compliance Plan

- 4.6.1. N/A

5.0 Source-Specific Requirements [NSPS Sources]

- a) Silica sand storage silos (Stacks #28, 29 & 33)
- b) Bulk bagging operation at ground sand packaging (Stack #34)
- c) Six Rotex screens at New Screen Tower (Stacks #36 and #7)
- d) Five micron bagger and associated equipment (Stacks #37 and 38)
- e) Trash screen at Fluid Bed Dryer (Stack #25)
- f) Bulk sand bagger and associated equipment at the Wet Float Plant (Stack #9)
- g) One Rotex screen at the Wet Float Plant (Stack #9)
- h) Wet ball mill (Denver)
- i) Microsizer #3 (MS-20) and Handling Equipment (Stack #42)
- j) Screening and Underground Sand Processing (Stack #6)
- k) CGS and Handling Equipment (Stack #41)
- l) PACKR1 (Stack #40)
- m) Air Classifier and Cristobalite Processing (Stacks #15, 45, 46, and 47)
- n) Limestone Processing Operations

5.1. Limitations and Standards

5.1.1.1. (Note: The following section numbers match those of 40 C.F.R. §60.672)

- (a) Affected facilities must meet the stack emission limits and compliance requirements in Table 2 of this subpart 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 § 60.8. The requirements in Table 2 of this subpart apply for affected facilities with capture systems used to capture and transport particulate matter to a control device.

Table 2 to Subpart 000 of Part 60—Stack Emission Limits for Affected Facilities With Capture Systems

For ***	The owner or operator must meet a PM limit of ***	And the owner or operator must meet an opacity limit of ***	The owner or operator must demonstrate compliance with these limits by conducting ***
Affected facilities (as defined in §§ 60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	0.05 g/dscm (0.022 gr/dscf) ^a	7 percent for dry control devices ^b	An initial performance test according to § 60.8 of this part and § 60.675 of this subpart; and Monitoring of wet scrubber parameters according to § 60.674(a) and § 60.676(c), (d), and (e).

^a Exceptions to the PM limit apply for individual enclosed storage bins and other equipment. See § 60.672(d) through (f).

^b The stack opacity limit and associated opacity testing requirements do not apply for affected facilities using wet scrubbers.

- (b) Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of this subpart 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 § 60.11. The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.

Table 3 to Subpart OOO of Part 60—Fugitive Emission Limits

For * * *	The owner or operator must meet the following fugitive emissions limit 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 (as defined in §§ 60.670 and 60.671) * * *	The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§ 60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	10 percent opacity	15 percent opacity	An initial performance test according to § 60.11 of this part and § 60.675 of this subpart.

- (c) [Reserved]
- (d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.
- (e) 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 paragraphs (a) and (b) of this section, 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 § 60.671) must not exceed 7 percent opacity; and
 - (2) Vents (as defined in § 60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of this subpart.
- (f) Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 of this subpart but must meet the applicable stack opacity limit and compliance requirements in Table 2 of this subpart. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.

[Stacks #7, 9, 25, 28, 29, 33, 34, 36, 37, 38, 41 & 42; Mill 8] [Buildings #7, 11, 12, 14 and 17] [45CSR16; 40 C.F.R. § 60.672]

5.1.1.2. (Note: The following section numbers match those of 40 C.F.R. §60.672)

- (a) Affected facilities must meet the stack emission limits and compliance requirements in Table 2 of this subpart 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 § 60.8. The requirements in Table 2 of this subpart apply for affected facilities with capture systems used to capture and transport particulate matter to a control device.

Table 2 to Subpart OOO of Part 60—Stack Emission Limits for Affected Facilities With Capture Systems

For * * *	The owner or operator must meet a PM limit of * * *	And the owner or operator must meet an opacity limit of * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§ 60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	0.032 g/dscm (0.014 gr/dscf) ^a	Not applicable (except for individual enclosed storage bins) 7 percent for dry control devices on individual enclosed storage bins	An initial performance test according to § 60.8 of this part and § 60.675 of this subpart; and Monitoring of wet scrubber parameters according to § 60.674(a) and § 60.676(c), (d), and (e); and Monitoring of baghouses according to § 60.674(c), (d), or (e) and § 60.676(b).

^a Exceptions to the PM limit apply for individual enclosed storage bins and other equipment. See § 60.672(d) through (f).

- (b) Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of this subpart 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 § 60.11. The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.

Table 3 to Subpart OOO of Part 60—Fugitive Emission Limits

For * * *	The owner or operator must meet the following fugitive emissions limit 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 (as defined in §§ 60.670 and 60.671) * * *	The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§ 60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	7 percent opacity	12 percent opacity	An initial performance test according to § 60.11 of this part and § 60.675 of this subpart; and Periodic inspections of water sprays according to § 60.674(b) and § 60.676(b); and A repeat performance test according to § 60.11 of this part and § 60.675 of this subpart within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in § 60.674(b) and § 60.676(b) are exempt from this 5-year repeat testing requirement.

- (c) [Reserved]

- (d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.
- (e) 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 paragraphs (a) and (b) of this section, 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 § 60.671) must not exceed 7 percent opacity; and
 - (2) Vents (as defined in § 60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of this subpart.
- (f) Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 of this subpart but must meet the applicable stack opacity limit and compliance requirements in Table 2 of this subpart. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.

[Stacks #6, #15, #40, #45, #46, #47] [Building #4, Building #7, Building #11] [CRUSH1T, CRUSH2T, SCREN1T thru SCREN3T, SCRENBC1T thru SCRENBC7T, STACKBC1T and STACKBC2T] [45CSR16; 40 C.F.R. § 60.672]

5.1.2. The following emission limits shall not be exceeded:

Emission Source	Emission Point ID	Allowable PM Emissions (PPH)
<u>Silica Sand Storage Silos</u>		
Storage Silo #1- #4 ¹	1e (Stack #33)	0.2 ⁴
Storage Silo #5 ²	5e (Stack #29)	0.05 ⁴
Storage Silo #6 ³	6e (Stack #28)	0.05 ⁴

¹ In original construction, each storage tank #1-#4 was equipped with separate baghouses. The four baghouses were replaced by one cartridge filter in 1998 according to PD99-127.

² In original construction, storage tank #5 was equipped with a baghouse. The baghouse was replaced by a cartridge filter.

³ In original construction, storage tank #6 was equipped with a baghouse. The baghouse was replaced by a cartridge filter. In addition, storage tank is controlled by the same cartridge filter as storage tank #7 (see Permit No. R13-1970).

⁴ Allowable emissions were originally established in Permit No. R13-750 and revised in PD99-127.

[45CSR13, R13-750] [Stacks 28, 29 & 33]

5.1.3. Ground Sand Packaging/Loading

5.1.3.1. The maximum process weight rate for the permitted facilities (Ground Sand Packaging/Loading) shall not exceed 10 tons per hour.

[45CSR13, R13-991] [Ground Sand Packaging/Loading]

5.1.3.2. The particulate emission rate for Emission point 1e {Bulk Bagger (PACKR5), Stack #34} as defined in Permit application No. 991, shall not exceed 0.1 pounds per hour.

[45CSR13, R13-991] [Stack #34, Emission Point 1e]

5.1.3.3. The particulate emission rate for Emission point 2e (Room Venting, Stack #34), as defined in Permit application No. 991, shall not exceed 0.5 pounds per hour.

[45CSR13, R13-991] [Stack #34, Emission Point 2e]

Note : In original construction, emission points 1e and 2e were controlled by separate baghouses. Bagooses were replaced by one cartridge filter control device. PD ISSUED 5-16-94.

5.1.4. 5 Micron Bagging System

5.1.4.1. Emissions from Mikropul cartridge baghouse Model CFH-6-V-6”B” Emission point ID No. 37 (Stack #37) and vented through Air Pollution Control Device ID No. 1C, shall not exceed 0.2 pounds of particulate matter per hour (lb./hr.).

[45CSR13, R13-1917, A.1] [Stack #37]

5.1.4.2 The maximum amount of processed material charged into the feed bin (air pollution source 6S) {5 Micron feed Bin}, return bucket elevator (top) (air pollution source 7S) [ELEV 16] and return bucket elevator (bottom) (air pollution source 8S) {ELEV 17} shall not exceed 37.5 tons per hour (TPH). **[45CSR13, R13-1917, A.2] [6S, 7S, 8S]**

5.1.4.3. Emissions from Mikropul Cartridge baghouse, Model CFH-6-V-12”B”, Emission Point ID No. 38 (Stack #38), and vented through Air Pollution Control Device ID No. 2C, shall not exceed 0.2 pounds of particulate matter per hour (lb/hr).

[45CSR13, R13-1917, A.3] [Stack #38]

5.1.4.4. The maximum amount of processed material charged into the bulk storage bin (air pollution source 2S), product bin (air pollution source 1S) [Bin 5], bulk loading spout (air pollution source 3S), the bagger bin (air pollution source 4S) [MIN-U-SIL Bagger bin], and stone container model 988 DM single spout bagger (air pollution source 5S) [PACKR7] shall not exceed 35.5 tons per hour (TPH).

