

**West Virginia Department of Environmental Protection**  
***Division of Air Quality***

Joe Manchin III  
Governor

Stephanie R. Timmermeyer  
Cabinet Secretary

# Permit to Operate



*Pursuant to*  
**Title V**  
*of the Clean Air Act*

*Issued to:*  
**Capitol Cement Corporation**  
Martinsburg, Berkeley County, WV  
R30-00300006-2006

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*John A. Benedict*  
*Director*

*Issued: January 4, 2006 • Effective: January 18, 2006*  
*Expiration: January 4, 2011 • Renewal: July 4, 2010*

Permit Number: **R30-00300006-2006**  
Permittee: **ESSROC Cement Corporation**  
Facility Name: **Capitol Cement Corporation**  
Mailing Address: **3251 Bath Pike, Nazareth, PA 18064**

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*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.*

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Facility Location:	Martinsburg, Berkeley County, West Virginia
Mailing Address:	P.O. Box 885, 1826 South Queen Street, Martinsburg, WV 25401
Telephone Number:	(304) 267-8966
Type of Business Entity:	Corporation
Facility Description:	Capitol Cement Plant is a Portland cement manufacturing facility. Their cement is used to make concrete, concrete products and masonry cement.
SIC Codes:	Primary 3241; Secondary 1422; Tertiary NA
UTM Coordinates:	243.50 km Easting • 4369.00 km Northing • Zone 18

*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.*

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*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**

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device <sup>(1)</sup>
<b>Crushing Group 001</b>							
EP01.01	42 Inch Primary Crusher	1943 and 1982	805 TPH	Baghouse CD01.01	CD01.01	EP01.01 to CD01.01	Baghouse
					EP01.03	CD01.01 to EP01.03	PE
CD01.01	Dust Filter for Transfer Point between 42" Crusher and 42" Belt	1972	6,300 CF/min	Stack 001	EP01.01	CD01.01 to EP01.01	Baghouse
					Stack 1	CD01.01 to Stack 1	None
EP01.02	Crusher Feeder	1982	805 TPH	None	EP01.01	EP01.02 to EP01.01	None
EP0X.04	Crusher Feeder Stockpiles	1972		None	EP01.02	EP0X.04 to EP01.02	None
EP0X.05	Quarry Waste Stockpiles	1972		None	None	None	None
EP01.03	Discharge to Surge Bin	1943 and 1982	805 TPH	PE CD01.03	EP01.04	EP01.03 to EP01.04 and	None
					EP01.07	EP01.07	None
EP01.04	Conveying Equipment	1943 and 1982	805 TPH	FE CD01.04	EP01.05	EP01.04 to EP01.05	FE
EP01.05	Conveying Equipment	1943 and 1982	805 TPH	FE CD01.05	EP02.01	EP01.05 to EP02.01	FE
EP01.06	Reclaim Scalper	1955 and 1971	750 TPH	None	EP01.03	EP01.06 to EP01.03	None
EP01.07	Discharge to Surge Pile		805 TPH	None	EP01.08	EP01.07 to EP01.08	None
EP01.08	Load/Unload Surge Stone		805 TPH	None	None	None	None
<b>Secondary Crushing Group 002</b>							
EP02.01	Secondary Crusher and Screens 8' X 16' Screen	1966 and 1982	805 TPH	Baghouse CD02.01	CD02.01	EP02.01 to CD02.01	Baghouse
					EP02.02	EP02.01 to EP02.02	Baghouse
CD02.01	Baghouse for Secondary Crusher and Screens	1990	46,000 cfm at 70 degrees F	Stack 002	Stack 2	CD02.01 to Stack 2	None
EP02.02	Conveying Equipment	1965 and 1982	805 TPH	DSWs CD02.02A and FE CD02.02B	EP02.03	EP02.02 to EP02.03	DS and PE
					EP02.04	EP02.02 to EP02.04	DS
EP02.03	Conveying Equipment - Belt Discharge to Material Storage	1965 and 1982	805 TPH	DSWS and PE	EP03.01	EP02.03 to EP03.01	PE
EP02.04	999 Belt Discharge to Stone Stockpile	1965 and 1982	805 TPH	DSWS	EP03.03	EP02.04 to EP03.03	None

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
<b>Tertiary Crushing Group 003</b>							
EP03.01	Raw Material Storage	1966 and 1971	0.860 ft <sup>2</sup>	PE CD03.01	EP03.02	EP03.01 to EP03.02	PE
	Bay 1 for Cement Rock				EP03.04	EP03.01 to EP03.04	PE
	Bay 2 for Cement Rock				EP04.01	EP03.01 to EP04.01	None
	Bay 3 for Cement Rock				EP05.01	EP03.01 to EP05.01	FE
	Bay 4 for Shale				EP05.03	EP03.01 to EP05.03	FE
	Bay 5 for Limestone				CD03.01	EP03.01 to CD03.01	None
EP03.02	Material Loading /Unloading (Stone Bays)	1971	805 TPH	PE CD03.02	EP03.01	EP03.02 to EP03.01	PE
					CD03.02	EP03.02 to CD03.02	None
EP03.03	Outside Stone Stockpiles	1971		None	EP03.04	EP03.03 to EP03.04	None
					EP03.02	EP03.03 to EP03.02	PE
EP03.04	Loading/Unloading	1971	805 TPH	None	EP03.03	EP03.04 to EP03.03	None
EP04.01	Number 1 Tertiary Conveying Equipment to #5&#7 Raw STG Bins	1965 and 1971	240 TPH	FE CD06.01	EP04.03	EP04.01 to EP04.03	Baghouse
					EP05.01	EP04.01 to EP05.06	CD05.01
EP04.03	Number 1 Tertiary Screens and Elevator	1965 and 1971	240 TPH	Baghouse CD04.03	EP04.02	EP04.03 to EP04.02	Baghouse
					EP06.01	EP04.03 to EP06.01	FE
					EP07.01	EP04.03 to EP07.01	CD07.01
					CD04.03	EP04.03 to CD04.03	Stack 3
EP04.02	Tertiary Crusher Number 1	1965 and 1971	240 TPH	Baghouse CD04.02	CD04.02	EP04.02 to CD04.02	Stack 4
					EP04.03	EP04.02 to EP04.03	Baghouse
CD04.03	Baghouse for Number 1 Tertiary Screens and Elevator	1966	10,800 cfm	Stack 003	EP04.03	CD04.03 to EP04.03	Stack 3
CD04.02	Baghouse for Tertiary Crusher Number 1	1981	4,100 cfm	Stack 004	EP04.03	CD04.02 to EP04.03	Baghouse
					Stack 4	CD04.02 to Stack 4	None

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
EP05.01	Number 2 Tertiary Conveying Equipment to #2 Tertiary Crusher	1965 and 1971	240 TPH	FE CD05.01	CD05.01	EP05.01 to CD05.01	FE
					EP04.03	EP05.01 to EP04.03	Baghouse
					EP05.06	EP05.01 to EP05.06	Baghouse
EP05.06	Number 2 Tertiary Screens and Elevator Manufacture: Tyer, Rexord	1965 and 1971	240 TPH	Baghouse CD05.06	EP05.02	EP05.06 to EP05.02	Baghouse
					EP08.01	EP05.06 to EP08.01	FE
					CD05.06	EP05.06 to CD05.06	Baghouse
EP05.02	Tertiary Crusher Number 2 Manufacture: Pennsylvania Crusher	1965 and 1971	240 TPH	Baghouse CD05.02	EP05.06	EP05.02 to EP05.06	Baghouse
					CD05.02	EP05.02 to CD05.02	Baghouse
CD05.02	Baghouse for Tertiary Crusher Number 2 Manufacture: Torrit	1981	4,100 cfm	Stack 006	EP05.02	CD05.02 to EP05.02	Baghouse
					Stack 6	CD05.02 to Stack 6	None
CD05.06	Baghouse for Number 2 Tertiary Screens and Elevator Manufacture: Buell - Norblo	1966	10,800 cfm	Stack 005	EP05.06	CD05.06 to EP05.06	Baghouse
					Stack 5	CD05.06 to Stack 5	None
EP05.04	Material Unloading	1965 and 1971	200 TPH	DSWs CD05.04A PE	CD05.04 A	EP05.04 to CD05.04A	PE
					EP05.05	EP05.04 to EP05.05	FE
CD05.04A	Wet Material			PE CD05.04B	CD05.04 B	CD05.04A to CD05.04B	None
EP05.05	Conveying Equipment	1965 and 1971	200 TPH	FE CD05.05	EP04.03	EP05.05 to EP04.03	Baghouse
					EP05.06	EP05.05 to EP05.06	Baghouse
EP05.03	Conveying Equipment	1965 and 1971	50 TPH	FE CD05.03	EP17.01	EP05.04 to EP17.01	Baghouse
EP06.01	Conveying Equipment	1965 and 1971	120 TPH	FE CD06.01	EP09.01	EP06.01 to EP09.01	None
EP07.01	Conveying Equipment in a Building	1965 and 1971	120 TPH	FE CD07.01	EP09.01	EP07.01 to EP09.01	None
CD07.01	Conveyor Equipment is Enclosed within Tertiary Grinding Building	1965 and 1971	120 TPH	PE CD07.01	ATM	CD07.01 to Atmosphere (ATM)	None
	Control Efficiency: 80.0 %						
EP08.01	Conveying Equipment	1965 and 1971	120 TPH	FE CD08.01	EP09.01	EP08.01 to EP09.01	None

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
EP09.01	Slurry Storage, Handling, and Raw Mills	1965 and 1971	360 TPH	None	EP10.01	EP09.01 to EP10.01	Cyclone ESP
					EP11.01		
					EP12.01	EP09.01 to EP12.01	Cyclone ESP
<b>Kiln Number 7 Group 006</b>							
EP10.01	Number 7 Kiln	1955 and 1971	35 TPH 33.0 Short Tons/hr or 31.7 Metric Tons/hr	Cyclone CD10.01B and ESP CD10.01C	CD10.01 A	EP10.01 to CD.10.01A	Cyclone and ESP
	Manufacture: Traylor				EP10.02	EP10.01 to EP10.02	Baghouse
CD10.01A	Settling Chamber	1955		Cyclone CD10.01B	CD10.01 B	CD10.01A to CD10.01B	Cyclone
	Manufacture: Traylor						
CD10.01B	Number 7 Cyclones (7BC)	1955		ESP CD10.01C	CD10.01 C	CD10.01B to CD10.01C	ESP
	Manufacture: Buell						
CD10.01C	Number 7 Electro Static Precipitator (ESP)	1963		Stack 008	EP13.01	CD10.01C to EP13.01	Baghouse
	Manufacture: Western Precipitator				EP13.02	CD10.01C to EP13.02	Baghouse
EP10.03	Number 7 Kiln Torch	1971	140 gallons/hr of 1000 Gallons Fuel Oil Burned	None	EP10.01	EP10.03 to EP10.01	Cyclone and ESP
	Manufacture: Fuller Company						
EP10.02	Number 7 Kiln Clinker Cooler	1955, 1971, 06/04/00	35.0 short tons/hr or 31.7 metric tons/hr; 35 LB / ton Clinker	Baghouse CD.10.02	CD10.02	EP10.02 to CD.10.02	Baghouse
	Manufacture: Fuller Company				EP10.04	EP10.02 to EP10.04	PE
CD10.02	Number 7 Kiln Clinker Cooler Dust Filter (Baghouse)	1975 and 2000	93,000 ACFM at 350 °F <sup>(2)</sup> Emission Limits are: 6.11 LB/hr and 26.7 TPY of PM	Stack 009	EP10.04	CD.10.02 to EP10.04	Baghouse
	Manufacture: Micro-Pulse				Stack 9	CD.10.02 to Stack 9	None
EP10.04	Conveying Equipment for #3 and #5 Drags Plus Elevator	1955 & 1971	128 Tons Cement Produced	CD10.04 PE	EP14.01	EP10.04 to EP14.01	DSCS
EP10.05	Conveying Equipment for #7 Drags Plus Elevator	06/04/00	35 Tons Cement Produced	CD10.05 PE	EP14.01	EP10.05 to EP14.01	DSCS
	Manufacture: Aumund Louise						

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
<b>Kiln Number 8 Group 007</b>							
EP11.01	Number 8 Kiln	1958 and 1971	35.0 Tons of Clinker / hour 33.0 Short Tons/hr or 31.7 Metric Tons/hr;	Cyclone CD11.01B and ESP CD11.01C	EP11.02	EP11.01 to EP11.02	Cyclone and ESP
	Manufacture: Tralyor				CD11.01A	EP11.01 to CD11.01A	Baghouse
CD11.01A	Settling Chamber	1958		Cyclone CD11.01B and ESP CD11.01C	CD11.01B	CD11.01A to CD11.01B	Cyclone
	Manufacture: Tralyor						
CD11.01B	Number 8 Cyclone	1958		ESP CD11.01C	CD11.01C	CD11.01B to CD11.01C	ESP
	Manufacture: Buell						
CD11.01C	Number 8 Electro Static Precipitator (ESP)	1963		Stack 007	Stack 007	CD11.01C to Stack 007	None
	Manufacture: Western Precipitator				EP13.01	CD11.01C to EP13.01	Baghouse
					EP13.02	CD11.01C to EP13.02	Baghouse
EP11.03	Number 8 Kiln Torch	1971	140 gallons/hr of 1000 Gallons Fuel Oil Burned	None	EP11.01	EP11.03 to EP11.01	Cyclone and ESP
	Manufacture: Hauck						
EP11.04	Conveying Equipment for #8 Drags Plus Elevator	07/23/03	35 Tons Cement Produced	CD11.04 PE	EP10.04	EP11.04 to EP10.04	DSCS
	Manufacture: Aumund Louise						
EP11.02	Number 8 Kiln Clinker Cooler	1958, 1971, 07/23/00	35.0 short tons/hr or 31.7 metric tons/hr	Baghouse CD11.02	CD11.02	EP11.02 to CD11.02	Baghouse
	Manufacture: Fuller Company				EP10.04	EP11.02 to EP10.04	PE
CD11.02	Number 8 Kiln Clinker Cooler Dust Filter	1975 and	93,000 ACFM at 350 °F <sup>(2)</sup> Emission Limits are: 6.11 LB/hr and 26.7 TPY of PM	Stack 010	EP10.04	CD11.02 to EP10.04	Baghouse
	Manufacture: Mikropul				Stack 10	CD11.02 to Stack 10	None
<b>Kiln Number 9 Group 012</b>							
EP12.01	Number 9 Kiln	1966 and 1971	58.0 TPH 53.0 short tons/hr or 52.6 metric tons/hr	ESP CD12.01B	CD12.01 A	EP12.01 to CD.12.01A	ESP
	Manufacture: Tralyor				EP12.02	EP12.01 to EP12.02	Baghouse