[45CSR13, R13-1917, A.4] [1S to 5S]

5.1.5. Particulate matter (PM) emissions shall not exceed the following hourly and annual emission limits:

Emission Source	Emission Point ID No.	Allowable PM Emissions	
		(PPH)	(TPY)
Three 100-ton storage silos ¹	Storage Silos #7, #8, #9 (E1) (Stack #28). Mikropul Horizontal Cartridge Dust Collector - #CFH-24-T Pulse Type	0.70 ^{2, (a)}	7 ^{2, (b)}

¹ Storage Tank #7 & #8 have been installed at present. Storage Tank #9 has not been installed.

² Emission limitations are included in permit No. R13-1970 and are based on specific cartridge filter equipment manufacturer and specifications submitted with Permit R13-1970. At present, the control equipment (cartridge filter) for Storage Tank #7 is a Torit Model No. #2DFA-155. This cartridge filter also controls emissions from Storage Tank #6 (see Permit No. R13-750). The cartridge filter was tested on 10/18/05 as part of the requirements of the permit.

^(a) Based on a PM emission rate of 0.022 grains/dscf (0.05grams/dscm) and a maximum dust collector gas flow rate of 3,715 dcfm.

^(b) Based on 8,760 hours of operation per year.

[45CSR13, R13-1970, A.1] [Stack #28]

5.1.6. SCREEN 16 (45CSR13 Permit No. R13-2015)

5.1.6.1. Particulate Matter (PM) emissions shall not exceed the following hourly and annual emission limits:

Equipment	Equipment ID Number	Emission Limitations	
		lb/hr	TPY
Trash Vibrating Screen (Stack #25)	TS1 (SCREEN 16)	1.0	4.4

[45CSR13, R13-2015, A.1] [Stack #25]

5.1.6.2. In accordance with the requirements of 40CFR60, Subpart OOO, the maximum particulate (PM) emissions from air pollution control device CF #25 shall not exceed 0.022 grains per dry standard cubic foot (0.05 grams per dry standard meter).

[45CSR13, R13-2015, A.2] [Stack #25]

5.1.6.3. The maximum hourly and annual rate of sand to the Trash Vibrating Conveyor (SCREEN), Equipment ID No. TS1(SCREEN 16), shall not exceed 220.0 tons/hour and 1,927,200 tons/year.

[45CSR13, R13-2015, A.3] [SCREEN16]

5.1.6.4. The Trash Vibrating Conveyor (SCREEN), Equipment ID No. TS1, shall be controlled at all times of operation with a cartridge filter, Control Equipment ID No. CF #25.

[45CSR13, R13-2015, A.4] [CF #25]

5.1.6.5. The permittee shall operate the cartridge filter, Control Equipment ID No.CF #25, as outlined in Permit Application R13-2015.

[45CSR13, R13-2015, A.5] [CF #25]

5.1.7. Q-Rok Loading Operations and Five Rotex Screens at the New Screen Tower

5.1.7.1 The following conditions and requirements are specific to the Q-Rok loading operations:

a. The fugitive PM emissions due to the transferring of material the from Q-Rok Storage Tanks #13 & #17 and #14 & #18 to the dust suppression hopper (DSH) load out spout using the two bucket elevators (BE01 & BE02) shall be equipped with a capture and removal system (PM control device). Such PM control device shall utilize the fabric filter control technology or similar technology that has a design removal efficiency of 99% or better for PM.

[45CSR§7-5.1]

b. Visible emissions from Stack #6 shall not be greater than 7% opacity on a six minute average.
[40 C.F.R. §60.672(a) & Table 2 of Subpart OOO; 45CSR16; 45CSR§7-3.1.] Compliance with the opacity limit in 5.1.7.1.b. ensures compliance with 45CSR§7-3.1.

c. PM emissions from Stack #6 shall not exhibit PM greater than 0.014 grains per dry standard cubic foot of exhaust.

[40 C.F.R. §60.672(a) & Table 2 of Subpart OOO; 45CSR16; 45CSR§7-4.1.] Compliance with the concentration limit in 5.1.7.1.c. ensures compliance with 45CSR§7-4.1.

d. Fugitive visible emissions from DSH loadout spout (LS01) shall not be greater than 7% opacity on a six minute average.

[40 C.F.R. §60.672(b) & Table 3 of Subpart OOO; 45CSR16; 45CSR§7-3.1.] Compliance with the opacity limit in 5.1.7.1.d. ensures compliance with 45CSR§7-3.1.

[45CSR13, R13-2145, 4.1.1.]

5.1.7.2. The following conditions and requirements are specific to the five Rotex Screens:

- a. The combined annual processing rate of the five Rotex Screens shall not exceed 3,285,000 tons of sand per year.
- b. Fugitive visible emissions from Building #7 (location of the five Rotex Screens) shall not be greater than 10% opacity on a six minute average.
[45CSR16; 40 C.F.R. §60.672(b) & Table 3 of Subpart OOO; 45CSR§7-3.1.] *Compliance with the opacity limit in 5.1.7.2.b. ensures compliance with 45CSR§7-3.1.*
- c. PM emissions from Stack #36 shall not exhibit PM greater than 0.022 grains per dry standard cubic foot of exhaust.
[40 C.F.R. §60.672(a) & Table 2 of Subpart OOO; 45CSR16]
- d. Visible emissions from Stack #36 shall not be greater than 7% opacity on a six minute average.
[40 C.F.R. §60.672(a) & Table 2 of Subpart OOO; 45CSR16] *Compliance with the opacity limit in 5.1.7.2.d. ensures compliance with 45CSR§7-3.1.*

[45CSR13, R13-2145, 4.1.2.] (Rotex Screens – 1S-5S)

5.1.7.3 **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 R13-2145C (*i.e.*, CF #36 and CF #6) 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, R13-2145, 4.1.3.; 45CSR§13-5.10.]

5.1.8. **Rotex Screen (SCREN 18) at the Wet Float Plant and Rotex Screen (SCREN 17) at the New Screen Tower**

- 5.1.8.1. The maximum hourly rate of sand to the two (2) new Rotex Screens (Equipment ID Nos.: 1s and 2s) (SCREN 17 & SCREN 18) shall not exceed 50 TPH per screen and 100 TPH total.
[45CSR13, R13-2423, A.1] [SCREN 17&18]
- 5.1.8.2. The maximum annual rate of sand to the two (2) new Rotex Screens (Equipment ID Nos.: 1s and 2s) (SCREN17 & SCREN 18) shall not exceed 438,000 TPY per screen and 876,000 TPY total.
[45CSR13, R13-2423, A.2] [SCREN 17&18]
- 5.1.8.3. The permittee shall operate the air pollution control device, the #9 Torit Cartridge Model No. 4DF32-155 Dust Collector (Emission Point ID No. Stack #9), for the #2 Rotex Screen (2S) as outlined in Permit Application R13-2423.
[45CSR13, R13-2423, A.3] [Stack #9]
- 5.1.8.4. In accordance with the requirements of 40 CFR 60, Subpart OOO, the maximum particulate (PM) emissions from the air pollution control devices, the #9 Torit Model No. 4DF32-155 Pulse Type Cartridge Dust Collector (Emission Point ID No. Stack #9) for the #2 Rotex Screen (2S) and the #7 Torit Cartridge Model No. DFT4-32 Dust Collector (Emission Point ID No. Stack #7) for the #1 Rotex Screen (1S) shall not exceed 0.022 grains per dry standard cubic foot (0.05 grams per dry standard meter).
[45CSR13, R13-2423, A.4, A.5; 40 C.F.R. § 60.672; 45CSR16] [Stack #9 and Stack #7]

5.1.8.5. Particulate matter (PM) emissions shall not exceed the following hourly and annual emission limits:

Emission Point ID No.	Control Equipment	Emission Limitations	
		Hourly ¹ (PPH)	Annual ² (TPY)
Stack #7	#7 Torit Cartridge Model No. DFT-32 Dust Collector	4.1 ³	18.2 ³
Stack #9	#9 Torit Cartridge Model No. 4DF32-155 Pulse Type Dust Collector	1.4	6.0
⁽¹⁾ Based on a PM emission rate of 0.022 grains/dscf (0.05 grams/dscm) and a maximum dust collector gas flow of 7,212 dcfm for the #9 dust collector and 22,000 cfm for the #7 dust collector. ⁽²⁾ Based on 8,760 hours of operation per year. ⁽³⁾ Stack #7 limitations listed above apply at times when #1 Rotex Screen (1s) is in operation.			

[45CSR13, R13-2423, A.6] [Stack #9 and Stack #7]

5.1.9. Bulk bagging operation at the Wet Float Plant [45CSR13 Permit No. R13-2299]

5.1.9.1. The maximum hourly and annual processing rates of sand through the bulk sand bagger shall not exceed 30 TPH and 262,800 TPY, based on 8,760 hours of operation per year.