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
CD12.01A	Settling Chamber Manufacture: Fuller	1966		ESP CD12.01B	CD12.01 B	CD12.01A to CD12.01B	ESP
CD12.01B	Number 9 Electro Static Precipitator Manufacture: Western Precipitator	1965		Stack 008	EP13.01	CD12.01B to EP13.01	Baghouse
	EP13.02				CD12.01B to EP13.02	Baghouse	
EP12.04	Number 9 Kiln Torch Manufacture: Hauck	1966 and 1971	140 gallons/hr of 1000 Gallons Fuel Oil Burned	None	EP12.01	EP12.04 to EP12.01	None
EP12.02	Number 9 Kiln Clinker Cooler Manufacture: Fuller Company	1966 and 1971	58.0 Tons of Cement Per Hour	Baghouse CD10.02	CD12.02	EP12.02 to CD12.02	Baghouse
	EP12.03				EP12.02 to EP12.03	PE	
CD12.02	Number 9 Kiln Clinker Cooler Dust Filter (Baghouse) Manufacture: Micro - Pulse	1975	Temperature <sup>(2)</sup>	Stack 011	EP10.04	CD12.02 to EP10.04	PE
	Stack 11				CD12.02 to Stack 11	None	
EP12.03	Conveying Equipment	1977	58.0 Tons of Cement Per Hour	Baghouse CD12.03	CD12.03	EP12.03 to CD12.03	Baghouse
					EP12.05	EP12.03 to EP12.05	None
CD12.03A	Baghouse for Conveying Equipment Manufacture: DCE Vokes	1985	1,700 cfm @ 200 degree. F @ 9" SP	Stack 012	Stack 12	CD12.03 Stack 12	None
EP12.05	Conveying Equipment #2 and #4 Drags Plus Elevator		58.0 TPH	PE CD12.05	EP10.04	EP12.05 to EP10.04	PE
					EP14.05	EP12.05 to EP14.05	PE
<b>Dust Bin Waste Group 013</b>							
EP13.01	Dust Bin Waste Manufacture: Highland Tank	1991	200 Tons	Baghouse CD13.01	CD13.01	EP13.01 to CD13.01	Baghouse
					ED13.03	EP13.01 to ED13.03	Baghouse
					ED13.04	EP13.01 to ED13.04	Baghouse
CD13.01	Baghouse for Dust Bin Waste Manufacture: Micro - Pulse	1991	1,700 cfm @ 70 degree. F. @ 8" SP	Stack 013	Stack 13	CD13.01 to Stack 13	None
EP13.02	Dust Bin Waste - Return Manufacture: Highland Tank	1991	250 Tons	Baghouse CD13.02	CD13.02	EP13.02 to CD13.02	Baghouse
	ED13.05				EP13.02 to ED13.05	Baghouse	

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device <sup>(1)</sup>

CD13.02	Baghouse for Dust Bin Waste	1991	1,700 cfm @ 70 degree. F. @ 8" SP	Stack 014	Stack 14	CD13.02 to Stack 14	None
	Manufacture: Micro - Pulse						
EP13.03	Dust Loadout to Customer	1991	50 Tons	Baghouse CD13.03	CD13.03	EP13.03 to CD13.03	Baghouse
CD13.03	Baghouse for Dust Loadout Customer	1991	1,700 cfm @ 70 degree. F. @ 8" SP	Stack 015	EP13.03	CD13.03 to EP13.03	Baghouse
	Manufacture: Micro - Pulse				Stack 15	CD13.03 to Stack 15	None
EP13.04	Dust Loadout	1991	50 Tons	Nodulizer CD13.04	CD13.04	EP13.04 to CD13.04	Nodulizer
					EP13.05	EP13.04 to EP13.06	None
CD13.04	Nodulizer	1972		None	EP13.04	CD13.04 to EP13.04	None
					CD13.04	EP13.04 to CD13.04	Nodulizer
EP13.05	Dust Return Pump Feed Screw	1991	25 Tons	Baghouse Baghouse CD13.05	CD13.05	EP13.05 to CD13.05	Baghouse
					EP10.01	EP13.05 to EP10.01	CD10.01C
					EP11.01	EP13.05 to EP11.01	CD11.01C
					EP12.01	EP13.05 to EP12.01	CD12.01B
CD13.05	Baghouse for Dust Return Pump Feed Screw	1991	1,700 cfm @ 70 degree. F. @ 8" SP	Stack 016	Stack 16	CD13.05 to Stack 16	Stack 16
	Manufacture: Micro - Pulse						
EP13.06	Clinker Kiln Dust Loading and Unloading by Truck		50 Tons	None	EP13.07	EP13.06 to EP13.07	None
					Customer	EP13.06 to Customer	None
EP13.07	Clinker Kiln Dust Stockpile			None	EP13.06	EP13.07 to EP13.06	None
EP13.08	Dust Scoop Storage Bin for #8 Kiln	01/27/1999	12 TPH	CD13.08	CD13.08	EP13.08 to CD13.08	Baghouse
					EP11.01	EP13.08 to EP11.01	EP11.01
EP13.09	#8 Kiln Dust Scoop	1999	12 TPH	EP11.01	EP11.01	EP13.09 to EP11.01	EP11.01
					CD13.09	EP13.09 to CD13.09	Baghouse
CD13.08	Dust Filter for #8 Kiln Dust Scoop Storage Bin	1999	2,100 SCFM	Stack	Fan	CD13.08 to Fan to	None

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device <sup>(1)</sup>
	Manufacture: Industrial Accessories Company					Atmosphere	

The Handling of Clinker Group 014							
EP14.01	Clinker Discharge	1955 and 1971	128 TPH	DSCS CD14.01A	EP14.02	EP14.01 to EP14.02	DS & PE
					CD14.01A	EP14.01 to CD14.01A	DS
CD14.01A	Dust Suppressant by Chemical Stabilization / Wetting a (DSCS)	1992		PE CD14.01B	CD14.01B	CD14.01A to CD14.01B	FE
CD14.01B	Stacker	1981		FE	None	None	None
EP14.02	Conveying Equipment	1955 and 1971	128 TPH	PE CD14.02A	CD14.02A	EP14.02 to CD14.02A	PE
					EP14.04	EP14.02 to EP14.04	PE
CD14.02A	Dust Suppressant by Chemical Stabilization / Wetting a (DSCS)	1992		PE CD14.04B	None	None	None
EP14.04	Stockpile	1955 and 1971	1.16 Acres	PE CD14.04	EP14.03	EP14.04 to EP14.03	PE
					EP14.05	EP14.04 to EP14.05	PE
EP14.03	Conveying Equipment	1955 and 1971	177 TPH	PE CD14.03	EP16.01	EP14.03 to EP16.01	Baghouse
					EP17.01	EP14.03 to EP17.01	Baghouse
					EP19.01	EP14.03 to EP18.01	Baghouse
					EP19.01	EP14.03 to EP19.01	Baghouse
EP14.06	Loading and Unloading Clinker	1971	150 TPH	PE CD14.06	EP14.04	EP14.06 to EP14.04	PE
EP14.08	Loading /Unloading (Portable Crusher) Outside Clinker Stockpile		540 Tons of Cement Produced per Hour	None	EP14.08	EP14.07 to EP14.08	None
					EP14.04	EP14.08 to EP14.04	PE
EP14.05	Reclaim Screen	1992	100 TPH	PE CD14.05	EP14.08	EP14.05 to EP14.08	PE
	Manufacture: Reed						
EP14.07	Outside Clinker Stockpile	1971		None	EP14.08	EP14.07 to EP14.08	PE
	Truck Loading/Unloading Clinker2or Other Equipment to Reclaim Screen			None	EP14.05	Truck to EP14.05	PE
Coal Handling Group 015							
EP15.01	Unloading Rail Road Hopper - Coal/Coke	1966 and 1972	300 TPH	PE CD15.01	EP15.02	EP15.01 to EP15.02	PE

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
EP15.02	Conveying Equipment -Coal/Coke:	1966 and 1972	300 TPH	PE CD15.02	EP15.03	EP15.02 to EP15.03	PE
EP15.03	Conveying Equipment - Coal/Coke:	1966 and 1972	300 TPH	None	EP15.04	EP15.03 to EP15.04	None

EP15.04	Stockpile-Coal/Coke	1965 and 1972	12,000 Tons 3.9 Acres	None	EP15.05	EP15.03 to EP15.05	None
EP15.11	Loading / Unloading of Coal / Coke	1972	200 TPH	None	EP15.04	EP15.11 to EP15.04	None
EP15.05	Conveying Equipment -Coal/Coke:	1965 and 1972	50 TPH	FE CD15.05	EP15.06	EP15.05 to EP15.06	FE
EP15.06	Crusher -Coal/Coke	1965 and 1971	50 TPH	FE CD15.06	EP15.07	EP15.06 to EP15.07	FE
	Manufacture: Jeffrey Manufacturing Company				EP15.08	EP15.06 to EP15.08	FE
EP15.07	Conveying Equipment -Coal/Coke to #9 Kiln	1965 and 1972	16 TPH	FE CD15.07	EP10.01	EP15.07 to EP10.01	Cyclone and ESP
					EP10.01	EP15.07 to EP11.01	Cyclone and ESP
					EP10.01	EP15.07 to EP12.01	ESP
EP15.08	Conveying Equipment -Coal/Coke to #7 and #8 Kilns	1965 and 1972	50 TPH	FE CD15.08	EP15.09	EP15.08 to EP15.09	FE
					EP15.10	EP15.08 to EP15.10	FE
EP15.09	Conveying Equipment -Coal/Coke to #8 Kiln	1965 and 1972	10 TPH	FE CD15.09	EP10.01	EP15.09 to EP10.01	Cyclone and ESP
					EP10.01	EP15.09 to EP11.01	Cyclone and ESP
					EP10.01	EP15.09 to EP12.01	ESP
EP15.10	Conveying Equipment -Coal/Coke to #7 Kiln	1965 and 1972	10 TPH	FE CD15.10	EP10.01	EP15.10 to EP10.01	Cyclone and ESP
					EP10.01	EP15.10 to EP11.01	Cyclone and ESP
					EP10.01	EP15.10 to EP12.01	ESP

**Finish Mill Number 7 Group 016**

EP16.01	Conveying Equipment #7 Mill	1955 and 1971	30 TPH	Baghouse CD16.01	EP16.02	EP16.01 to EP16.02	Baghouse
					CD16.01	EP16.01 to CD16.01	Baghouse
CD16.01	Baghouse for Conveying Equipment -Number 7 Finish Mill	1975	24,000 cfm	Stack 017	Stack 17	CD16.01 to Stack 17	None
	Manufacture: Envirotech						

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device <sup>(1)</sup>

EP16.02	Finish Mill Number 7	1955 and 1971	30 TPH	Baghouse CD16.02	CD16.02	EP16.02 to CD16.02	Baghouse
	Manufacture: Tralyor Manufacturing Company				EP20.01	EP16.02 to EP20.01	Baghouse
					EP21.01	EP16.02 to EP21.01	Baghouse
					EP21.02	EP16.02 to EP21.02	Baghouse
					EP22.01	EP16.02 to EP22.01	Baghouse
CD16.02	Baghouse for Finish Mill # 7	1982	6,000 cfm	Stack 018	Stack 18	CD16.02 to Stack 18	None
<b>Finish Mill Number 8 Group 017</b>							
EP17.01	Conveying Equipment	1958 and 1971	32 TPH	Baghouse CD17.01	CD17.01	EP17.01 to CD17.01	Baghouse
	Manufacture: Tralyor Manufacturing Company				EP20.01	EP17.01 to EP20.01	Baghouse
					EP21.01	EP17.01 to EP21.01	Baghouse
					EP21.02	EP17.01 to EP21.02	Baghouse
					EP22.01	EP17.01 to EP22.01	Baghouse
CD17.01	Baghouse for Conveying Equipment –Number 8 Finish Mill	1975	32,000 cfm	Stack 019	EP17.01	CD17.01 to EP17.01	Baghouse
	Manufacture: Envirotech				Stack 19	CD17.01 to Stack 19	None
<b>Finish Mill Number 9 Group 018</b>							
EP18.01	Conveying Equipment:	1959 and 1971	30 TPH	Baghouse CD18.01	CD18.01	EP18.01 to CD18.01	Baghouse
CD18.01	Baghouse for Conveying Equipment –Number 9 Finish Mill	1975	24,000 cfm	Stack 020	EP18.01	CD18.01 to EP18.01	Baghouse
	Manufacture: Envirotech				Stack 20	CD18.01 to Stack 20	None
EP18.02	Finish Mill Number 9	1959 and 1971	30 TPH	Baghouse CD18.02	CD18.02	EP18.02 to CD18.02	Baghouse
	Manufacture: Tralyor Manufacturing Company				EP20.01	EP18.02 to EP20.01	Baghouse
					EP21.01	EP18.02 to EP21.01	Baghouse

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
					EP21.02	EP18.02 to EP21.02	Baghouse
EP22.01	EP18.02 to EP22.01	Baghouse					
CD18.02	Baghouse for Finish Mill # 9	1982	6,000 cfm	Stack 021	EP18.02	CD18.02 to EP18.02	Baghouse
	Manufacture: Torrit				Stack 21	CD18.02 to Stack 21	None