[45CSR13, R13-2299, A.1] [PACKR8]

5.1.9.2. The permittee shall operate the air pollution control device, the Torit Model Number 4DF32-155 Pulse Type Cartridge Dust Collector (Equipment ID No. 1C; Emission Point ID No. 1E - Stack #9), as outlined in Permit Application R13-2299.

[45CSR13, R13-2299, A.2] [Stack #9]

5.1.9.3. In accordance with the requirements of 40 CFR 60, Subpart OOO, the maximum particulate (PM) emissions from the air pollution control device, the Torit Model Number 4DF32-155 Pulse Type Cartridge Dust Collector (Emission Point ID No. 1E - Stack #9), shall not exceed 0.022 grains per dry standard cubic foot (0.05 grams/dry standard meter).

[45CSR13, R13-2299, A.3; 40 C.F.R. § 60.672; 45CSR16] [Stack #9]

5.1.9.4. Particulate matter (PM) emissions shall not exceed the following hourly and annual emission limits:

Emission Point ID No.	Control Equipment	Emission Limitation	
		Hourly (PPH)	Annual (TPY)
SCREW 31, PACKR 8 (1E) (Stack #9)	Torit Model Number 4D F32-155 Pulse Type Cartridge (Equipment ID No. 1C) (CF #9)	1.37 ^(a)	6.0 ^(b)

^(a) Based on a PM emission rate of 0.022 grains/dsc (0.05grams/dscm) and a maximum dust collector gas flow rate of 7,239 dcfm.

^(b) Based on 8,760 hours of operation per year.

[45CSR13, R13-2299, A.4] [Stack #9]

5.1.10. Microsizer #3 (MS-20) and Handling Equipment [45CSR13 Permit No. R13-2595]

5.1.10.1. The maximum quantity of material to be processed by the Microsizer #3 and Handling Equipment shall be limited to the following:

Equipment Source (Emission Source ID)	Maximum Hourly Rate (ton/hr)
Microsizer #3 (Stack #42)	25
Airslide 100 (Stack #41)	8
PNEU1 (Stack #42)	8

[45CSR13, R13-2595 (Condition 4.1.2.a.) and PD10-027] [Stacks #42 & 41]

5.1.10.2. Maximum particulate matter emissions to the atmosphere shall not exceed the following:

Emission Point ID#	Emission Source	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Stack #42	Microsizer #3	1.20	5.26
Stack #41	Airslide 100	0.15	0.66
Stack #42	PNEU1	0.40	1.75

[45CSR13, R13-2595 (Condition 4.1.2.b.) and PD10-027] [Stacks #42 & 41]

5.1.10.3. The following fugitive dust control measures as specified in Permit Application R13-2595 shall be installed, maintained, and operated at all times when the facility is in operation in order to minimize fugitive particulate matter emissions:

Emission Source ID#	Air Pollution Control Device	Air Pollution Control Device Efficiency
Microsizer #3	Torit DFT 3-6 Baghouse	99.9%
Airslide 100	Torit DFT2-4-155 Baghouse (2C)	99.9%
PNEU1	Torit DFT3-6	99.9%

[45CSR13, R13-2595 (Condition 4.1.2.c.) and PD10-027] [Baghouses CF #41 & CF #42; Stacks #42 & 41]

5.1.10.4. The stabilized static pressure loss across baghouse 2C and CF#42 shall remain between 0.5 to 6.0 inches of water. **[45CSR13, R13-2595 (Condition 4.1.2.d.) and PD10-027] [Baghouses CF #41 & CF #42; Stacks #42 & 41]**

5.1.10.5. Except during startup and shutdown, opacity from baghouse CF #41 and CF #42 shall not exceed 10 percent based on a six minute block average. In order to determine compliance with this limit the permittee shall conduct monthly visual emission observations in accordance with Method 22 of 40 CFR 60, Appendix A for stacks #41 and #42. These observations shall be conducted during periods of facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures

outlined in 40CFR60 Appendix A, Method 22. If sources of visible emissions are identified during the survey, the permittee shall conduct an opacity evaluation in accordance with 40CFR60 Appendix A, Method 9, within 24 hours. A 40CFR60 Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected within 24 hours and the units are operated at normal operating conditions with no visible emissions being observed. Records shall be maintained on site reporting the results of each test. Upon observing any visible emissions in excess of twenty percent (20%) opacity, or excess of forty (40%) for any period or periods aggregating more than five (5) minutes in any sixty (60) minute period, the Company shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within five (5) days after taking said reading.

[45CSR13, R13-2595 (Condition 4.1.2.e.) and PD10-027] [Stacks #42 & 41]

5.1.10.6. PM emissions from Stack #41 and #42 shall not exhibit PM greater than 0.05 grains per dry standard cubic meter of exhaust.

[45CSR16; 40CFR§60.672(a) & Table 2 of Subpart OOO; 45CSR13, R13-2595 (Condition 4.1.2.f.)]

5.1.10.7. **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 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.

[45CSR§13-5.10.; 45CSR13, R13-2595 (Condition 4.1.3.)]

5.1.11. The following cartridge filter or baghouse pressure drop ranges obtained from stack test and historical data are an indicator of compliance for the cartridge filter or baghouse to attain the required minimum particulate removal efficiency. Cartridge filter or baghouse pressure drop shall be monitored at least once per day. The monitoring device is to be certified to be accurate within ±0.1 inch water gauge. An excursion shall be defined as when the Cartridge filter or baghouse pressure drop falls outside the following range. When an excursion occurs, the permittee shall conduct an inspection of the cartridge filter or baghouse and corrective actions shall be taken to return the pressure drop within the following range:

Control device #	Control Device Description	Indicator Range for Pressure Drop (in)
#6	Donaldson Torit DFA-155	0.5 - 6.0
#9	Donaldson Torit 4DFT-32-155	0.5 - 6.0
#25	Donaldson Torit DF-4DF-48	0.5 - 6.0
#28	Donaldson Torit DF-2DF-4	0.5 - 6.0
#29	Mikropul CFH-18-20-VB	0.5 - 6.0
#33	Donaldson Torit DF-T4-16	0.5 - 6.0
#34	Donaldson Torit DF-2DF-4	0.5 - 6.0
#36	Donaldson Torit DF-T2-8	0.5 - 6.0
#37	Mikropul CFH-8-20	0.5 - 6.0
#38	Mikropul CFH-18-20-VB	0.5 - 6.0
#41	Donaldson Torit DFT2-4-155	0.5 - 6.0
#42	Donaldson Torit DFT3-6	0.5 - 6.0

According to the CAM plan submitted, the differential pressure gauges for the cartridge filter or baghouse shall be operated continuously during operation of the emission units.

[40 C.F.R. §64.3(a)(2); 45CSR§30-5.1.c.] [Stacks #6, 9, 25, 28, 29, 33, 34, 36, 37, 38, 41, 42]

5.1.12. Bagging and Palletizing Line System (PACKR1) [45CSR13 Permit No. R13-0029]

5.1.12.1. The following conditions and requirements are specific to the replacement Bagging and Palletizing Line system (PACKR1) which was installed in 2018, is controlled by cartridge filter dust collector CF#40 (Donaldson Torit Model No. DF-T2-8), and has Stack #40 as its Emission Point ID No.:

- a. The maximum hourly and annual rate of sand processed through the replacement Bagging and Palletizing Line system (PACKR1) shall not exceed 36 ton per hour (ton/hr) and 315,360 ton per year (ton/yr) based on operating 8,760 hr/yr.
- b. Visible emissions from Stack #40 shall not exceed 7% opacity based on a six-minute average. An initial performance test is required. **[45CSR16; 40 CFR §60.672(a) & Table 2 of Subpart OOO]**
- c. Particulate matter (PM) emissions from the cartridge filter dust collector (CF #40) shall not exceed 0.032 g/dscm (0.14gr/dscf). An initial performance test is required. **[45CSR16; 40 CFR §60.672(a) & Table 2 of Subpart OOO]**
- d. Fugitive emissions from the replacement Bagging and Palletizing Line system (PACKR1) shall not exceed 7% opacity based on a six-minute average. An initial performance test and a repeat performance test within 5 years of the initial performance test is required. **[45CSR16; 40 CFR §60.672(b) & Table 3 of Subpart OOO]**
- e. PM emissions from the cartridge filter dust collector (CF #40) shall not exceed the following hourly and annual emission limits:

Emission Point ID No.	Control Equipment	Emissions Limitations ¹	
		(lb/hr)	(ton/yr) ²
Stack #40	Cartridge Filter Dust Collector #40 (CF #40, Donaldson Torit Model No. DF-T2-8)	0.66	2.89

⁽¹⁾ Based on a PM emission rate of 0.032 grams/dscm (0.14 grains/dscf) and a maximum dust collector gas flow rate of 5,500 dcfm for the #40 dust collector.