Finish Mill Number 10 Group 019							
EP19.01	Conveying Equipment:	1965 and 1986	85 TPH	Baghouse CD19.01	CD19.01	EP19.01 to CD19.01	Baghouse
CD19.01	Baghouse for Conveying Equipment--Number 10 Finish Mill	1986	20,000 cfm	Stack 023	EP19.01	CD19.01 to EP19.01	Baghouse
	Manufacture: Envirotech				Stack 23	CD19.01 to Stack 23	None
	Type of Filter: Fabric						
EP19.02Pb	Finish Mill Number 10	1965 and 1986	85 TPH	Baghouse CD19.02	CD19.02	EP19.02 to CD19.02	Baghouse
	Manufacture: Traylor Manufacturing Company				EP20.01	EP19.02 to EP20.01	Baghouse
					EP21.01	EP19.02 to EP21.01	Baghouse
					EP21.02	EP19.02 to EP21.02	Baghouse
CD19.02	Baghouse for Finish Mill # 10	1986	58,500 cfm @ 176 degree F @ 27" SP	Stack 022	EP19.02	CD19.02 to EP19.02	Baghouse
	Manufacture: Fuller Plenum-Pulse				Stack 22	CD19.02 to Stack 22	None

East Bank Silos Group 020							
EP20.01	East Bank Silos [30 through 45] (16 Silos) Manufacture: Martin Marietta	1955 and 1971	21,848 Tons 145 TPH	Baghouse CD20.01	CD20.01	EP20.01 to CD20.01	Baghouse
					EP20.02	EP20.01 to EP20.02	Baghouse
					EP20.03	EP20.01 to EP20.03	Baghouse
					EP23.06	EP20.01 to EP23.06	Baghouse
					EP23.01	EP20.01 to EP23.01	Baghouse
					EP23.02	EP20.01 to EP23.02	Baghouse
					EP24.01	EP20.01 to EP24.01	Baghouse
					EP24.04	EP20.01 to EP24.04	Baghouse

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
CD20.01	Baghouse for East Bank Silos [30 through 45]	1970	14,000 cfm	Stack 024	EP20.01	CD20.01 to EP20.01	Baghouse
	Stack 24				CD20.01 to Stack 24	None	
EP20.03	Silo Loadout 33	1955 and 1971	100 TPH	Baghouse CD20.03	CD20.03	EP20.03 to CD20.03	Baghouse
	Manufacture: Martin Marietta						

CD20.03	Baghouse for Silo Loadout 33	1971	1,200 cfm	Stack 026	EP20.03	CD20.03 to EP20.03	Baghouse
	Manufacture: Buell – Norblo				Stack 26	CD20.03 to Stack 26	None
CD20.02	Baghouse	1971	1,200 cfm	Stack 025	EP20.02	CD20.02 to EP20.02	Baghouse
	Manufacture: Buell – Norblo				Stack 25	CD20.02 to Stack 25	None
EP20.02	Silo Loadout 31	1955 and 1971	100 TPH	Baghouse CD20.02	CD20.02	EP20.02 to CD20.02	Baghouse
	Manufacture: Martin Marietta						

**Middle Bank Silos Group 021**

EP21.01	Middle Bank Silos [50 through 65] Manufacture: Martin Marietta	1957 and 1971	20,833 Tons 177 TPH	Baghouse CD21.01	CD21.01	EP21.01 to CD21.01	Baghouse
					EP21.03	EP21.01 to EP21.03	Baghouse
					EP21.04	EP21.01 to EP21.04	Baghouse
					EP23.03	EP21.01 to EP23.03	Baghouse
					EP23.04	EP21.01 to EP23.04	Baghouse
					EP23.05	EP21.01 to EP23.05	Baghouse
					EP23.06	EP21.01 to EP23.06	Baghouse
CD21.01	Baghouse for Middle Bank Silos Manufacture: W. W. Sly	1966	4,000 cfm	Stack 027	EP21.01	CD21.01 to EP21.01	Baghouse
					Stack 27	CD21.01 to Stack 27	None
EP21.02	Silos - Masonry Manufacture: Martin Marietta	1957 and 1971	5,117 Tons 32.0 TPH	Baghouse CD21.02	CD21.02	EP21.02 to CD21.02	Baghouse
					EP21.03	EP21.02 to EP21.03	Baghouse
					EP21.04	EP21.02 to EP21.04	Baghouse
					EP23.03	EP21.02 to EP23.03	Baghouse
					EP23.04	EP21.02 to EP23.04	Baghouse

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
CD21.02	Baghouse for Masonry Silos		15,000 cfm	Stack 028	EP23.05	EP21.02 to EP23.05	Baghouse
	EP23.06				EP21.02 to EP23.08	Baghouse	
CD21.02	Manufacture: Buell – Norblo		15,000 cfm	Stack 028	EP21.02	CD21.02 to EP21.02	Baghouse
	Stack 28				CD21.02 to Stack 28	None	

EP21.03	Silo Loadout 51	1957 and 1971	100 TPH	Baghouse CD21.03	CD21.03	EP21.03 to CD21.03	Baghouse
	Manufacture: Martin Marietta						
CD21.03	Baghouse for Silo Loadout 51	1973	1,200 cfm	Stack 029	EP21.03	CD21.03 to EP21.03	Baghouse
	Manufacture: Buell – Norblo						
EP21.04	Silo Loadout 53	1957 and 1971	100 TPH	Baghouse CD21.04	CD21.04	EP21.04 to CD21.04	Baghouse
	Manufacture: Martin Marietta						
CD21.04	Baghouse for Silo Loadout 53	1973	1,200 cfm	Stack 030	EP21.04	CD21.04 to EP21.04	Baghouse
	Manufacture: Buell – Norblo				Stack 30	CD21.04 to Stack 30	None

**West Bank Silos Group 022**

EP22.01	West Bank Silos [70 to 85]	1964 and 1971	21,484 Tons 145 TPH	Baghouse CD22.01	CD22.01	EP22.01 to CD22.01	Baghouse	
						EP21.03	EP22.01 to EP22.02	Baghouse
						EP21.04	EP22.01 to EP22.03	Baghouse
						EP23.03	EP22.01 to EP23.03	Baghouse
						EP23.04	EP22.01 to EP23.04	Baghouse
						EP23.05	EP22.01 to EP23.05	Baghouse
						EP23.06	EP22.01 to EP23.08	Baghouse
						EP24.01	EP22.01 to EP24.01	Baghouse
						EP24.02	EP22.01 to EP24.02	Baghouse
CD22.01	Baghouse for West Bank Silos [70 to 85]	1973	9,300 cfm	Stack 031	EP22.01	CD22.01 to EP22.01	Baghouse	
	Manufacture: Buell- Norblo				Stack 31	CD22.01 to Stack31	None	
EP22.02	Silo Loadout 71	1964 and 1971	100 TPH	Baghouse CD22.03	CD22.03	EP22.03 to CD22.03	Baghouse	
	Manufacture: Martin Marietta							
CD22.02	Baghouse for Silo Loadout 71	1973	1,200 cfm	Stack 032	EP22.03	CD22.03 to EP22.03	Baghouse	
	Manufacture: Buell - Norblo							

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
					Stack 32	CD22.03 to Stack 32	None
EP22.03	Silo Loadout 73 Manufacture: Martin Marietta	1964 and 1971	100 TPH	Baghouse CD22.03	CD22.04	EP22.04 to CD22.04	Baghouse
CD22.03	Baghouse for Silo Loadout 73 Manufacture: Buell - Norblo	1973	1,200 cfm	Stack 033	EP22.04	CD22.04 to EP22.04	Baghouse
	Stack 33				CD22.04 to Stack 33	None	

Loadout and Packaging Group 023							
EP23.01	Packer - Northeast Manufacture: St. Regis Corp.	1956 and 1971	62 TPH	Baghouse CD23.01	CD23.01	EP23.01 to CD23.01	Baghouse
CD23.01	Baghouse for Northeast Packer Manufacture: Industrial Accessories Company	1997	9,680 ACFM at 100 °F	Stack 034	EP23.01	CD23.01 to EP23.01	None
EP23.02	Packer - Southeast Manufacture: St. Regis Corp.	1956 and 1971	62 TPH	Baghouse CD23.02	CD23.02	EP23.02 to CD23.02	Baghouse
	EP23.07				EP23.02 to EP23.07	FE	
CD23.02	Baghouse for Southeast Packer Manufacture: Industrial Accessories Company	1997	9,680 ACFM at 100 °F	Stack 035	EP23.02	CD23.02 to EP23.02	Baghouse
	Stack 35				CD23.02 to Stack 35	None	
EP23.03	Packer - Northwest Manufacture: St. Regis Corp.	1958 and 1971	62 TPH	Baghouse CD23.03	CD23.02	EP23.03 to CD23.03	Baghouse
	EP23.07				EP23.03 to EP23.07	FE	
CD23.03	Baghouse for Northwest Packer Manufacture: W. W. Sly	1956	9,680 cfm	Stack 038	EP23.03	CD23.03 to EP23.03	Baghouse
	Stack 38				CD23.03 to Stack 38	None	
EP23.04	Packer - Southwest Manufacture: St. Regis Corp.	1978	62 TPH	Baghouse CD23.04	CD23.04	EP23.04 to CD23.04	Baghouse
	EP23.07				EP23.04 to EP23.07	FE	
CD23.04	Baghouse for Southwest Packer Manufacture: Eastern Control	1958	11,627 cfm	Stack 037	EP24.04	CD23.04 to EP23.04	Baghouse
	Stack 37				CD23.04 to Stack 37	None	
EP23.05	Loadout - Southwest	1957 and 1971	100 TPH	Baghouse CD23.05	CD23.05	EP23.05 to CD23.05	Baghouse
CD23.05	Baghouse for Southwest Loadout Manufacture: Eastern Control	1976	6,000 cfm	Stack 039	EP24.05	CD23.05 to EP23.05	Baghouse
	Stack 39				CD23.05 to Stack 39	None	

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
EP23.06	Loadout - Southeast	1955 and 1971	100 TPH	Baghouse CD23.06	CD23.06	EP23.06 to CD23.06	Baghouse
CD23.06	Baghouse for Southeast Loadout	1974	5,700 cfm	Stack 036	EP24.06	CD23.06 to EP23.06	Baghouse
	Manufacture: Buell – Norblo				Stack 36	CD23.06 to Stack 36	None
EP23.07	Palletizer and Conveyor	1972	56 TPH	FE	CD23.07	EP23.07 to CD23.07	FE
	Manufacture: Lawson Division			CD23.07			

EP23.08	Loadout - Northwest	1957 and 1971	50 TPH	Baghouse CD23.04	CD23.04	EP23.08 to CD23.04	Baghouse
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**Bulk Loadout Group 024**

EP24.01	Bins – Bulk Loading Plant	1962 and 1971	5,736 Tons 320 TPH	Baghouse CD24.01	CD24.01	EP24.01 to CD24.01	Baghouse
CD24.01	Baghouse for Bins – Bulk Loading Plant	1959	8,000 cfm @ 12” SP @ 70 degree F	Stack 040	EP24.01	CD24.01 to EP24.01	Baghouse
	Manufacture: Fuller Plenum - Pulse				Stack 40	CD24.01 to Stack 40	None
EP24.02	Loading – North Bulk Loading Plant	1962 and 1971	125 TPH	Baghouse CD24.02	CD24.02	EP24.02 to CD24.02	Baghouse
CD24.02	Baghouse for Loading – North Bulk Loading Plant	1959	1,900 cfm	Stack 042	EP24.02	CD24.02 to EP24.02	Baghouse
	Manufacture: W.W. Sly				Stack 42	CD24.02 to Stack 42	None
EP24.03	Loading – South Bulk Loading Plant	1962 and 1971	125 TPH	Baghouse CD24.03	CD24.03	EP24.03 to CD24.03	Baghouse
CD24.03	Baghouse for Loading – South Bulk Loading Plant	1959	1,900 cfm	Stack 041	EP24.03	CD24.03 to EP24.03	Baghouse
	Manufacture: W. W. Sly				Stack 41	CD24.03 to Stack 41	None
EP24.04	Bins – Masonry Bulk Loading Plant	1962 and 1971	391 Tons 125 TPH	Baghouse CD24.04	CD24.04	EP24.04 to CD24.04	Baghouse
CD24.04	Baghouse for Bins – Masonry Bulk Loading Plant	1989	4,100 cfm @ 9” SP @ 70 degree F	Stack 044	EP24.04	CD24.04 to EP24.04	Baghouse
	Manufacture: Torrit				Stack 44	CD24.04 to Stack 44	None

**Haul Roads Group 025**

EP25.01	Quarry Haul Roads	1972	6.79 miles/hr	DSWS	None	None	None
EP25.02	Quarry Shale Haul Roads	1972	10.14 miles/hr	DSWS	None	None	None
EP25.03	Quarry Haul Roads	1972	18.55 miles/hr	DSWS	None	None	None
EP25.04	Cement Shipment Haul Roads	1972	16.88 miles/hr	DSWS	None	None	None
EP25.05	Sand AL, Etc. Haul Roads	1972	10.00 miles/hr	DSWS	None	None	None

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
EP25.06	Coal/Coke Haul Roads	1972	10.00 miles/hr	DSWS	None	None	None
EP25.08	Miscellaneous Haul Roads	1972	1.04 miles/hr	DSWS	None	None	None
EP25.09	Fly Ash Haul Roads	1972	4.40 miles/hr	DSWS	None	None	None
EP25.10	Customer Dust Haul Roads	1972	4.00 miles/hr	DSWS	None	None	None