⁽²⁾ Based on 8,760 hours of operation per year.

[45CSR13, R13-0029, 4.1.1.]

5.1.12.2. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 (conditions 3.1.9., 3.1.10., 3.1.11., 3.1.13., and 3.1.14.) 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.; 45CSR13, R13-0029, 4.1.2.i.]

5.1.12.3. The permitted facility shall comply with all applicable provisions of 40 CFR 60 Subpart OOO. Pertinent sections applicable to this operation include, but are not limited to:

- a. Performance tests must be conducted as required by §60.8 and in accordance with test methods and procedures given in §60.675. Refer to Section 3.5.3 of this permit for addresses to send written notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA.
- b. Standards governing particulate matter emissions are given in §60.672.

- c. Reporting and record keeping requirements are given in §60.676.

[45CSR13, R13-0029, 4.1.3.]

5.1.12.4. The pertinent sections of 45CSR13 applicable to this facility include, but are not limited to, the following:

- a. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or such other tests the Secretary may specify shall be conducted to determine compliance. **[45CSR§13-6.1]**
- b. The Secretary may suspend or revoke a permit if, after six (6) months from the date of issuance, the holder of the permit cannot provide the Secretary, at the Secretary's request, with written proof of a good faith effort that construction, modification, or relocation, if applicable, has commenced. Such proof shall be provided not later than thirty (30) days after the Secretary's request. If construction or modification of a stationary source is discontinued for a period of eighteen (18) months or longer, the Secretary may suspend or revoke the permit. **[45CSR§13-10.2]**
- c. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based or the conditions established in the permit are not adhered to. Upon notice of the Secretary's intent to suspend, modify or revoke a permit, the permit holder may request a conference with the Secretary in accordance with the provisions of W.Va. Code § 22-5-5 to show cause why the permit should not be suspended, modified or revoked. **[45CSR§13-10.3]**

[45CSR13, R13-0029, 4.1.4.]

5.1.12.5. **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 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. **[45CSR§13-5.10.; 45CSR13, R13-0029, 4.1.5.]**

5.1.13. Air Classifier (AIRSE25) and Cristobalite processing operations [45CSR13 Permit No. R13-2595]

5.1.13.1. The following conditions and requirements are specific to the Air Classifier (AIRSE25) and Cristobalite processing operations:

- a. The fugitive PM emissions due to the transferring of material from the feed bin (TANK25) to the air classifier (AIRSE25) using the two feed conveyor belts (FEEDB25 & FEEDB26) shall be equipped with a capture and removal system (PM control device). Such PM control device shall utilize the fabric filter control technology or similar technology that has a design removal efficiency of 99.9% or better for PM. **[45CSR§7-5.1]**
- b. Visible emissions from Stacks (#15, #45, #46 & #47) shall not be greater than 7% opacity on a six minute average. **[45CSR16; 40CFR§60.672(a) & Table 2 of Subpart OOO]**

- c. The fugitive PM emissions due to the transferring of material from the feed bin (TANK25) to Mill #6 using the two feed conveyor belts (FEEDB25 & FEEDB26) shall be equipped with a capture and removal system (PM control device). Such PM control device shall utilize the fabric filter control technology or similar technology that has a design removal efficiency of 99.9% or better for PM. **[45CSR§7-5.1]**
- d. The following fugitive dust control measures as specified in Permit Application R13-2595B shall be installed, maintained, and operated at all times when the facility is in operation in order to minimize fugitive particulate matter emissions:

Emission Source ID#	Air Pollution Control Device ID#	Air Pollution Control Device	Air Pollution Control Device Efficiency
ELEV25	Stack #15	Cellulosic Cartridge Filter	99.9%
FEEDB25			
FEEDB26			
SCREEN25			
BIN25			
PNEU25			
HOPPR25	Stack #46	Cellulosic Cartridge Filter	99.9%
TANK25	Stack #47	Cellulosic Cartridge Filter	99.9%
AIRSE25	Stack #45	Ecutech Cartridge Filter	99.9%

- e. Visible emissions from Stack #47 shall not be greater than 7% opacity on a six minute average. **[45CSR16; 40CFR§60.672(a) & Table 2 of Subpart OOO]**
- f. PM emissions from Stacks (#15 & #45) shall not exhibit PM greater than 0.014 grains per dry standard cubic foot of exhaust. **[45CSR16; 40CFR§60.672(a) & Table 2 of Subpart OOO]**
- g. Fugitive visible emissions from feed conveyor belts (FEEDB25 & FEEDB26) shall not be greater than 7% opacity on a six minute average. **[45CSR16; 40CFR§60.672(b) & Table 3 of Subpart OOO]**

[45CSR13, R13-2595, 4.1.1.]

5.1.13.2. 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 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. **[45CSR§13-5.10.; 45CSR13, R13-2595, 4.1.3.]**

5.1.14. Limestone processing operations [45CSR13 Permit No. R13-3535]

5.1.14.1. The following conditions and requirements are specific to the Limestone processing operations:

- a. In accordance with the information filed in Permit Application R13-3535, the equipment/processes identified under permit condition 1.1. Emission Units of this permit shall be installed, maintained, and operated so as to minimize any fugitive escape of pollutants, shall not exceed the listed maximum design capacities and/or throughputs, and shall use the specified control devices.
[45CSR13, R13-3535, 4.1.1.]
- b. The maximum transfer rate of material through the crushers and screens shall not exceed hourly and annual throughput rates identified in the table under Section 1.1. Emission Units of this permit. Said limits shall be based on a 12-month rolling total.
[45CSR13, R13-3535, 4.1.2.]

5.1.14.2. The Limestone processing operations are subject to the applicable sections of 45CSR7 which include, but are not limited to, the following:

- a. 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 Table 45-7A found at the end of this rule.
[45CSR§7-4.1.]
- b. 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. The permitted facility shall comply with all applicable requirements of 45CSR§7, with the exception of any more stringent limitations set forth in Section 4.1. of this permit.
[45CSR§7-5.1.]

[45CSR13, R13-3535, 4.1.3.]

5.1.14.3. The Limestone processing operations are subject to the applicable sections of 40 CFR 60 Subpart OOO which include, but are not limited to, the following:

- a. Fugitive visible emissions from screening operations (SCREN1T thru SCREN3T) and transfer points on belt conveyors (SCRENBC1T thru SCRENBC7T, STACKBC1T, STACKBC2T) shall not be greater than 7% opacity on a six minute average. An initial performance test and a repeat performance test within 5 years of the initial performance test is required.
[45CSR16; 40CFR§60.672(b) & Table 3 of Subpart OOO]
- b. Fugitive visible emissions from crushers at which a capture system is not used (CRUSH1T and CRUSH2T) shall not be greater than 12% opacity on a six minute average. An initial performance test and a repeat performance test within 5 years of the initial performance test is required.
[45CSR16; 40CFR§60.672(b) & Table 3 of Subpart OOO]

[45CSR13, R13-3535, 4.1.4.]

- 5.1.14.4. **Owners and Operators of Engines classified as Nonroad.** Owners and operators of engines classified as nonroad must ensure that the engine does not remain at a location for more than 12 months, with location being any single site at a building, structure, facility or installation.

[40CFR§1068.30]

A nonroad engine ceases to be a nonroad engine and becomes a new stationary engine if - (1) At any time, it meets the criteria specified in paragraph (2)(iii) in the definition of “nonroad engine” in § 1068.30. For example, a portable generator engine ceases to be a nonroad engine if it is used or will be used in a single specific location for 12 months or longer. If we determine that an engine will be or has been used in a single specific location for 12 months or longer, it ceased to be a nonroad engine when it was placed in that location.

[40 CFR § 1068.31(e)(1)]

[45CSR13, R13-3535, 4.1.5.]

- 5.1.14.5. **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 1.1. of this permit 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.

[45CSR§13-5.10.; 45CSR13, R13-3535, 4.1.6.]

5.2. Monitoring Requirements

- 5.2.1. Visible Emissions evaluations will be conducted as specified in Facility-wide requirements 3.2.1.
[45CSR§30-5.1c]
- 5.2.2. The permittee shall monitor and maintain records of daily observations of pressure drop across baghouses CF#41 and CF#42.
[45CSR13, R13-2595, 4.2.7. and PD10-027] [Baghouses CF#41 & CF#42; Stacks #41 & 42]
- 5.2.3. For the purpose of determining compliance with the process rate limitations set forth in 5.1.10.1. and 5.1.12.1.a., the permittee shall maintain monthly and annual records on the processing rate of sand through the replacement Bagging and Palletizing Line System (PACKR1), #3 microsizer, Airslide 100 and PNEU1. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request. The monthly and annual sand processing records may be maintained using the U.S. Silica Company computerized Production Tracking Data System (PTDS).
[45CSR13, R13-2595, 4.2.4., R13-0029, 4.2.4., and PD10-027] [PACKR1, #3 Microsizer, Airslide 100 and PNEU1]
- 5.2.4. Maintenance records for the air pollution control devices listed in 5.1.10.3. and 5.1.12.1. shall be maintained on site for a period of five (5) years. Malfunctions shall be documented in writing and records of these malfunctions maintained at the facility for a period of five (5) years. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request. At a minimum, the following information shall be documented for each malfunction:
- The equipment involved in the malfunction and the associated cause.
 - Steps taken to correct the malfunction.
 - The steps taken to minimize the emissions during the malfunction.
 - The duration of the malfunction.

- e. The increase in emissions during the malfunction.
- f. Steps taken to prevent a similar malfunction in the future.

[45CSR13, R13-2595, 4.2.6., R13-0029, 4.2.6. and PD10-027] [Baghouses CF #41 & CF #42, CF #40; Stacks #40, 41, & 42]

- 5.2.5. Once a quarter (every three months), the permittee shall conduct 30-minute visible emission inspections using U.S. EPA Method 22 (Appendix A-7 of Part 60) of Stacks #6, #15, #40, #45, and #47. The Method 22 observations shall be conducted while the dust collector 1C (dust collector for Stack #6) and the dust collector (for Stacks #15, #40, #45, and #47) is operating. Such monitoring is deemed satisfactory if no visible emissions are detected during the Method 22 observations. If any visible emissions are detected, then the permittee must initiate corrective actions within twenty-four hours of the observation to bring the dust collector to normal operation. The date and time of every Method 22 observation inspection shall be recorded in accordance with Condition 3.4.2. and in the logbook in accordance with 40 C.F.R. §60.676(b). These records shall include any corrective actions taken. The permittee may elect to establish a different satisfactory (success) level for the visible emissions observations inspections by conducting PM performance test according to 40 C.F.R. §60.675(b) simultaneously with a Method 22 observation to determine what constitutes normal visible emission from Stack #6 when it is in compliance with the PM limit of Condition 5.1.7.1.c., from stack #40 when it is in compliance with the PM limit in Condition 5.1.12.1.c., and from

Stacks #15, #45, and #47 when it is in compliance with the PM limits on conditions 4.1.1.e and 4.1.1.f. These revised visible emissions satisfactory (success) level must be incorporated into the Facility's Title V Operating Permit.

[45CSR13, R13-2145, 4.2.1., R13-0029, 4.2.2., R13-2595, 4.2.2.; 40 C.F.R. §60.674(c); 45CSR16]

- 5.2.6. For the purpose of determining compliance with the emission limits as set forth in 5.1.10.2 and 5.1.12.1.e, the permittee shall maintain all records that are required herein. Said records shall be maintained on site for a period of five (5) years and shall be made available to the Director or his/her duly authorized representative upon request.

[45CSR13, R13-0029, 4.2.5., R13-2595. 4.2.5.]

- 5.2.7. To determine compliance with 5.1.12.1.e, the permittee shall monitor and maintain records of daily observations of delta P across cartridge filter dust collector, CF #40. These records shall be maintained on-site for a period of five (5) years and certified records shall be made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request.

[45CSR13, R13-0029, 4.2.7.]

- 5.2.8. Visible emissions shall be observed visually at least each calendar week during periods of facility operation for a sufficient time interval to determine if the unit (Stacks #15, #45, #46, and #47) has any visible emissions using 40CFR60 Appendix A, Method 22. If visible emissions are observed during these weekly observations, or at any other time, that appear to exceed the allowable visible emission requirement, visible emissions evaluations in accordance with 45CSR7A shall be conducted as soon as practicable, but no later than 24 hours from the time of the observation. A visible emissions evaluation in accordance with 45CSR7A shall not be required under condition 5.2.8 if the visible emissions condition is corrected in a timely manner; the Process Source Operation is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

[45CSR13, R13-2595, 4.2.1.]

- 5.2.9. For the purpose of determining compliance with the opacity limits of 40 CFR 60 Subpart OOO, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission sources subject to an opacity limit.
- a. 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 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.
 - b. 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.
 - c. If visible emissions are present at a source(s) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of Method 9 as soon as practicable, but within seventy-two (72) hours of the final visual emission check. A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.

[45CSR13, R13-3535, 4.2.1.] (Limestone Processing Operations)

- 5.2.10. The permittee shall install instrumentation to measure both volumetric flow rate and water pressure as supplied to the facility's water spray bars on a daily basis. At the beginning and end of each operating day, the water pressure and ambient temperature shall be recorded. At the end of each operating day, the tonnage of rock processed, the amount of water (measured in gallons) utilized that day, the number of hours of operation, and a description of the day's weather conditions shall be recorded. Such records shall be maintained in accordance with Section 3.4.2. of this permit.

[45CSR13, R13-3535, 4.2.2.] (Limestone Processing Operations)

- 5.2.11. The permittee shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b). Such records shall be maintained in accordance with Section 3.4.2. of this permit.

[45CSR13, R13-3535, 4.2.3.; 40CFR§60.674(b)] (Limestone Processing Operations)

5.3. Testing Requirements

- 5.3.1. The owner or operator shall determine compliance with the particulate matter standards in Section 5.1.1.1(a) according to Test method and Procedures in 40 C.F.R. §60.675.
[40 C.F.R. §60.675; 45CSR16]

- 5.3.2. For demonstrating initial compliance with the visible emission standards of 5.1.7.1.b., 5.1.7.1.d., 5.1.12.1.b., 5.1.12.1.d., 5.1.13.1.e., 5.1.13.1.g., 5.1.14.3.a and 5.1.14.3.b. the permittee shall conduct performance testing to determine the visible emissions from the point and fugitive emission sources associated with Q-Rok loading at the facility, which includes Stack #6, Bucket Elevators (BE01 & BE02) and the associated load out spout, the replacement Bagging and Palletizing Line system (PACKR1), the Cristobalite processing (Stack #47, FEEDB25, and FEEDB26), and the Limestone Processing Operations. Such testing shall be conducted in accordance with Method 9 of Appendix A-4 of 40 CFR 60, and the procedures in 40 C.F.R. §60.11. and Condition 3.3.1 of this permit and the following additions:
- a. The minimum distance between the observer and the emission source shall be 15 feet. The observer shall, when possible, select a position that minimizes interference from other fugitive sources (e.g. road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of 40 CFR 60, Section 2.1.) must be followed.
 - b. The duration of the Method 9 observations for demonstrating compliance with the fugitive emission limit must be 30 minutes (five 6-minute averages). Compliance with the limits in 5.1.7.1.d., 5.1.12.1.d., 5.1.13.1.g., 5.1.14.3.a. and 5.1.14.3.b shall be based on the average of five 6-minute averages.
 - c. If a building/structure encloses the replacement Bagging and Palletizing Line system (PACKR1), Bucket Elevators BE01 and BE02 and/or load out spout with the DSH system, and the Cristobalite process, the permittee shall conduct initial Method 9 observation of the building/structure to determine the compliance with fugitive emission limits in 5.1.7.1.d., 5.1.12.1.d., and 5.1.13.1.g. according to 40 C.F.R. 60 Subpart OOO and 40 C.F.R. §60.11. Such source must be operating while conducting the observations.
 - d. At locations where water sprays are employed at, the water mist must not be confused with particulate matter emissions and is not be considered 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.

[40 C.F.R. §§60.675(c) and (d); 45CSR16; 45CSR13, R13-2145, 4.3.1., R13-0029, 4.3.1., R13-2595, 4.3.1., R13-3535, 4.3.1.]

The permittee may use the following as alternatives to the reference methods and procedures listed in the above:

- a. If visible emissions from two or more facilities (affected sources) 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 application to any of the individual affected contributing to the emission stream.
 - ii. Separate the emissions so that the opacity of emissions from each affected can be read.
- b. A single visible emission observer may conduct visible emissions 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.

- c. The permittee may reduce the 30-day advance notification of performance test in 40 C.F.R. §§60.7(a)(6), 60.8(d) and 15-day notification of Condition 3.3.1.c. to a 7-day advance notification.

[40 C.F.R. §§60.675(e) and (g); 45CSR16; 45CSR13, R13-2145, 4.3.1., R13-0029, 4.3.1., R13-2595, 4.3.1., R13-3535, 4.3.1.]