EP25.11	Stone Bought/Sold Haul Roads	1972	20.00 miles/hr	DSWS	None	None	None
EP25.12	Gypsum Haul Roads Highway	1972	8.00 miles/hr	DSWS	None	None	None
EP25.13	Clinker Haul Roads Highway	1972	1.20 miles/hr	DSWS	None	None	None
EP25.14	Gypsum Haul Roads Plant Trucks	1972	6.00 miles/hr	DSWS	None	None	None
EP25.15	Clinker Haul Roads Plant	1972	11.20 miles/hr	DSWS	None	None	None
EPOX.03	Quarry Truck Loading and Unloading	1972	805.0 TPH	None	EP01.02	EP0X.03 to EP01.02	None
					EP0X.04	EP0X.03 to EP0X.04	None
					EP0X.05	EP0X.03 to EP0X.05	None

**Material Group 026**

EP26.01	Stockpile – Silica Bearing Material	1972	0.29 ft <sup>2</sup>	None	None	None	None
EP26.02	Material Unloading – Silica Bearing Material	1971	100 TPH	None	None	None	None
CD26.02	Wet Material			None	None	None	None
EP26.04	Material Unloading – Iron Bearing Material	1971	100 TPH	None	EP26.03	EP26.04 to EP26.03	None
EP26.03	Stockpile – Iron Bearing Material	1971	0.12 ft <sup>2</sup>	None	None	None	None
EP26.05	Stockpile – Gypsum Type Material	1971	0.46 ft <sup>2</sup>	None	EP26.06	EP26.05 to EP26.06	None
EP26.06	Material Load/Unload Gypsum Type Material	1971	100 TPH	None	EP26.05	EP26.06 to EP26.05	None
EP26.07	Stockpile – Aluminum Bearing Material	1971	0.06 ft <sup>2</sup>	None	None	None	None
EP26.08	Material Load/Unload Aluminum Bearing Material	1971	100 TPH	None	EP26.08	EP26.07 to EP26.08	None

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
<b>Parts Cleaner Group 027</b>							
EP27.01	Parts Cleaner	1987	6.0 LB of Cold Cleaner in Operation	Closed Lid CD27.01	None	None	None
CD27.01	Closed Lid	1987		None	None	None	None
<b>Group 028</b>							
EP28.01	Refrigerant Usage	1972	6.0 LB/hr	None	None	None	None

<b>Group 029</b>							
EP29.01	Fuel Storage Gas	1972	2.0/1000 gallons storage capacity	None	EP29.02	EP29.01 to EP29.02	None
EP29.02	Fuel Dispensing Gas	1966 and 1972	0.15/1000 gallons through put	None			
<b>Boiler Group 030</b>							
EP30.01	Boiler Manufacture: Clever Brookes	1966 and 1972	0.347 MMBtu/hr at 22.5 per gallons of oil	None	None	None	None
<b>Silo Flyash Group 031 (see Finish Mill – Flow Sheet CC-F-925)</b>							
	From Truck or Other Equipment			None	EP31.01	Truck to EP31.01	None
					EP31.02	Truck to EP31.02	None
EP31.01	Silo Flyash Manufacture: Highland Tank	1995	300 Tons	Baghouse CD31.01	CD31.01	EP31.01 to CD31.01	Baghouse
					EP17.01	EP31.01 to EP17.01	Baghouse
					EP19.01	EP31.01 to EP19.01	Baghouse
CD31.01	Baghouse for Silo Flyash Manufacture: Fuller Pulse Jet	1995	1,865 cfm @ 70 degree F	Stack 045	EP31.01	CD31.01 to EP31.01	Baghouse
					Stack 45	CD31.01 to Stack 45	None
EP31.02	Silo Flyash Manufacture: Highland Tank	1995	300 Tons	Baghouse CD31.02	EP31.03	EP31.02 to EP31.03	Baghouse

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
					EP17.01	EP31.01 to EP17.01	Baghouse
EP19.01	EP31.01 to EP19.01	Baghouse					
CD31.02	Baghouse for Silo Flyash	1995	20,000 cfm	Stack 046	EP31.02	CD31.02 to EP31.02	Baghouse
	Stack 46				CD31.02 to Stack 46	None	
EP31.03	Loadout Flyash	1995	50.0 TPH	Baghouse CD31.03	CD31.03	EP31.03 to CD31.03	Baghouse

CD31.03	Baghouse for Loadout Flyash	1995	500 cfm @ 5" SP	Stack 047	EP31.03	CD31.03 to EP31.03	Baghouse
	Stack 47				CD31.03 to Stack 47	None	

**Storage Tanks Group 032**

EP32.01	Oil Storage Tanks Underground	1946 through 1974	69,000 Gallons Total	None	None	None	None		
	Tanks in Emission Unit ID:								
	1							1966	10,000 Gallons
	2							1966	10,000 Gallons
	3							1966	10,000 Gallons
	4							1972	20,000 Gallons
	5							1974	4,000 Gallons
6	1946	15,000 Gallons							
EP32.02	Oil Storage Tanks Aboveground	1992	22,000 Gallons Total	None	None	None	None		
	Tanks in Emission Unit ID:								
	34							1992	2,000
	35							1992	2,000
	36							1992	2,000
	46							1999	2,000
	55							1999	2,000
	56							1999	15,000
6 Tanks	1999	≤550							

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
<b>Tanks Group 033</b>							
EP33.01	Additive (Totes) Tanks Exempt from emission levels		1,000 Gallons Each Throughput	None	None	None	None
<b>Group 034</b>							
EP34.01	Spill Cleanup Activities	1955	2.083 TPH 100.0 Tons of Cement Handled/hr	CD34.01	None	None	None
CD34.01	Vac Truck and Other Controls - Miscellaneous	1955		None	None	None	None

<b>Modern Precaliner Kiln System and Related Equipment</b>							
<b>Quarry and Crushing EU1</b>							
EP37.01	Truck (T1)	TBD	3,652,000 TPY	None		T1 to SB	
EP37.01	Small Bin (SB)	TBD	3,652,000 TPY	None		SB to C1	
EP37.01	Conveyor (C1)	TBD	3,652,000 TPY	None		C1 to C2	
EP37.01	Conveyor (C2)	TBD	3,652,000 TPY	None	NP104	C2 to F1	
EP37.02	Truck (T2)	TBD		None		T2 to LB	
EP37.02	Large Bin (LB)	TBD	3,652,000 TPY	None		LB to C2	
EP37.03	Feeder (F1)	TBD	3,395,680 TPY	CD37.03	NP104	F1 to C3	
EP37.03	Conveyor (C3)	TBD	3,395,680 TPY	CD37.03	NP104	C3 to SPT1	
EP37.03	Hammermill (H1)	TBD	3,395,680 TPY	CD37.03	NP104	H1 to F1	
CD37.03	New Primary Crusher D\C	TBD			NP104		
EP37.04	Split (SPT1)	TBD	3,395,680 TPY	None	NP105	SPT1 to SP 1 SPT1 to C4	
EP37.05	Surge Pile (SP 1)	TBD	3,652,000 TPY	None			
EP37.04	Split (SPT2)	TBD	3,395,680 TPY	CD37.04	NP105	SPT2 to TC1 SPT2 to BC1	
EP37.04	Conveyor (C4)	TBD	3,395,680 TPY	CD37.04	NP105	C4 to SPT2	

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
CD37.04	New Crushing System D\C1 Manufacture:	TBD			NP105		
EP37.06	Top Conveyor (TC 1)	TBD	3,395,680 TPY	CD37.06	NP107	TC1 to SW1	
EP37.06	Bottom Conveyor (BC 1)	TBD	3,395,680 TPY	CD37.06	NP107	BC1 to SPT3	
CD37.06	New Premix Storage Feeding D\C Manufacture:	TBD			NP107		
EP38.01	Swing Conveyor (SW1)	TBD	3,395,680 TPY	CD38.01	NP107	SW1 to SP 2	
EP38.01	Storage Pile (SP 2)	TBD	3,395,680 TPY	CD38.01	NP107	SP 2 to FD1 SP 2 to FD2	
EP38.02	Feeder 1 (FD1)	TBD	3,395,680 TPY	CD38.01	NP107	FD1 to BC1	
EP38.02	Feeder 2 (FD2)	TBD	3,395,680 TPY	CD38.01	NP107	STP1 to FD2 FD2 to BC1	
CD38.01	New Premix Storage Discharge D\C	TBD			NP107		

	End Loader (EL 1)	TBD	3,395,680 TPY		None	EL 1 to 1013	
EP01.03	Belt Conveyor 1013	TBD	3,395,680 TPY		NP100	1013 to 40TB	
EP01.04	40 Ton Bin (40TB)	TBD	3,395,680 TPY	CD01.03 PE	NP100	40TB to F40TB	
EP01.05	Feeder from 40 Ton Bin (F40TB)	TBD	3,395,680 TPY	CD01.03 PE	NP100	F40TB to 1011	
EP01.05	Belt Conveyor 1011	TBD	3,395,680 TPY	CD01.03 PE	NP100	1011 to 1007	
CD01.03BH	40 Ton Bin & Belt Conveyor 1013 D/C	TBD					
CD01.05BH	Belt Conveyors 1013 & 1011 D/C	TBD					
EP01.05	Belt Conveyor 1007	TBD	3,395,680 TPY	CD01.05 PE	NP101	1007 to SEC	
EP02.01	Secondary Crusher (SEC) and 8' X 16' Screen Manufacture: Simplicity, Tyler & Penn Crusher	TBD	805 TPH	CD02.01		SEC to 1000	
CD02.01	Secondary Crusher and Screens D/C	TBD	46,000 cfm at 70 degree F	Stack 2	Stack 2	CD02.01 to Stack 2	None
EP02.03	Belt Conveyor 1000	TBD	3,395,680 TPY	CD02.03A DSWS	NP102	1000 to 999	
EP02.03	Belt Conveyor 999	TBD	3,395,680 TPY	CD02.03A DSWS	NP102	999 to 998	
EP02.03	Shuttle Conveyor 998	TBD	3,395,680 TPY	CD02.03B PE	NP103	998 to CSSH	
	Raw Storage Hill CRSH	TBD					

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
EP46.01	Cement Receiving DC1 of Additive <b>Cement Consist of:</b>	TBD		CD46.01	NP141		
	Truck Dumping of Additive Cement						
	Truck Dumping to Conveyor (CDC1)						
	Conveyor (CDC1)						
	Conveyor (CDC1) to Conveyor (CDC2)						
Conveyor (CDC2)							
CD46.01	Cement Receiving DC1	TBD			NP141		
EP46.02	Cement Receiving DC2 of Additive <b>Cement Consist of:</b>	TBD		CD46.02	NP142		
	Conveyor (CDC2) to Conveyor (CDC3)						
	Conveyor (CDC3)						
CD46.02	Cement Receiving DC2	TBD			NP142		
EP46.03	Cement Receiving DC3 of Additive <b>Cement Consist of:</b>	TBD		CD46.03	NP143		
	Conveyor (CDC4)						
	Conveyor (CDC3) to Conveyor (CDC4)						

CD46.03	Cement Receiving DC3	TBD			NP143		
EP46.04	Cement Receiving DC4 of Additive <b>Cement Consist of:</b>	TBD		CD46.04	NP144		
	Conveyor (CDC5)						
	Conveyor (CDC4) to Conveyor (CDC5)						
	Stock Pile						
	Conveyor (CDC5) to Stock Pile (DC4A)						
	End Loader						
	Stock Pile (DC4A) to End Loader						
	End Loader to Conveyor (CDC6)						
Conveyor (CDC6)							
CD46.04	Cement Receiving DC4	TBD			NP144		
EP46.05	Cement Receiving DC5 of Additive <b>Cement Consist of:</b>	TBD		CD46.05	NP145	CDC5 to	
	Conveyor (CDC6) to Split (SPT DC5)						
	Split (SPT DC5)						
	Split (SPT DC5) to Stock Pile (SPDC5)						
	Stock Pile (SPDC5)						
	Split (SPT DC5) to Conveyor CDC7						
	Conveyor CDC7						
Conveyor CDC7 to Raw Material (EU2) Conveyor (C7) by Truck							
CD46.05	Cement Receiving DC5	TBD			NP145		
<b>Raw Material Preparation EU2</b>							
EP39.01	Split (SPT3)	TBD	3,395,680 TPY	CD39.01	NP108	STP3 to C5 SPT3 to LMB	
EP39.01	Conveyor (C5)	TBD	3,395,680 TPY	CD39.01	NP108	C5 to SB C5 to HB	

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
EP39.03	Limestone Mix Bin (LMB)	TBD	3,395,680 TPY	CD39.01	NP108	LMB to LBMF	
EP39.03	Shale Bin (SB)	TBD	339,568 TPY	CD39.01	NP108	SB to SBF	
EP39.04	High Bin (HB)	TBD	3,395,680 TPY	CD39.01	NP108	HB to	
EP39.03	Feeder (F3)	TBD	3,395,680 TPY	CD39.01	NP108	SB to F3	
EP39.03	Shale Bin Feeder (SBF)	TBD	3,395,680 TPY	CD39.01	NP108	SBF to C6	
EP39.03	Conveyor (C6)	TBD	3,395,680 TPY	CD39.01	NP108		
EP39.02	Limestone Mix Bin Feeder (LMBF)	TBD	3,395,680 TPY	CD39.01	NP108	LMBF to C6	
EP39.04	High Silo (HS)	TBD	3,395,680 TPY	CD39.01	NP108	HS to HSF	
EP39.04	High Silo Feeder (HSF)	TBD	3,395,680 TPY	CD39.01	NP108	HSF to C6	
CD39.01	New Limestone Silos Feeding D\C	TBD			NP108		