- 5.3.3. For demonstrating initial compliance with the PM emission limit of 5.1.7.1.c., 5.1.12.1.c., and 5.1.13.1.f, the permittee shall conduct performance testing to determine the PM concentration rate from Stacks #6, #15, #40, and #45. Such testing shall be conducted using Method 5 (Appendix A-3 of Part 60), Method 17 ((Appendix A-6) of Part 60), or Method 5I (Appendix A-3 of Part 60). If the exhaust velocity of Stack #6, #15, #40, or #45 is too low to measure accurately using the type S pilot tube as specified in EPA Method 2 (Appendix A-1 of Part 60), then the permittee may use the procedure outlined in 40 C.F.R. §60.675(e)(4). **[45CSR16; 40CFR§§60.675(b), (e)(3), and (e)(4); 45CSR13, R13-2145, 4.3.2., R13-0029, 4.3.2., R13-2595, 4.3.2.]**

- 5.3.4. Initial performance testing will be performed as follows:

- a. The initial performance testing as required in this section (condition 5.3.2. through 5.3.4.) shall be conducted within 60 days after achieving the maximum production rate of 150 tons per hour through the load out with the DSH system, but no later than 180 days after initial start-up of the load out with the DSH system.
[45CSR16; 40 C.F.R. §§60.672(a) and (b); 45CSR16; 45CSR13, R13-2145, 4.3.3.]
- b. The initial performance testing as required in this section (condition 5.3.2. through 5.3.4.) shall be conduct within 60 days after achieving the maximum production rate of 25 tons per hour with the Cristobalite system, but no later than 180 days after initial start-up of either system.
[45CSR16; 40CFR§§60.672(a) and (b); 45CSR13, R13-2595, 4.3.3.]
- c. The initial performance testing as required in this section (conditions 5.3.2. through 5.3.4.) shall be conducted within 60 days after achieving the maximum production rate at which the replacement Bagging and Palletizing Line system (PACKR1) will be operated, but no later than 180 days after initial start-up.
[45CSR16; 40CFR§§60.672(a) and (b)]

The design capacity of the replacement Bagging and Palletizing Line system (PACKR1) is specified in this permit in Section 1.1 Emission Units Table and Condition 5.1.12.1.a.
[45CSR13, R13-0029, 4.3.3.]

- d. The initial performance testing as required in this section (conditions 5.3.2. and 5.3.4.) shall be conducted within 60 days after achieving the maximum production rate at which the Limestone Processing Operations will be operated, but no later than 180 days after initial start-up.
[45CSR16; 40CFR§60.8 and 40CFR§60.672(b)]

The design capacity of the Limestone Processing Operations is specified in this permit in the table in Section 1.1. Emission Units. Such testing shall be conducted while the piece is processing or handling

stone equal to or greater than 90 percent its hourly throughput limit as listed in Section 1.1 of this permit or at the maximum throughput possible.

[45CSR13, R13-3535, 4.3.1.] (Limestone Processing Operations)

- 5.3.5. The permittee shall repeat the performance testing as prescribed in Condition 5.3.2. for compliance with the fugitive emission standards of Conditions 5.1.7.1.d., 5.1.12.1.d., 5.1.13.1.g., 5.1.14.3.a. and 5.1.14.3.b. within 5 years from the previous performance test demonstrating compliance.

[40 C.F.R. §60.672(b) and Table 3 of 40 C.F.R. 60 Subpart OOO; 45CSR16; 45CSR13, R13-2145, 4.3.4., R13-0029, 4.3.4., R13-2595, 4.3.4., R13-3535, 4.3.1.]

- 5.3.6. With regard to performance tests required by the WV Division of Environmental Protection, Division of Air Quality (DAQ), including those performance tests required under 40 CFR 60 Subpart OOO, the permittee shall submit to the Director of the DAQ a test protocol detailing the proposed test methods, date, and time testing is to take place, sampling locations, and any other relevant information. The test protocol must be received by the Director no less than thirty (30) days prior to the date the testing is to take place. Performance test results shall be submitted to the DAQ within 60 days of completing said tests.

[45CSR13, R13-0029, 4.2.3., R13-2595, 4.2.3.]

- 5.3.7. During such testing, the permittee shall monitor and record the water pressure, flow rate of the water sprays, and the hourly throughput or process rate of the piece of equipment at which the observation is occurring. Such records shall include the water pressure and flow rate at the beginning and the at end of the last observation for the actual operation day. Such records shall be included in with the test results and maintained in accordance with Section 3.4.2. of this permit.

[45CSR13, R13-3535, 4.3.1.d.] (Limestone Processing Operations)

5.4. Recordkeeping Requirements

- 5.4.1. For the purpose of determining compliance with the process rate limitation set forth in Sections 5.1.8.1 and 5.1.8.2, the permittee shall maintain monthly and annual records on the processing rate of sand to the two (2) new Rotex Screens (located at the Float Plant). Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request. The monthly and annual sand processing records may be maintained using the U.S. Silica Company computerized Production Tracking Data System (PTDS).

[45CSR13, R13-2423, B.4] [SCREN17 & 18]

- 5.4.2. For the #9 Torit Model No. 4DF32-155 Pulse Type Cartridge Dust Collector (Equipment ID No. 1C-CF#9):

a. Maintenance records shall be maintained on site for a period of five (5) years. Certified copies of these records shall be made available to the Director or his duly authorized representative upon request.

b. Malfunctions shall be documented in writing and records of these malfunctions maintained at the facility for a period of 5 years. Certified copies of these records shall be made available to the Director or his duly authorized representative upon request. At minimum, the following information shall be documented for each malfunction:

- The cause of malfunction.
- Steps taken to:
 - correct the malfunction.
 - minimize emissions during malfunction.
- The duration of the malfunction in hours.
- The estimated increase in emissions during the malfunction.

- Any changes/modifications made to equipment and/or procedures that will help prevent future recurrence of the malfunction.
[45CSR13, R13-2423, B.5] [CF#9]
- 5.4.3. For the purpose of determining compliance with the process rate limitation set forth in Section 5.1.9.1, the permittee shall maintain monthly and annual records on the processing rate of sand to the bulk sand bagger (located at the Float Plant). Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request. The monthly and annual sand processing records may be maintained using the U.S. Silica Company computerized Production Tracking Data System (PTDS).
[45CSR13, R13-2299, B.4] [PACKR8]
- 5.4.4. Maintenance records for the Torit Model Number 4DF32-155 Pulse Type Cartridge Dust Collector (Equipment ID No.: 1C-CF #9; Emission Point ID No.: 1E-Stack #9), must be maintained. Records shall be maintained on site for a period of five (5) years. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request.
[45CSR13, R13-2299, B.5] [Stack#9]
- 5.4.5. The permittee shall maintain monthly and annual records on the processing rate of sand to the five (5) Rotex Screens. The monthly and annual sand processing records may be maintained using the U.S. Silica Company computerized Production Tracking Data System (PTDS). Such records shall be maintained in accordance with Condition 3.4.2. of this permit.
[45CSR13, R13-2145, 4.2.2.] (Rotex Screens 1S – 5S)
- 5.4.6. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0 of the current version of R13-2145, R13-2595, R13-0029, and R13-3535, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-2145, 4.4.2.] (CF #36, CF #6)
[45CSR13, R13-0029, 4.4.2.] (PACKR1)
[45CSR13, R13-2595, 4.4.2.] (CF #41, CF #42, CF #15, CF #45, CF #46, CF #47)
[45CSR13, R13-3535, 4.4.2.] (Limestone Processing Operations)
- 5.4.7. For the purpose of determining compliance with the emission limits as set forth in Sections 5.1.6.1 and 5.1.6.2, the permittee shall maintain all records that are required herein. Said records shall be maintained on site for a period of five (5) years and shall be made available to the Director or his/her duly authorized representative upon request.
[45CSR13, R13-2015, B.1] [Stack #25]
- 5.4.8. For the purpose of determining compliance with the process weight rate limitations set forth in Section 5.1.6.3 the permittee shall maintain monthly and annual records on the processing rate of sand to the Trash Vibrating Screen. Compliance with the monthly and annual process weight rate limits shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of the process weight rate at any given time for the previous twelve (12) consecutive months. Said records shall be maintained on site for a period of five (5) years. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request. The monthly and annual sand processing records may be maintained using the U.S. Silica Company computerized Production Tracking Data System (PTDS)
[45CSR13, R13-2015, B.2] [SCREN16]
- 5.4.9. For the purpose of determining compliance with the conditions set forth in Section 5.1.6.4, the permittee shall maintain certified annual records that contain at a minimum the following:
- Hours of Operation when the Trash Vibrating Screen is operating without the required control device (Cartridge Filter).

Said records shall be maintained on site for a period of five (5) years. Certified copies of these records shall be made available to the Director or his/her duly authorized representative upon request.

[45CSR13, R13-2015, B.3] [CF#25]

- 5.4.10. For the purpose of determining compliance with the conditions set forth in Section 5.1.6.5, the permittee shall meet the following requirements for the control device CF#25:
- a. Maintenance records shall be maintained on site for a period of five (5) years. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request.
 - b. Malfunctions shall be documented in writing and records of these malfunctions maintained at the facility for a period of five (5) years. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request. At minimum, the following information shall be documented for each malfunction:
 1. The cause of malfunction.
 2. Steps taken to:
 - correct the malfunction
 - minimize emissions during malfunction
 3. The duration of the malfunction in hours.
 4. The estimated increase in emissions during the malfunction.
 5. Any changes/modifications made to equipment and/or procedures that will help prevent future recurrence of the malfunction.

[45CSR13, R13-2015, B.4] [CF#25]

- 5.4.11. The permittee shall keep records of monitoring requirements of Section 5.2 as specified in Sections 3.4.1, 3.4.2.
[45CSR§30-5.1c]
- 5.4.12. The permittee shall monitor and record the differential pressure drop across each fabric filter (during operation) on a daily basis.
[40 C.F.R. §64.3(b); 45CSR§30-5.1.c.] [CFs #6, 9, 25, 28, 29, 33, 34, 36, 37, 38, 41, 42]
- 5.4.13. Qualified personnel shall perform visual inspections of the fabric filters control devices at least monthly and perform routine maintenance to assure proper operation of the fabric filters. The results of inspection and performance of routine maintenance shall be recorded.
[40 C.F.R. §64.3(b); 45CSR§30-5.1.c.] [CFs #6, 9, 25, 28, 29, 33, 34, 36, 37, 38, 41, 42]
- 5.4.14. *General recordkeeping requirements.* (1) The owner or operator shall comply with the recordkeeping requirements specified in 40 C.F.R. §70.6(a)(3)(ii) of this chapter. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40CFR64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.
[40 C.F.R. §64.9(b); 45CSR§30-5.1.c.] [CFs #6, 9, 25, 28, 29, 33, 34, 36, 37, 38, 41, 42]

5.4.15. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0 of the current version of R13-2145, R13-2595, and R13-0029, 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.

[40 C.F.R. §60.676(b)(1); 45CSR16; 45CSR13, R13-2145, 4.4.3.] (CF #36, CF #6)
[45CSR13, R13-0029, 4.4.3.] (PACKR1)
[45CSR13, R13-2595, 4.4.3.] (CF#41, CF#42, CF#15, CF#45, CF#46, CF#47)
[45CSR13, R13-3535, 4.4.3.] (Limestone Processing Operations)

5.4.16. For the purpose of determining compliance with maximum throughput and operation limits set forth in Section 5.1.14.1.b. of this permit, the applicant shall maintain certified daily and monthly records. An example form is included as Appendix C to permit R13-3535. Compliance will be determined on a 12-month rolling total. These records shall be maintained on-site for a period of five (5) years and be made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request.
[45CSR13, R13-3535, 4.4.4.] (Limestone Processing Operations)

5.4.17. The permittee shall maintain records of all monitoring data required by Section 5.2.9. of this permit 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 to Permit 3535. 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, R13-3535, 4.4.5.] (Limestone Processing Operations)

5.4.18. The permittee shall maintain certified daily and monthly records of the water usage by the water truck. An example form is included as Appendix B to permit R13-3535. These records shall be maintained on-site for a period of five (5) years and be made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request.

[45CSR§30-5.1.c.] (Limestone Processing Operations)

5.5. Reporting Requirements

5.5.1. Reserved.

5.5.2. (a) *General reporting requirements.*

- (1) On and after the date specified in 40 C.F.R. §64.7(a) by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 C.F.R. §70.6(a)(3)(iii) of this chapter.
- (2) A report for monitoring under this part shall include, at a minimum, the information required under 40 C.F.R. §70.6(a)(3)(iii) of this chapter and the following information, as applicable:
 - (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - (iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. §64.9(a); 45CSR§30-5.1.c.] [CFs #6, 9, 25, 28, 29, 33, 34, 36, 37, 38, 41, 42]

5.5.3. The Director shall be notified of the initial start-up of Bucket Elevators BE01 & BE02, and the load out spout with the DSH system, PACKR1, and the equipment listed in R13-2595 within 15 days after such date. The notification of these sources can be included in a single notification and needs to include a description of each affected source, equipment manufacturer, and serial number of the equipment if available. This notification supersedes the notification requirements of Condition 2.18. of the current version of R13-2145, R13-0029, and R13-2595.

**[45CSR13, R13-2145, 4.5.1., R13-2595, 4.5.1.; 40 C.F.R. §§60.676(i)(1) and (k); 45CSR16]
[45CSR13, R13-0029, 4.5.1.] (PACKR1)**

5.5.4. The permittee shall report the results of any test conducted as required in conditions 5.3.2., 5.3.3., 5.3.4., 5.3.5., and 5.3.6. of this permit to the Director within 60 days after completing such testing.

**[45CSR13, R13-2145, 4.5.2., R13-2595, 4.5.2.; 40 C.F.R. §§60.676(f) and (k); 45CSR16]
[45CSR13, R13-0029, 4.5.2.] (PACKR1)
[45CSR13, R13-3535, 4.5.1.] (Limestone Processing Operations)**

5.5.5. Any exceedances of the allowable visible emission requirement for any emission source discovered during observation using 40CFR Part 60, Appendix A, Method 9 must be reported in writing to the Director 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 exceedances, and any corrective measures taken or planned.

[40CFR§§60.676(f) and (k); 45CSR16; 45CSR13, R13-3535, 4.5.2.] (Limestone Processing Operations)

5.6. Compliance Plan

5.6.1. N/A

6.0 Source-Specific Requirements [Non- NSPS Sources]

- a) **Primary Crushing Plant (Stack #1)**
- b) **Secondary Crushing Plant (Stack #2)**
- c) **Wet Processing Operations Plant (Rod Mill Building) except CONV54, MILL8, SCREN16, SCREN 1**
- d) **Screening and Unground Sand Processing except SCREN 7-9, 14-15, BE01, BE02, LS01 (Stacks #7, 27 & 40)**
- e) **Milling Process (Stacks #10, 11, 12 & 39)**
- f) **Classification (10/15/30/40 Micron) (Includes only #1 and #2 Pump Feed Bins and Tailing Bins) (Stacks #11 & 12)**
- g) **5 Micron Classification (Includes only PEMCO Elevator, PACKR 3, 4 (Stacks #13 & 20)**
- h) **Wet Float Plant except SCREN 17 & 18, Elev 20, Packr 8**
- i) **Storage Structures except Supersil storage silos #1 to #4, Minusil Storage Silos #5 to #7 (Stacks #7, 13 & 27)**

6.1. Limitations and Standards

6.1.1. The emission limitations are as shown in the table below:

Emission Unit	Emission Point ID	Allowable PM Stack Emissions (Type 'a' Source Operation) (PPH)
CRUSH 2, CONV2, CONV3	Stack #1 (CF #1)	50
CRUSH 3	Stack #2 (Wsc#2)	50
SCREN10-13, SCREN22-23 & SCREN4, ELEV1, ELEV2, ELEV3, CONV 31, CONV33, Tanks 7, 8, 13, 14, 15,16,17 & 18	Stack #7 (CF #7)	43
CONV 51, Pulverizer tank #19, Pulverizer tank #20, Tanks #9-#12 vents and loadouts, Steel Tank #21 Vent and Loadout, SPOUT 1 and 2	Stack #27 (CF #27)	43
SCREW3, #1 Mill Feed Bin, SCREW6, AIRSD7, ELEV 6, ELEV 7, #2 Mill Feed bin, FEEDB1 and FEEDB2, MILL2, MILL3, SCREW5	Stack #10	37
Elev 14	Stack #39	40
#5 Mill Feed Bin, FEEDB5, ELEV10, #6 Mill Feed Bin, FEEDB6, AIRSD3, ELEV11, BIN7, #1 AND #2 PUMPS, TAILINGS BINS, MILL6, ELEV15, BIN2, MILL7	Stack #12	37
PEMCO Elev (ELEV 23), CGS FCP Tank VENT, and PEMCO tank VENT, SPOUT6	Stack #13	47
Packr 3 & 4	Stack #20	28
SCREW4 (3-4 Screw Conveyor), #3 Mill Feed Bin, #4 Mill Feed Bin, SCREW7, AIRSD8, ELEV8, ELEV9, FEEDB3, FEEDB4, SCREW5, MILL4, MILL5	Stack #11	37

[45CSR§7-4.1] [Stacks 1, 7, 10, 11, 12, 13, 20, 27, 39, Wsc#2]

- 6.1.2. The following Non-NSPS Fabric Filter pressure drop ranges obtained from stack test and historical data are an indicator of compliance for the filters to attain the required minimum particulate removal efficiency. Filter pressure drop shall be monitored at least once per day. The monitoring device is to be certified to be accurate within ± 0.1 inch water gauge. An excursion shall be defined as when the filter pressure drop falls outside the following range. When an excursion occurs, the permittee shall conduct an inspection of the filter and corrective actions shall be taken to return the pressure drop within the following range:

Control device #	Control Device Description	Indicator Range for Pressure Drop (in H ₂ O)
#1	Donaldson Torit DF-T4-32	0.5 - 6.0
#7	Donaldson Torit DFT-32-SH)	0.5 - 6.0
#10	Mikropul CFH 40T-20-B	0.5 - 6.0
#11	Mikropul CFH 40T-20-B	0.5 - 6.0
#12	Mikropul CFH 40T-20-B	0.5 - 6.0
#13	Donaldson Torit DF-T3-24	0.5 - 6.0
#20	Donaldson Torit DF-T4-16	0.5 - 6.0
#27	Donaldson Torit DF-T2-8	0.5 - 6.0
#39	Mikropul CFH 8-20-V	0.5 - 6.0

According to the CAM plan submitted, the differential pressure gauges for the filters shall be operated continuously during operation of the emission units.