EP39.05	Additive Truck (T3)	TBD	248,286 TPY	CD39.05	NP109	T3 to C7	
EP39.05	Additive Conveyor (C7)	TBD	248,286 TPY	CD39.05	NP109	C7 to C8	
EP39.05	Additive Conveyor (C8)	TBD	248,286 TPY	CD39.05	NP109	C8 to BE1	
CD39.05	New Additive Discharge System D\C	TBD			NP109		
EP39.06	Bucket Elevator (BE1)	TBD	248,286 TPY	CD39.06	NP110	BE1 to C9	
EP39.06	Conveyor (C9)	TBD	248,286 TPY	CD39.06	NP110	C9 to P S	
EP39.07	Pyrite Silo (P S)	TBD	248,286 TPY	CD39.06	NP110	P S to PSF	
EP39.07	Pyrite Silo Feeder (PSF)	TBD	248,286 TPY	CD39.06	NP110	PSF to C6	
EP39.07	Conveyor (C6)	TBD	248,286 TPY	CD39.06	NP110	C14 to SPT 4	
EP39.08	Sand Silo (S S)	TBD	248,286 TPY	CD39.06	NP110	S S to SSF	
EP39.08	Sand Silo Feeder (SSF)	TBD	248,286 TPY	CD39.06	NP110	SSF to C6	
CD40.01	New Raw Mill High Zone D\C	TBD			NP111		
EP40.01	Split (SPT4)	TBD		CD40.01	NP111	SPT4 to HP1	
EP40.01	Hopper (HP1)	TBD		CD40.01	NP111	HP1 to C7	
EP40.02	Conveyor (C7)	TBD		CD40.02	NP112	C7 to	
EP40.02	Split (SPT5)	TBD		CD40.02	NP112	SPT5 to BE2 STP5 to SP 3 STP5 to RM1	
EP40.03	Surge Pile (SP3)	TBD	3,652,000 TPY	None			
EP40.02	Bucket Elevator (BE2)	TBD		CD40.01	NP112	BE2 to C8	
EP40.02	Conveyor (C8)	TBD		CD40.01	NP111	C8 to BE2	
EP40.04	Raw Mill (RM1)	TBD		CD40.02	NP111	RM1 to C8	
EP40.01	Coal Feeders (CF)	TBD		None		CF to CFC	
CD40.02	New Raw Mill Low Zone D\C	TBD			NP111		
CD40.05	New Raw Meal Air Slide D\C	TBD			NP113		

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
EP40.05	Raw Meal Conveying Equipment	TBD		CD40.05	NP113	EP40.05 to EP40.06	
EP40.06	Homo Silo Feeding Equipment	TBD		CD40.06	NP114	EP40.06 to EP40.07	
CD40.06	New Homo Silo Feeding D\C	TBD			NP114		
EP40.07	Homo Silo Discharge Equipment	TBD			NP115	EP40.07 to EP42.02	
CD40.07	New Homo Silo Discharge D/C	TBD			NP115		
<b>Pyroprocessing EU3</b>							
EP42.04	New Raw Mill Kiln	TBD	In = 3,652,000 TPY Out = 2,212,890 TPY of Clinker		NP118	EP42.04 to EP43.01	

CD42.04	New Raw Mill Kiln/Clinker Cooler D\C	TBD			NP118		
EP42.02	New Kiln Feeding Bucket Elevator DC	TBD	3,652,000 TPY		NP116	EP42.02 to EP42.03	
CD42.02	New Kiln Feeding Bucket Elevator D\C	TBD			NP116		
CD42.03	New Kiln Feeding with Pump D\C	TBD			NP117		
EP42.03	New Kiln Feeding with Pump DC	TBD	3,652,000 TPY		NP117	EP42.03 to EP42.04	
EP10.01	Kiln #7	TBD 19	Output: 100,000 TPY White Cement	Cyclone CD10.01B and ESP CD10.01C	CD10.01 A EP10.02	EP10.01 to CD.10.01A	Cyclone and ESP Baghouse
	Manufacture: Traylor					EP10.01 to EP10.02	
CD10.01A	Settling Chamber	TBD 1955		Cyclone CD10.01B	CD10.01 B	CD10.01A to CD10.01B	Cyclone
	Manufacture: Traylor						
CD10.01B	Number 7 Cyclones (7BC)	TBD 1955		ESP CD10.01C	CD10.01 C	CD10.01B to CD10.01C	ESP
	Manufacture: Buell						
CD10.01C	Number 7 Electro Static Precipitator (ESP)	TBD 1963		Stack 008	EP13.01 EP13.02 Stack 008	CD10.01C to EP13.01	Baghouse Baghouse None
	Manufacture: Western Precipitator					CD10.01C to EP13.02	
EP10.03	Number 7 Kiln Torch	TBD 1971	140 gallons/hr of 1000 Gallons Fuel Oil Burned	None	EP10.01	EP10.03 to EP10.01	Cyclone and ESP
	Manufacture: Hauck						

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
EP10.02	Number 7 Kiln Clinker Cooler Manufacture: Fuller Company	TBD 1955, 1971, 06/04/00	35.0 short TPH or 31.7 metric TPH; 35 LB / ton Clinker	Baghouse CD.10.02	CD10.02 EP10.04	EP10.02 to CD.10.02 EP10.02 to EP10.04	Baghouse PE
CD10.02	Number 7 Kiln Clinker Cooler Dust Filter (Baghouse) Manufacture: Micro-Pulse	TBD 1975 and 2000	93,000 ACFM at 350 °F <sup>(2)</sup> Emission Limits are: 6.11 LB/hr and 26.7 TPY of PM	Stack 9	EP10.04 Stack 009	CD.10.02 to EP10.04 CD.10.02 to Stack 009	Baghouse None
EP10.04	Conveying Equipment for #3 and #5 Drags Plus Elevator	TBD	128 Tons Cement Produced	CD10.04 PE	EP14.01	EP10.04 to EP14.01	DSCS

EP10.05	Conveying Equipment for #7 Drags Plus Elevator Manufacture: Aumund Louise	TBD 06/04/00	35 Tons Cement Produced	CD10.05 PE	EP14.01	EP10.05 to EP14.01	DSCS
<b>Clinker Handling and Storage EU4</b>							
EP43.01	New Clinker Cooler	TBD	2,212,890 TPY	CD42.02	NP118		
EP43.02	New Clinker Cooler Discharge DC	TBD	2,212,890 TPY	CD43.02	NP119		
EP43.03	Cooler Conveyor (CoC1)	TBD	2,212,890 TPY	CD43.03	NP120	CoC1 to CIC1	
EP43.03	Clinker Conveyor (CIC1)	TBD	2,212,890 TPY	CD43.03	NP120	CIC1 to CIS 1	
EP43.04	Clinker Silo (CIS 1)	TBD		CD43.04	NP146	CIS 1 to C S CIS 1 to C N	
EP43.05	Big Clinker Silo (BCIS)	TBD		CD43.03	NP120	BCIS to L C BCIS to M C BCIS to U C	
EP43.06	Conveyor S (C S)	TBD	2,212,890 TPY	CD43.06	NP147	C S to U C C S to L C	
EP43.06	Upper Conveyor (U C)	TBD	2,212,890 TPY	CD43.06	NP147	U C to U C 2	
EP43.06	Lower Conveyor (L C)	TBD	2,212,890 TPY	CD43.06	NP147	L C to Ci DP	
EP43.06	Conveyor N (C N)	TBD	2,212,890 TPY	CD43.06	NP147	C N to U C	
EP43.07	Middle Conveyor (M C)	TBD	2,212,890 TPY	CD43.07	NP121	M C to U C 2	
EP43.07	Upper Conveyor 2 (U C 2)	TBD	2,212,890 TPY	CD43.07	NP121	U C 2 to FM FC1	

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device <sup>(1)</sup>
EP43.07	Big Clinker Silo	TBD		CD43.07	NP121	BCS to S C	
EP43.07	Short Conveyor (S C)	TBD	2,212,890 TPY	CD43.07	NP121	S C to U C 2	
EP43.08	Existing FM Feed Conveyor1 (FM FC1)	TBD	2,212,890 TPY	CD43.08	NP124	FM FC1 to FM FC2 FM FC1 to FM10	
EP43.09	Clinker Dispatching (Ci DP)	TBD		CD43.09	NP122	Ci DP to TL	
EP43.10	Truck Loadout (TL)	TBD		CD43.10	NP123	TL to Trucks	
EP43.11	Railroad Loadout (RL)	TBD		CD43.10	NP123	RL to Railcars	
EP43.12	Clinker Bin (Ci B)	TBD		CD43.08	NP124	Ci B to	

EP43.13	Existing FM Feed Conveyor2 (FM FC2)	TBD		CD43.13		FM FC2 to FM8 FM FC2 to FM7 FM FC2 to FM9	
EP43.14	Clinker Hopper (Finish Mill 8)	TBD		CD43.13	NP125	FM8 to	
EP43.15	Clinker Hopper (Finish Mill 7)	TBD		CD43.13	NP125	FM7 to	
EP43.16	Clinker Hopper (Finish Mill 9)	TBD		CD43.13	NP125	CH9 to	
EP43.17	Clinker Hopper (Finish Mill 10)	TBD		CD43.13	NP125	CH10 to	
CD43.02	New Cooler Discharge D\C	TBD			NP112		
CD43.03	New Clinker Storage Feeding D\C	TBD			NP120		
CD43.04	Small Clinker Storage Discharge D\C	TBD			NP146		
CD43.06	Small Clinker Storage Feeding D\C	TBD			NP147		
CD43.07	New Clinker Storage Discharge D\C	TBD			NP121		
CD43.08	New Steel Conveyor Discharge D\C	TBD			NP124		
CD43.09	New Shipping Plant Feeding D\C	TBD			NP124		
CD43.10	New Shipping System D\C	TBD			NP123		
CD43.13	New Chain Conveyor D\C	TBD			NP125		
EP43.18	Emergency Outside Clinker Pile	TBD		None			
EP43.19	Transfer to Emergency Outside Clinker Pile	TBD	3,652,000 TPY	None			
EP43.20	Emergency Outside Clinker Pile to Underground Conveyor	TBD	3,652,000 TPY	None			

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
<b>Fuel Handling EU5</b>							
EP41.01	Coal Feeders Conveyor (CFC1)	TBD	3,652,000 TPY	None		CFC1 to CSH	
EP41.02	CSH Fuel Bins	TBD	3,652,000 TPY	None		CSH to CSHF	
EP41.01	CSH Fuel Bins Feeders (CSHF)	TBD		None		CSHF to CF2	
EP41.02	Coal Feeder Conveyor (CF2)	TBD		None			
EP41.03	Coal Mill (CM)	TBD	3,652,000 TPY	CD42.04	NP118		
EP41.03	New Coal Dust Silo for Kiln DC	TBD	3,652,000 TPY		NP139		
CD41.03	New Coal Dust Silo for Kiln D\C	TBD			NP139		
EP41.04	New Coal Dust Silo for PRS DC	TBD			NP140		
CD41.04	New Coal Dust Silo for PRS D\C	TBD			NP140		
<b>Cement Production EU6</b>							
EP44.01	Gypsum Bin to Finish Mill 12 (G B 12)	TBD		CD44.01	NP128	G B 12 to CFM12	
EP44.01	Gypsum Bin to Finish Mill 11 (G B 11)	TBD		CD44.02	NP126	G B 11 to CFM11	
EP44.01	Conveyor for Finish Mill 12 (CFM12)	TBD		CD44.01	NP128	CFM12 to BEFM12	
EP44.02	Conveyor for Finish Mill 11 (CFM11)	TBD		CD44.02	NP126	CFM11 to BEFM11	
EP44.03	Clinker Bin to Finish Mill 12 (CB12)	TBD		CD44.01	NP128	CB12 to CFM12	
EP44.04	Clinker Bin to Finish Mill 11 (CB11)	TBD		CD44.02	NP126	CB11 to FM11	
EP44.05	Additive Bin to Finish Mill 12 (AB12)	TBD		CD44.02	NP128	AB12 to CFM12	
EP44.06	Additive Bin to Finish Mill 11 (AB11)	TBD		CD44.01	NP126	AB11 to FM11	
EP44.07	Bucket Elevator to Finish Mill 11 (BEFM11)	TBD		CD44.07	NP148	BEFM11 to C10	
EP44.07	Conveyor in Finish Mill 11 (C10)	TBD		CD44.07	NP148	C10 to BFM11	
EP44.07	Bin for Finish Mill 11 (BFM11)	TBD		CD44.07	NP148	BFM11 to C11	
EP44.08	Conveyor in Finish Mill 11 (C11)	TBD		CD44.07	NP148	C11 to FM11	
EP44.09	Finish Mill 11 (FM11)	TBD	180 tons/hour	CD44.09	NP127	FM11 to C12	
EP44.15	Conveyor from Finish Mill 11 (C12)	TBD		CD44.07	NP148	C12 to CFM11	
EP44.16	Conveyor from Finish Mill 11 (C13)	TBD		CD44.02	NP126	C13 to CFM11	

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
EP44.08	Bin in Finish Mill 11 (B2FM11)	TBD		CD44.07	NP148	B2FM11 to CFM11	
EP44.08	Conveyor in Finish Mill 11 (C14)	TBD		CD44.07	NP148	C14 to CFM11	
EP44.10	Conveyor in Finish Mill 12 (C15)	TBD		CD44.10	NP149	C15 to	
EP44.10	Bucket Elevator for Finish Mill 12 (BEFM12)	TBD		CD44.10	NP149	BEFM12 to C15	
EP44.11	Bin for Finish Mill 12 (BFM12)	TBD		CD44.07	NP149	BFM12 to C16	
EP44.12	Conveyor in Finish Mill 12 (C16)	TBD	180 tons/hour	CD44.10	NP149	C16 to FM12	
EP44.13	Finish Mill 12 (FM12)	TBD	180 tons/hour	CD44.12	NP129	FM12 to C17	
EP44.14	Conveyor in Finish Mill 12 (C17)	TBD		CD44.01	NP149	C17 to CFM12	
EP44.11	Bin in Finish Mill 12 (B2FM12)	TBD		CD44.01	NP149	B2FM12 to CFM12	
EP44.11	Conveyor in Finish Mill 12 (C18)	TBD		CD44.10	NP149	C18 to CFM12	
CD44.01	New Mill 12 Feeding System D\C	TBD			NP128		
CD44.02	New Mill 11 Feeding System D\C	TBD			NP126		
CD44.07	No. 11 Cement Mill D\C	TBD			NP148		