[40 C.F.R. §64.3(a)(2); 45CSR§30-5.1.c.] [Stacks #1, 7, 10, 11, 12, 13, 20, 27, 39]

- 6.1.3. The following scrubber pressure drop range obtained from stack test and historical data is an indicator of compliance for the scrubber to attain the required minimum particulate removal efficiency. Scrubber pressure drop shall be monitored at least once per day. The monitoring device is to be certified to be accurate within ± 0.1 inch water gauge. An excursion shall be defined as when the scrubber pressure drop falls outside the following range. When an excursion occurs, the permittee shall conduct an inspection of the scrubber and corrective actions shall be taken to return the pressure drop within the following range:

Control device #	Control Device Description	Indicator Range for Pressure Drop (in H ₂ O)
Wsc#2	Wet Scrubber	1.5 - 7.0

According to the CAM plan submitted, the pressure drop across the wet scrubber shall be measured continuously during operation of the emission units.

[40 C.F.R. §64.3(a)(2); 45CSR§30-5.1.c.] [Wsc#2]

6.2. Monitoring Requirements

- 6.2.1. Visible emissions evaluations will be conducted as specified in facility-wide requirements 3.2.1. **[45CSR§30-5.1c]**
- 6.2.2. The wet scrubber Wsc#2 shall be observed daily during periods of facility operation for a sufficient time interval to determine if the unit has any visible emissions using 40 C.F.R. 60 Appendix A, Method 22. If visible emissions are observed, visible emissions evaluations in accordance with 45CSR7A shall be conducted as soon as practicable, but no later than one week from the time of the observation. A visible emissions evaluation in accordance with 45CSR7A shall not be required under condition Section 6.2.2 if the visible emissions condition is corrected in a timely manner; the scrubber is operating at normal operating conditions; and, the cause and corrective measures taken are recorded. **[45CSR§30-5.1c] [Wsc#2]**

6.3. Testing Requirements

N/A

6.4. Recordkeeping Requirements

- 6.4.1 Recordkeeping will be conducted as specified in facility-wide requirements 3.4.1., 3.4.2., 3.4.3 and 3.4.4. [45CSR§30-5.1c]
- 6.4.2. The monitoring required in section 6.2.2 shall be recorded. [45CSR§30-5.1c]
- 6.4.3. The permittee shall monitor and record the differential pressure drop across each fabric filter and the wet scrubber during operation on a daily basis. [40 C.F.R. §64.3(b); 45CSR§30-5.1.c.]
- 6.4.4. Qualified personnel shall perform visual inspections of the fabric filters and wet scrubber control devices at least monthly and perform routine maintenance to assure proper operation of the fabric filters and wet scrubber. The results of inspection and performance of routine maintenance shall be recorded. [40 C.F.R. §64.3(b); 45CSR§30-5.1.c.]
- 6.4.5. *General recordkeeping requirements.*
- (1) The owner or operator shall comply with the recordkeeping requirements specified in 40 C.F.R. §70.6(a)(3)(ii) of this chapter. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40CFR64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
 - (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 C.F.R. §64.9(b); 45CSR§30-5.1.c.]

6.5. Reporting Requirements

- 6.5.1 Reporting will be conducted as specified in facility-wide requirements 3.5.6 and 3.5.8. [45CSR§30-5.1c]
- 6.5.2. *General reporting requirements.*
- (1) On and after the date specified in 40 C.F.R. §64.7(a) by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 C.F.R. §70.6(a)(3)(iii) of this chapter.
 - (2) A report for monitoring under this part shall include, at a minimum, the information required under 40 C.F.R. §70.6(a)(3)(iii) of this chapter and the following information, as applicable:

- (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. §64.9(a); 45CSR§30-5.1.c.]

6.6. Compliance Plan

6.6.1. N/A

7.0 Source-Specific Requirements: Mobile Conveyor (MOB-CONV), Bucket Elevator (BE-03), Cristobalite Silo (C Silo), and Damp Conveyor (CONV 55)

7.1. Limitations and Standards

- 7.1.1. The following conditions and requirements are specific to the Mobile Conveyor (MOB-CONV), Damp Conveyor (CONV 55), Bucket Elevator (BE-03), and the Cristobalite Silo (C Silo):

The permittee shall meet the following fugitive emissions limit for Bucket Elevator (BE-03) and the transfer points on Mobile Conveyor (MOB-CONV), Damp Conveyor (CONV 55), Cristobalite Silo (C Silo), enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671): 7 percent opacity

[45CSR16, 40CFR §60.672(b) and Table 3 to Subpart OOO of 40CFR60; 45CSR13, R13-2145, 5.1.1. and 6.1.1.]

7.2. Monitoring Requirements

- 7.2.1. The permittee shall maintain monthly and annual records on the processing rate of sand to the mobile conveyor, bucket elevator, and damp conveyor. The monthly and annual sand processing records may be maintained using the U.S. Silica Company computerized Production Tracking Data System (PTDS). Such records shall be maintained in accordance with Condition 3.4.2 of this permit.

[45CSR13, R13-2145, 5.2.1. and 6.2.1.]

- 7.2.2. The permittee shall maintain records on the specific location of the Mobile Conveyor (MOB-CONV). Upon initial startup, these records shall include the date moved and a plot plan marking the location for each move. Such records shall be maintained in accordance with Condition 3.4.2 of this permit.

[45CSR13, R13-2145, 5.2.2.]

7.3. Testing Requirements

- 7.3.1. For demonstrating initial compliance with the visible emission limit of 7.1.1, the permittee shall demonstrate compliance by conducting:

- a. An initial performance test according to 40 CFR §60.11 and 40 CFR §60.675; and
- b. A repeat performance test according to 40 CFR §60.11 and 40 CFR §60.675 within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays.

[45CSR16, Table 3 to Subpart OOO of 40 CFR 60; 45CSR13, R13-2145, 5.3.1. and 6.3.1.]

- 7.3.2. Method 9 of Appendix A-4 of 40 CFR 60 and the procedures in 40 CFR §60.11 will be used to determine opacity, with the following additions:

- a. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet);
- b. The observer shall, when possible, select a position that minimizes interference from other fugitive emissions sources (e.g., road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of 40 CFR 60, Section 2.1) must be followed.

[45CSR16, 40 CFR §§60.675(b)(2) and (c)(1); 45CSR13, R13-2145, 5.3.2. and 6.3.2.]

- 7.3.3. When determining compliance with the fugitive emissions standard for any affected facility described under 40 CFR §§60.672(b) or 60.672(e)(1), the duration of the Method 9 (40 CFR 60, Appendix A–4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in 7.1.1. must be based on the average of the five 6-minute averages.
[45CSR16, 40 CFR §60.675(c)(3); 45CSR13, R13-2145, 5.3.3. and 6.3.3.]

7.4. Recordkeeping Requirements

- 7.4.1. The permittee shall maintain a record of each periodic inspection required under 40 CFR §60.674(b), including dates and any corrective actions taken, in a logbook (in written or electronic format). Keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Director upon request.
[45CSR16, 40 CFR §60.676(b)(1), 45CSR13, R13-2145, 5.4.1. and 6.4.1.]
- 7.4.2. The permittee shall maintain a record of each visible emissions observation, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or 45CSR7A, whichever is appropriate. The record will 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 will be maintained on site for a period of no less than five (5) years stating any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.
[45CSR7A, 45CSR13, R13-2145, 5.4.2. and 6.4.2.]
- 7.4.3. Record of Monitoring. 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.
[45CSR13, R13-2145, 5.4.3. and 6.4.3.]

7.5. Reporting Requirements

- 7.5.1. The Director shall be notified of the initial start-up of Mobile conveyor (MOB-CONV), Damp Conveyor (CONV 55) and Bucket Elevator (BE-03) within 15 days after such date. The notification of these sources can be included in a single notification and needs to include a description of each affected source, equipment manufacturer, and serial number of the equipment if available.
[45CSR16, 40 CFR §60.676(i), 45CSR13, R13-2145, 5.5.1. and 6.5.1.]
- 7.5.2. The permittee shall report the results of any test conducted as required in Section 7.3. of this permit to the Director within 60 days after completing such testing.
[45CSR16, 40 CFR §60.676(f), 45CSR13, R13-2145, 5.5.2. and 6.5.2.]

7.6. Compliance Plan

- 7.6.1. N/A