CD44.09	New Cement Mill 11 D\C	TBD			NP127		
CD44.10	No. 12 Cement Mill D\C	TBD			NP149		
CD44.12	New Cement Mill 12 D\C	TBD			NP129		
EP16.01Pb	Finish Mill Number 7 Separator	TBD		CD16.01	SRCID17		
	Manufacture:						
CD16.01	Baghouse for Conveying Equipment –Number 7 Finish Mill	TBD	24,000 cfm	Stack 17	SRCID17		None
	Manufacture: Envirotech						
CD16.02	Baghouse for Finish Mill # 7	TBD	6,000 cfm	Stack 18			
	Manufacture: Torrit						
EP17.02	Finish Mill Number 8	TBD		CD17.01	SRCID19		
EP17.01Pb	Finish Mill Number 8 Separator	TBD			SRCID19		
CD17.01	Baghouse for Conveying Equipment –Number 8 Finish Mill	TBD	32,000 cfm	Stack 19	SRCID19		
	Manufacture: Envirotech						
EP18.01Pb	Finish Mill Number 9 Separator	TBD		CD18.01	SRCID20		
CD18.01	Baghouse for Conveying Equipment –Number 9 Finish Mill	TBD	24,000 cfm	Stack 20			
	Manufacture: Envirotech						
CD18.02	Baghouse for Finish Mill # 9	TBD	6,000 cfm	Stack 21			
	Manufacture: Torrit						
EP19.01Pb	Finish Mill Number 10 Separator	TBD	180 TPH	CD19.02			
	Manufacture: Traylor Manufacturing Company						

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/Control Device <sup>(1)</sup>
CD19.01	Baghouse for Conveying Equipment– Number 10 Finish Mill Manufacture: Envirotech	TBD	20,000 cfm	Stack 23			
CD19.02	Baghouse for Finish Mill # 10 Manufacture: Fuller Plenum-Pulse	TBD	58,500 cfm @ 176 degree F @ 27" SP	Stack 22			

**Shipping EU7**

EP45.01	Bulk Lane Loadout 1 (BLL1)	TBD		CD45.01	NP135	BLL1 to Trucks	
EP45.02	Bulk Lane Loadout 2 (BLL2)	TBD		CD45.02	NP136	BLL2 to Trucks	
EP45.03	Bulk Rail Loadout (BRL)	TBD		CD45.03	NP137	BRL to Rail Cars	
CD45.01	New Bulk Lane 1 D\C	TBD			NP135		
CD45.02	New Bulk Lane 2 D\C	TBD			NP136		
CD45.03	New Bulk Rail Lane D\C	TBD			NP137		
EP45.04	New Ext.1 Cement Silo Feeding DC	TBD		CD45.04	NP130		
CD45.04	New Ext.1 Cement Silo Feeding D\C	TBD			NP130		
EP45.05	New Ext.2 Cement Silo Feeding DC	TBD		CD45.05	NP131		
CD45.05	New Ext. 2 Cement Silo Feeding D\C	TBD					
EP45.04	New Ext.3 Cement Silo Feeding DC	TBD		CD45.06	NP132		

CD45.06	New Ext.3 Cement Silo Feeding D\C	TBD					
EP45.07	New Int. Cement Silo Feeding DC	TBD		CD45.07	NP133		
CD45.07	New Int. Cement Silo Feeding D\C	TBD			NP133		
EP45.08	New Int. Cement Silo Discharge DC	TBD		CD45.08	NP134		
CD45.08	New Int. Cement Silo Discharge D\C	TBD			NP134		
EP23.04	Packer #3 Packer - Southwest Manufacture: St. Regis Corp.	TBD	62 TPH	CD23.04	SRCID37		
CD23.04	Baghouse for Southwest Packer Manufacture: Eastern Control	TBD	11,627 cfm	Stack 37	SRCID37		
EP23.03	Packer #4 Packer – Northwest Manufacture: St. Regis Corp.	TBD	62 TPH	CD23.03	SRCID38		
CD23.03	Baghouse for Northwest Packer Manufacture: W. W. Sly	TBD	9,680 cfm	Stack 38	SRCID38		
EP24.01	Bins – Bulk Loading Plant	TBD	5,736 Tons 320 TPH	CD24.01	SRCID40		
CD24.01	Baghouse for Bins – Bulk Loading Plant Manufacture: Fuller Plenum - Pulse	TBD	8,000 cfm @ 12" SP @ 70 degree F	Stack 40	SRCID40		
EP48.01	Miscellaneous Packhouse in Color Plant	TBD		CD48.01	CDC60		
CD48.01	Miscellaneous D\C; Packhouse Manufacture: Fuller Plenum - Pulse	TBD			CDC60		

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device <sup>(1)</sup>
EP48.02	Color Loading	TBD		CD48.02	CDC61		
CD48.02	Color Loading D\C Manufacture: Fuller Plenum - Pulse	TBD			CDC61		
EP48.03	Bin Filters (14)	TBD			CDC62		
CD48.03	Bin Filters (14) Manufacture: Fuller Plenum - Pulse	TBD			CDC62		
EP47.01	East Bank Silos 1 DC	TBD		CD47.01	NP150		
CD47.01	East Bank Silos 1 DC	TBD			NP150		
EP20.04	East Bank Silos 2 DC	TBD		CD20.04	NP151		
CD20.04	East Bank Silos 2 DC	TBD			NP151		
ED20.05	East Bank Silos 3DC	TBD		CD20.05	NP152		
CD20.05	East Bank Silos 3DC	TBD			NP152		
EP20.06	East Bank Silos 4 DC	TBD		CD20.06	NP153		
CD20.06	East Bank Silos 4DC	TBD			NP153		
EP20.07	East Bank Silos 5 DC	TBD		CD20.07	NP154		
CD20.07	East Bank Silos 5 DC	TBD			NP154		
EP21.05	Middle Bank Silos 1 DC	TBD		CD21.05	NP155		
CD21.05	Middle Bank Silos 1DC	TBD			NP155		
EP21.06	Middle Bank Silos 2 DC	TBD		CD21.06	NP156		
CD21.06	Middle Bank Silos 2DC	TBD			NP156		

EP21.07	Middle Bank Silos 3 DC	TBD		CD21.07	NP157		
CD21.07	Middle Bank Silos 3DC	TBD			NP157		
EP21.08	Middle Bank Silos 4 DC	TBD		CD21.08	NP158		
CD21.08	Middle Bank Silos 4DC	TBD			NP158		
CD22.04	West Bank Silos 1DC	TBD		CD22.04	NP159		
CD22.04	West Bank Silos 1 DC	TBD			NP159		
CD22.05	West Bank Silos 2 DC	TBD		CD22.05	NP160		
CD22.05	West Bank Silos 2DC	TBD			NP160		
EP22.06	West Bank Silos 3 DC	TBD		CD22.06	NP161		
CD22.06	West Bank Silos 3DC	TBD			NP161		
EP22.07	West Bank Silos 4 DC	TBD		CD22.07	NP162		
CD22.07	West Bank Silos 4DC	TBD			NP162		

**Other Miscellaneous Sources EU8**

EP42.01	Bypass Dust Loadout (BDL)	TBD		CD42.01	NP163	BDL to Railcar	
CD42.01	Kiln Bypass DC	TBD			NP163		
EP47.02	Slag Storage Pile	TBD	180 tons/hour	None			
EP50.01	Slag Shipment	TBD		None			
EP50.02	Slag Shipment	TBD		None			
EP50.03	Slag Receipts	TBD		None			

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device <sup>(1)</sup>
EP50.04	Slag Receipts	TBD		None			
	Slag Handling	TBD					
EP25.01	Quarry Haul Roads	TBD	6.79 miles/hr	DSWS	None	None	None
EP25.02	Quarry Shale Haul Roads	TBD	10.14 miles/hr	DSWS	None	None	None
EP25.03	Quarry Haul Roads	TBD	18.55 miles/hr	DSWS	None	None	None
EP25.04	Cement Shipment Haul Roads	TBD	16.88 miles/hr	DSWS	None	None	None
EP25.05	Sand AL, Etc. Haul Roads	TBD	10.00 miles/hr	DSWS	None	None	None
EP25.05	Additive Trucks	TBD		DSWS	None	None	None
EP25.06	Coal/Coke Haul Roads	TBD	10.00 miles/hr	DSWS	None	None	None
EP25.06	Fuel Deliveries	TBD		DSWS	None	None	None
EP25.07	Waste Dust Trucks	TBD		DSWS	None	None	None
EP25.08	Miscellaneous Haul Roads	TBD	1.04 miles/hr	DSWS	None	None	None
EP25.09	Fly Ash Haul Roads	TBD	4.40 miles/hr	DSWS	None	None	None

EP25.10	Waste Dust Customer Haul Roads	TBD	4.00 miles/hr	DSWS	None	None	None
EP25.11	Stone Bought/Sold Haul Roads	TBD	20.00 miles/hr	DSWS	None	None	None
EP25.12	Gypsum Haul Roads Highway	TBD	8.00 miles/hr	DSWS	None	None	None
EP25.13	Clinker Bought/Sold Haul Roads	TBD	1.20 miles/hr	DSWS	None	None	None
EP25.15	Clinker Haul Roads Plant	TBD	11.20 miles/hr	DSWS	None	None	None

(1) Transfer points (TP) have the same type of fugitive dust control system as the associated conveyors unless otherwise noted. Fugitive Dust Control System / Control Device abbreviations: FE = Full Enclosure, FE/FE = Full Enclosure in Building, PE = Partial Enclosure, NE = No Enclosure, WT = Water Truck, WS = Water Spray, MD = Minimization of Material Drop, DSWS = Dust Suppressant by Water Spray, DSCS = Dust Suppression by Chemical Stabilization/ Wetting, TBD = To Be Determined, TPH = Tons per hour.

(2) Temperature value limits established by stack testing.



## 2.0. General Conditions

### 2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

### 2.2. Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>NSPS</b>	New Source
<b>CBI</b>	Confidential Business Information		Performance Standards
<b>CEM</b>	Continuous Emission Monitor	<b>PM</b>	Particulate Matter
<b>CES</b>	Certified Emission Statement	<b>PM<sub>10</sub></b>	Particulate Matter less than 10µm in diameter
<b>C.F.R. or CFR</b>	Code of Federal Regulations		
<b>CO</b>	Carbon Monoxide	<b>pph</b>	Pounds per Hour
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>ppm</b>	Parts per Million
<b>DAQ</b>	Division of Air Quality	<b>PSD</b>	Prevention of Significant Deterioration
<b>DEP</b>	Department of Environmental Protection	<b>psi</b>	Pounds per Square Inch
<b>FOIA</b>	Freedom of Information Act	<b>SIC</b>	Standard Industrial Classification
<b>HAP</b>	Hazardous Air Pollutant		
<b>HON</b>	Hazardous Organic NESHAP	<b>SIP</b>	State Implementation Plan
<b>HP</b>	Horsepower		
<b>lbs/hr or lb/hr</b>	Pounds per Hour	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>LDAR</b>	Leak Detection and Repair	<b>TAP</b>	Toxic Air Pollutant
<b>M</b>	Thousand	<b>TPY</b>	Tons per Year
<b>MACT</b>	Maximum Achievable Control Technology	<b>TRS</b>	Total Reduced Sulfur
		<b>TSP</b>	Total Suspended Particulate
<b>MM</b>	Million		
<b>MMBtu/hr or mmbtu/hr</b>	Million British Thermal Units per Hour	<b>USEPA</b>	United States Environmental Protection Agency
<b>MMCF/hr or mmcf/hr</b>	Million Cubic Feet Burned per Hour	<b>UTM</b>	Universal Transverse Mercator
<b>NA</b>	Not Applicable		
<b>NAAQS</b>	National Ambient Air Quality Standards	<b>VEE</b>	Visual Emissions Evaluation
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants	<b>VOC</b>	Volatile Organic Compounds
<b>NO<sub>x</sub></b>	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§30-2.39]

## **2.12. Reasonably Anticipated Operating Scenarios**

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
  - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
  - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

## **2.13. Duty to Comply**

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

[45CSR§30-5.1.f.1.]

## **2.14. Inspection and Entry**

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under the permit;
  - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

## **2.15. Schedule of Compliance**

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
  - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

**[45CSR§30-5.3.d.]**

## **2.16. Need to Halt or Reduce Activity not a Defense**

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

**[45CSR§30-5.1.f.2.]**

## **2.17. Emergency**

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

**[45CSR§30-5.7.a.]**

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

**[45CSR§30-5.7.b.]**

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

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

**[45CSR§30-5.7.c.]**

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

**[45CSR§30-5.7.d.]**

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

**[45CSR§30-5.7.e.]**

## **2.18. Federally-Enforceable Requirements**

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

**[45CSR§30-5.2.a.]**

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

## **2.19. Duty to Provide Information**

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

**[45CSR§30-5.1.f.5.]**

## **2.20. Duty to Supplement and Correct Information**

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

**[45CSR§30-4.2.]**

## **2.21. Permit Shield**

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

**[45CSR§30-5.6.a.]**

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

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

**[45CSR§30-5.6.c.]**

## **2.22. Credible Evidence**

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

**[45CSR§30-5.3.e.3.B. and 45CSR38]**

## **2.23. Severability**

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

**[45CSR§30-5.1.e.]**

## **2.24. Property Rights**

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

**[45CSR§30-5.1.f.4]**

## **2.25. Acid Deposition Control**

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
  - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
  - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

### **[45CSR§30-5.1.d.]**

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

### **[45CSR§30-5.1.a.2.]**

### 3.0. Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency 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, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.  
**[45CSR§6-3.2.]**
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). A copy of this notice is required to be sent to the USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health.  
**[40 C.F.R. 61]**
- 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. **[Reserved]**
- 3.1.6. **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]**
- 3.1.7. **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. This report is to be submitted no later than July 1 of each year unless directed by DAQ.  
**[W.Va. Code § 22-5-4(a)(14)]**
- 3.1.8. **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 C.F.R. §§ 40-82.154 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 C.F.R. § 40-82.158.

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

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

- 3.1.9. **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]**

- 3.1.10. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 45CSR§7- 3.2 (See Section 3.1.11), 3.3, 3.4, 3.5, 3.6, and 3.7. (See Section 3.1.12).

**[45CSR§7-3.1., Groups 001, 002, 025, 026, 029, 030, 032, 033, 034, 45CSR14, R14-026A, B.4., EU1, EP39.01, EU8]**

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

**[45CSR§7-3.2., Groups 001, 002, 025, 026, 029, 030, 032, 033, 034, EU1, EP39.01, EU8]**

- 3.1.12. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to Section 3.1.15 [45CSR§7-5.1] is required to have a full enclosure and be equipped with a particulate matter control device. Compliance with this streamlined opacity limit for storage structures assures compliance with the storage structures in 40 C.F.R. 63 Subpart LLL, Section 3.1.20(40 C.F.R. § 63.1348).

**[45CSR§7-3.7., Groups 020, 021, 022, 031, EP20.01, EP21.01, EP21.02, EP22.01, EP31.01, EP31.02, EU7, EU8 ]**

- 3.1.13. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in 45CSR7, Table 45-7A. Following table list the equipment with their allowable stack emission rates.

<i>Old Sources</i>	<i>Allowable Stack Emission Rate</i>
<b>Description</b>	<b>LB PM/hr</b>
Crushing Facility Equipment Group 001	50 Each
Secondary Crushing Facility Equipment Group 002	50 Each
Tertiary Crushing Facility Equipment Group 003	50 Each
Kiln Number 7 and Associated Equipment Group 006	45.6 Each

<i>Old Sources</i>	<i>Allowable Stack Emission Rate</i>
<b>Description</b>	<b>LB PM/hr</b>
Kiln Number 8 and Associated Equipment Group 007	45.6 Each
Kiln Number 9 and Associated Equipment Group 012	56.6 Each
Dust Bin Waste and Associated Equipment Group 013	43 Each
The Handling Equipment of Clinker Group 014	50 Each
Finish Mill Number 7 and Associated Equipment Group 016	31.4 Each
Finish Mill Number 8 and Associated Equipment Group 017	31.4 Each
Finish Mill Number 9 and Associated Equipment Group 018	31.4 Each
Finish Mill Number 10 and Associated Equipment Group 019	43.6 Each
East Bank Silos and Associated Equipment Group 020	39.7 Each
Middle Bank Silos, Masonry Silo and Associated Equipment Group 021	41.6 Each
West Bank Silos and Associated Equipment Group 022	39.7 Each
Loadout and Packaging Equipment Group 023	37 Each
Bulk Loadout Equipment Group 024	50 Each
Silo Flyash Equipment Group 031	33 Each

**[45CSR§7-4.1., Groups 001, 002, 020, 021, 022, 025, 026, 029, 030, 031, 032, 033, 034]**

3.1.14. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.

**[45CSR§7-4.12., Groups 001, 002, 020, 021, 022, 025, 026, 029, 030, 031, 032, 033, 034, EU1, EP39.01, EP20.01, EP21.01, EP21.02, EP22.01, EP31.01, EP31.02, EU7, EU8]**

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

**[45CSR§7-5.1., 45CSR14, R14-026A, B.4.]**

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

**[45CSR§7-5.2., 45CSR14, R14-026A, B.4.]**

- 3.1.17. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.  
**[45CSR§7-9.1.]**
- 3.1.18. Maintenance operations (as defined in 45CSR7) shall be exempt from the provisions of 45CSR§7-4 provided that at all times the owner or operator shall conduct maintenance operations in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.  
**[45CSR§7-10.3.]**
- 3.1.19. The owner or operator of each new or existing raw mill or finish mill at a facility which is a major source subject to the provisions of 40 C.F.R. Part 63 Subpart LLL shall not cause to be discharged from the mill sweep or air separator air pollution control devices of these affected sources any gases which exhibit opacity in excess of ten percent (10%).  
**[45CSR34, 40 C.F.R. § 63.1347, Raw Mills #5 through #10, Finish Mills #7 through #10, 45CSR14, R14-026A, B.10., EU2 and EU6]**
- 3.1.20. The owner or operator of each existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system at a facility which is a major source subject to the provisions of 40 C.F.R. Part 63 Subpart LLL shall not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent.  
**[45CSR34, 40 C.F.R. § 63.1348, Group (003, 006, 012, 013, 014, 019, 021, 022, 023, and 024), 45CSR14, R14-026A, B.10., EU2, EU4, EU6, EU7]**
- 3.1.21. The compliance date for an owner or operator of an affected source subject to the provisions of 40 C.F.R. Part 63 Subpart LLL that commences new construction or reconstruction after March 24, 1998 is June 14, 1999 or upon startup of operations, whichever is later.  
**[45CSR34, 40 C.F.R. § 63.1351]**

### **3.2. Monitoring Requirements**

- 3.2.1. The owner or operator of each portland cement plant shall prepare for each affected source subject to the provisions of 40 C.F.R. Part 63 Subpart LLL, a written operations and maintenance plan. The affected sources are the Raw Material Preparation (EU2), the Pyroprocessing (EU3), the Clinker Handling and Storage (EU4), the Cement Production (EU6), the Shipping (EU7), and the Other Miscellaneous Sources (EU8). The plan shall be submitted to the Administrator for review and approval as part of the application for a part 70 permit and shall include the following information:
- (1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emission limits and operating limits of 40 C.F.R. §§ 63.1343 through 63.1348, except 40 C.F.R. § 63.1346;
  - (2) Corrective actions to be taken when required by Section 3.2.5 [40 C.F.R. 63.1350 (e)];
  - (3) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in line kiln raw mill located at the facility at least once per year; and

- (4) Procedures to be used to periodically monitor affected sources subject to opacity standards under Section 3.1.20 [40 C.F.R. § 63.1348]. Such procedures must include the provisions of Section 3.2.1 (4) (i) through (iv) [40 C.F.R. §§ 63.1350 (a) (4) (i) through (a) (4) (iv)].
- (i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to 40 C.F.R part 60 of Chapter I of Title 40. The test must be conducted while the affected source is in operation.
  - (ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintains that schedule until no visible emissions are observed in six consecutive monthly tests.
  - (iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintains that schedule until no visible emissions are observed in six consecutive monthly tests.
  - (iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of appendix A to part 60 of Chapter I of Title 40. The Method 9 test must begin within one hour of any observation of visible emissions.
  - (v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
  - (vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of Section 3.2.1 (4) (i) through (4) (iv) [40 C.F.R. §§ 63.1350 (a) (4) (i) through (iv)] for each such conveying system transfer point located within the building, or for the building itself, according to Section 3.2.1 (4) (vii) [40 C.F.R. § 63.1350 (a) (4) (vii)].
  - (vii) If visible emissions from a building are monitored, the requirements of Section 3.2.1 (4) (i) [40 C.F.R. § 63.1350 (a) (4) (i)] apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1-minute. The test must be conducted under normal operating conditions.

**[45CSR34, 40 C.F.R. § 63.1350 (a), 45CSR14, R14-026A, B.10., EU2, EU3, EU4, EU5,EU6, EU7, EU8]**

- 3.2.2. The owner or operator of a kiln shall monitor opacity at each point where emissions are vented from these affected sources in accordance with 40 C.F.R. §§ 63.1350 (c) (1) through (c) (3).

- (1) Except as provided in Section 3.2.2 (2) [40 C.F.R. § 63.1350 (c) (3)], the owner or operator shall install, calibrate, maintain, and continuously operate a continuous opacity monitor (COM) located at the outlet of the PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by 40 C.F.R. Part 63 Subpart A, general provisions of 40 C.F.R. Part 63, and according to PS-1 of appendix B to part 60 of Chapter I of Title 40.
- (2) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 20 percent. If the average opacity for any 6-minute block period exceeds 20 percent, this shall constitute a violation of the standard. Startup, Shutdown or Malfunction events are not included.

**[45CSR34, 40 C.F.R. § 63.1350 (c) (1) and (3), Group (006, 007, 012), 45CSR14, R14-026A, B.10., EP42.04]**

3.2.3. The owner or operator of a clinker cooler shall monitor opacity at each point where emissions are vented from the clinker cooler in accordance with Section 3.2.3 (1) through (3) [40 C.F.R. §§ 63.1350 (d) (1) through (d) (3)].

- (1) Except as provided in Section 3.2.3 (2) [40 C.F.R. § 63.1350 (d) (2)], the owner or operator shall install, calibrate, maintain, and continuously operate a COM located at the outlet of the clinker cooler PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by 40 C.F.R. Part 63 Subpart A, general provisions of 40 C.F.R. 63, and according to PS-1 of appendix B to part 60 of Chapter I of Title 40.
- (2) The owner or operator of a clinker cooler subject to the provisions of 40 C.F.R. Part 63 Subpart LLL using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by Section 3.2.3 (1) [40 C.F.R. § 63.1350 (d) (1)], monitor opacity in accordance with Section 3.2.3 (2) (i) through (ii) [40 C.F.R. § 63.1350 (d) (2) (i) through (ii)]. If the control device exhausts through a monovent, or if the use of a COM in accordance with the installation specifications of PS-1 of appendix B to part 60 of this chapter is not feasible, the owner or operator must monitor opacity in accordance with Section 3.2.3 (2) (i) through (ii) [40 C.F.R. § 63.1350 (d) (2) (i) through (ii)].
  - (i) Perform daily visual opacity observations of each stack in accordance with the procedures of Method 9 of appendix A to part 60 of this chapter. The Method 9 test shall be conducted while the affected source is operating at the representative performance conditions. The duration of the Method 9 test shall be at least 30 minutes each day.
  - (ii) Use the Method 9 procedures to monitor and record the average opacity for each six-minute period during the test.
- (3) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard. Startup, Shutdown or Malfunction events are not included.

**[45CSR34, 40 C.F.R. § 63.1350 (d), EP10.02, EP11.02, and EP12.02, 45CSR14, R14-026A, B.10., EP43.01]**

3.2.4. The owner or operator of a raw mill or finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCD of these affected sources in accordance with the procedures of Method 22 of appendix A to part 60 of this chapter. The Method 22 test shall be conducted while the affected source is operating at the representative performance conditions. The duration of the Method 22 test

shall be 6 minutes. If visible emissions are observed during any Method 22 visible emissions test, the owner or operator must:

- (1) Initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan developed in accordance with Section 3.2.1 (1) and (2) [40 C.F.R. §§ 63.1350 (a) (1) and (a) (2)]; and
- (2) Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a followup Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the followup Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 test in accordance with Method 9 of appendix A to part 60 of this chapter. The duration of the Method 9 test shall be 30 minutes.

**[45CSR34, 40 C.F.R. § 63.1350 (e), Raw Mills #5 through #10, Finish Mills #7 through #10, 45CSR14, R14-026A, B.10., EU2 and EU6]**

3.2.5. The owner or operator of an affected source subject to a limitation on D/F emissions shall monitor D/F emissions in accordance with Section 3.2.6. (1) through (6) [40 C.F.R. §§ 63.1350 (f) (1) through (f) (6)].

- (1) The owner or operator shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln-in-line kiln/raw mill and alkali bypass, if applicable, at the inlet to, or upstream of, the kiln, in-line kiln/raw mill and/or alkali bypass PM control devices
  - (i) The recorder response range must include zero and 1.5 times either of the average temperatures established according to the requirements in Section 3.3.3 (3) (iv) [40 C.F.R. § 63.1349 (b) (3) (iv)].
  - (ii) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
- (2) The owner or operator shall monitor and continuously record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill and alkali bypass, if applicable, at the inlet to the kiln, in-line kiln/raw mill and/or alkali bypass PMCD.
- (3) The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.
- (4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.
- (5) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on, or from on to off the calculation of the three-hour rolling average temperature must begin anew, without considering previous recordings.
- (6) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.

**[45CSR34, 40 C.F.R. § 63.1350 (f), Group (006, 007, 012), 45CSR14, R14-026A, B.10., EP42.04]**

- 3.2.6. The owner or operator of any kiln or in-line kiln/raw mill subject to a D/F emission limit under 40 C.F.R. Part 63 Subpart LLL shall conduct an inspection of the components of the combustion system of each kiln or in-line kiln/raw mill at least once per year.  
**[45CSR34, 40 C.F.R. § 63.1350 (i), Groups (006, 007, 012), EP42.04]**
- 3.2.7. The owner or operator of an affected source subject to a limitation on opacity under Section 3.1.20 [40 C.F.R. § 63.1348] shall monitor opacity in accordance with the operation and maintenance plan developed in accordance with Section 3.2.1 [40 C.F.R. § 63.1350 (a)].  
**[45CSR34, 40 C.F.R. § 63.1350 (j), Group (003, 006, 012, 013, 014, 019, 021, 022, 023, and 024), 45CSR14, R14-026A, B.10., EU2, EU4, EU6, EU7]**
- 3.2.8. The owner or operator of an affected source subject to a particulate matter standard under 40 C.F.R. § 63.1343 shall install, calibrate, maintain, and operate a particulate matter continuous emission monitoring system (PM CEMS) to measure the particulate matter discharged to the atmosphere. All requirements relating to installation, calibration, maintenance, operation or performance of the PM CEMS and implementation of the PM CEMS requirement are deferred pending further rulemaking.  
**[45CSR34, 40 C.F.R. § 63.1350 (k), Group (006, 007, and 012), 45CSR14, R14-026A, B.10., EP42.04]**
- 3.2.9. An owner or operator may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of 40 C.F.R. Part 63 Subpart LLL subject to the provisions of Section 3.2.9. (1) through (6) [40 C.F.R. §§ 63.1350 (l) (1) through (l) (6)].
- (1) The Administrator will not approve averaging periods other than those specified in this section, unless the owner or operator documents, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.
  - (2) If the application to use an alternate monitoring requirement is approved, the owner or operator must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.
  - (3) The owner or operator shall submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in Section 3.2.9. (3) (i) through (3) (iii) [40 C.F.R. §§ 63.1350 (l) (3) (i) through (l) (3) (iii)]:
    - (i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;
    - (ii) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and
    - (iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.
  - (4) The Administrator will notify the owner or operator of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide:

- (i) Notice of the information and findings upon which the intended disapproval is based; and
  - (ii) Notice of opportunity for the owner or operator to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the owner or operator to provide additional supporting information.
- (5) The owner or operator is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provision of 40 C.F.R. Part 63 Subpart LLL.
- (6) The Administrator may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of 40 C.F.R. Part 63 Subpart LLL.

**[45CSR34, 40 C.F.R. § 63.1350 (l), Group 006, 007, 012, 013, 014, 019, 021, 022, 023, 024, EU3, EU4, EU6, EU7]**

3.2.10. The requirements under Section 3.2.4 [40 C.F.R. § 63.1350 (e)] to conduct daily Method 22 testing shall not apply to any specific raw mill or finish mill equipped with a continuous opacity monitor COM or bag leak detection system (BLDS). If the owner or operator chooses to install a COM in lieu of conducting the daily visual emissions testing required under 3.2.4 [40 C.F.R. § 63.1350 (e)], then the COM must be installed at the outlet of the PM control device of the raw mill or finish mill, and the COM must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of this part and according to PS-1 of appendix B to part 60 of this chapter. To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard. If the owner or operator chooses to install a BLDS in lieu of conducting the daily visual emissions testing required under paragraph (e) of this section, the requirements in 3.2.10 (1) through (9) [40 C.F.R. § 63.1350 (m)(1) through (9)] apply to each BLDS:

- (1) The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less. "Certify" shall mean that the instrument manufacturer has tested the instrument on gas streams having a range of particle size distributions and confirmed by means of valid filterable PM tests that the minimum detectable concentration limit is at or below 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- (2) The sensor on the BLDS must provide output of relative PM emissions.
- (3) The BLDS must have an alarm that will activate automatically when it detects a significant increase in relative PM emissions greater than a preset level.
- (4) The presence of an alarm condition should be clearly apparent to facility operating personnel.
- (5) For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm.

- (6) All BLDS must be installed, operated, adjusted, and maintained so that they are based on the manufacturer's written specifications and recommendations. The EPA recommends that where appropriate, the standard operating procedures manual for each bag leak detection system include concepts from EPA's "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997).
- (7) The baseline output of the system must be established as follows:
  - (i) Adjust the range and the averaging period of the device; and
  - (ii) Establish the alarm set points and the alarm delay time.
- (8) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the operations and maintenance plan required by paragraph (a) of this section. In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 1 calendar year period unless a responsible official as defined in §63.2 certifies in writing to the Administrator that the fabric filter has been inspected and found to be in good operating condition.
- (9) The owner or operator must maintain and operate the fabric filter such that the bag leak detector alarm is not activated and alarm condition does not exist for more than 5 percent of the total operating time in a 6-month block period. Each time the alarm activates, alarm time will be counted as the actual amount of time taken by the owner or operator to initiate corrective actions. If inspection of the fabric filter demonstrates that no corrective actions are necessary, no alarm time will be counted. The owner or operator must continuously record the output from the BLDS during periods of normal operation. Normal operation does not include periods when the BLDS is being maintained or during startup, shutdown or malfunction.

**[45CSR34, 40 C.F.R. § 63.1350 (m), 45CSR14, R14-026A, B.10., EU2 and EU6]**

3.2.11. *Startup, shutdown, and malfunction plan.*

- (i) The owner or operator of an affected source must develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control and monitoring equipment used to comply with the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to --
  - (A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by 40 C.F.R. § 63.3 (e) (1) (i);
  - (B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and
  - (C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

- (ii) During periods of startup, shutdown, and malfunction, the owner or operator of an affected source must operate and maintain such source (including associated air pollution control and monitoring equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under Section 3.2.11 (i) [40 C.F.R. § 63.3 (e) (3) (i)].
- (iii) When actions taken by the owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan for that event. In addition, the owner or operator must keep records of these events as specified in 40 C.F.R. § 63.10 (b), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in 40 C.F.R. § 63.10 (d) (5).
- (iv) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with 40 C.F.R. § 63.10 (d) (5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).
- (v) The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in Section 3.2.11 (viii) [40 C.F.R. § 63.3 (e) (3) (viii)], the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The Administrator must request that the owner or operator submit a particular startup, shutdown, or malfunction plan (or a portion thereof) whenever a member of the public submits a specific and reasonable request to examine or to receive a copy of that plan or portion of a plan. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Clean Air Act or 40 CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.

- (vi) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection or submitted when requested by the Administrator.
  
- (vii) Based on the results of a determination made under 40 C.F.R. § 63.3 6 (e) (1) (i), the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:
  - (A) Does not address a startup, shutdown, or malfunction event that has occurred;
  
  - (B) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by 40 C.F.R. § 63.3 (e) (1) (i);
  
  - (C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or
  
  - (D) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in 40 C.F.R. § 63.2.
  
- (viii) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by 40 C.F.R. § 63.10 (d) (5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

- (ix) The title V permit for an affected source must require that the owner or operator adopt a startup, shutdown, and malfunction plan which conforms to the provisions of this part, and that the owner or operator operate and maintain the source in accordance with the procedures specified in the current startup, shutdown, and malfunction plan. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under part 70 or part 71 of this chapter. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504 (f) of the Clean Air Act.

**[45CSR34, 40 C.F.R. § 63.6 (e) (3), Group (006, 007, 012, 013, 014, 019, 021, 022, 023, and 024), EU2 through EU7]**

3.2.12. The permittee shall conduct monitoring/Record Keeping/reporting as follows. [Not required for open stockpiles, Coal and Limestone Feed Stockpile Common to Kiln #7, Kiln #8, Kiln #9, haulroads, haulroads and activities regulated by 40 C.F.R. Part 63 Subpart LLL.]

- a. Visible emission observations shall be conducted weekly for fugitive particulate emission activities identified in Section 1.0 by a certified Method 9 observer during periods of normal operation for a sufficient time interval to determine if any of the emission units listed above or emission points have visible emissions and if so, the opacity of the emissions. If any of the emission units listed above or emission points have visible emissions exceeding the regulatory limit of twenty percent (20%) opacity, then a 45CSR7A evaluation shall be conducted immediately after the violation of the regulatory limit unless the permittee can demonstrate a valid reason that the time frame should be extended. A 45CSR7A evaluation shall not be required if the condition resulting in the excess visible emissions is corrected within 24 hours and the units are operated at normal operating conditions.
- b. 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.]**

3.2.13. The permittee shall conduct weekly visible emission observations on all dust collectors and the permittee shall maintain instrumentation on all dust collectors for pressure drop observations. The permittee shall maintain records of the maintenance performed on each baghouse. These records shall include all maintenance work performed on each dust collector including the frequency of bag/filter change outs. Records shall state the date and time of each dust collector inspection, the inspection results, and corrective action taken, if any. Records shall be maintained on site for five (5) years from the record creation date.

**[45CSR§30-5.1.c.]**

- 3.2.14. The permittee shall maintain daily records indicating the use of any dust suppressants or any other suitable dust controls measures applied at the facility. The permittee shall also inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs. The permittee shall maintain records of all scheduled and non-scheduled maintenance and shall state any maintenance or corrective actions taken as a result of the weekly and/or monthly inspections, the times the fugitive dust control system(s) were inoperable and any corrective actions taken.

[45CSR§30-5.1.c.]

### 3.3. 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.

[WV Code § 22-5-4(a)(15) and 45CSR13]

- 3.3.2. The owner or operator of an affected source subject to 40 C.F.R. Part 63 Subpart LLL shall demonstrate initial compliance with the emission limits of 40 C.F.R. § 63.1343 and 40 C.F.R. § 63.1345, and Sections 3.1.19 and 3.1.20 [40 C.F.R. §§ 63.1347 through 63.1348] using the test methods and procedures in Section 3.3.3 [40 C.F.R. § 63.1349 (b)] and 40 C.F.R. § 63.7. Performance test results shall be documented in complete test reports that contain the information required by Section 3.3.2 (1) through (10) [40 C.F.R. §§ 63.1349 (a) (1)

through (a) (10)] as well as all other relevant information. The plan to be followed during testing shall be made available to the Administrator prior to testing, if requested.

- (1) A brief description of the process and the air pollution control system;
- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results;
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations;
- (9) All data recorded and used to establish parameters for compliance monitoring; and
- (10) Any other information required by the test method.

**[45CSR34, 40 C.F.R. § 63.1349 (a), Groups (006, 007, 012, 013, 014, 019, 021, 022, 023, and 024), 45CSR14, R14-026A, B.10., EU3, EU4, EU6, EU7]**

3.3.3. Performance tests to demonstrate compliance with 40 C.F.R. Part 63 Subpart LLL shall be conducted as specified in Section 3.3.3 [40 C.F.R. §§ 63.1349 (b)(1) through (b)(3)].

(1) The owner or operator of a kiln subject to limitations on particulate matter emissions shall demonstrate compliance by conducting a performance test as specified in Section 3.3.3 (1) (i) through (1) (iv) [40 C.F.R. §§ 63.1349 (b) (1) (i) through (b) (1) (iv)]. The owner or operator of an in-line kiln/raw mill subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting separate performance tests as specified in Section 3.3.3 (1)(i) through (1)(iv) [40 C.F.R. §§ 63.1349 (b) (1) (i) through (b) (1) (iv)] while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. The owner or operator of a clinker cooler subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in Section 3.3.3 (1) (i) through (1) (iii) [40 C.F.R. §§ 63.1349 (b) (1) (i) through (b) (1) (iii)]. The opacity exhibited during the period of the Method 5 of Appendix A to 40 C.F.R. part 60 of Chapter I of Title 40 performance tests required by Section 3.3.3 (1) (i) [40 C.F.R. § 63.1349 (b) (1) (i)] shall be determined as required in 40 C.F.R. § 63.1349 (b) (1) (v) and (b) (vi).

(i) Method 5 of appendix A to 40 C.F.R. part 60 of Chapter I of Title 40 shall be used to determine PM emissions. Each performance test shall consist of three separate runs under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with 40 C.F.R. § 63.7 (e). Each run shall be conducted for at least 1 hour, and the minimum sample volume shall be 0.85 dscm (30 dscf). The average of the three runs shall be used to determine compliance. A determination of the PM collected in the impingers ("back half") of the Method 5 particulate sampling train is not required to demonstrate initial compliance with the PM standards of 40 C.F.R. Part 63, Subpart LLL. However, this shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.

- (ii) Suitable methods shall be used to determine the kiln or in-line kiln/raw mill feed rate, except for fuels, for each run.
- (iii) The emission rate, E, of PM shall be computed for each run using equation 1:

$$E = (C_s Q_{sd}) / P \quad \text{Equation 1}$$

Where:

E = emission rate of particulate matter, kg/Mg of kiln feed.

$c_s$  = concentration of PM, kg/dscm.

$Q_{sd}$  = volumetric flow rate of effluent gas, dscm/hr.

P = total kiln feed (dry basis), Mg/hr.

- (iv) When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the main exhaust and alkali bypass of the kiln or in-line kiln/raw mill shall be tested simultaneously and the combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and alkali bypass shall be computed for each run using equation 2,

$$E_c = (C_{sk} Q_{sdk} + C_{sd} Q_{sdb}) / P \quad \text{Equation 2}$$

Where:

$E_c$  = the combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and bypass stack, kg/Mg of kiln feed.

$c_{sk}$  = concentration of particulate matter in the kiln or in-line kiln/raw mill effluent, kg/dscm.

$Q_{sdk}$  = volumetric flow rate of kiln or in-line kiln/raw mill effluent, dscm/hr.

$c_{sb}$  = concentration of particulate matter in the alkali bypass gas, kg/dscm.

$Q_{sdb}$  = volumetric flow rate of alkali bypass gas, dscm/hr.

P = total kiln feed (dry basis), Mg/hr.

- (v) Except as provided in 40 C.F.R. § 63.1349 (b) (1) (vi) the opacity exhibited during the period of the Method 5 performance tests required by Section 3.3.3 (1) (i) [40 C.F.R. § 63.1349 (b) (1) (i)] shall be determined through the use of a continuous opacity monitor (COM). The maximum six-minute average opacity during the three Method 5 test runs shall be determined during each Method 5 test run, and used to demonstrate initial compliance with the applicable opacity limits of Sections 4.1.6 (2) and 5.1.5 (2) [40 C.F.R. § 63.1343 (b) (2)], 40 C.F.R. § 63.1343 (c) (2), or Sections 4.1.5 (2) and 5.1.30 [40 C.F.R. § 63.1345 (a) (2)].
- (2) The owner or operator of any affected source subject to limitations on opacity under 40 C.F.R. Part 63 Subpart LLL that is not subject to by Section 3.3.3 (1) [40 C.F.R. § 63.1349 (b) (1)] shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with

Method 9 of Appendix A to Part 60 of Chapter I of Title 40. The performance test shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with 40 C.F.R. § 63.7 (e). The maximum 6-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of Section 3.3.3 (2) (i) through (2) (ii) [40 C.F.R. §§ 63.1349 (b) (2) (i) through (ii)] apply:

- (i) There are no individual readings greater than 10 percent opacity;
  - (ii) There are no more than three readings of 10 percent for the first 1-hour period.
- (3) The owner or operator of an affected source subject to limitations on D/F emissions under 40 C.F.R. Part 63 Subpart LLL shall demonstrate initial compliance with the D/F emission limit by conducting a performance test using Method 23 of appendix A to Part 60 of Chapter I of Title 40. The owner or operator of an in-line kiln/raw mill shall demonstrate initial compliance by conducting separate performance tests while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. The owner or operator of a kiln or in-line kiln/raw mill equipped with an alkali bypass shall conduct simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass. However, the owner or operator of an in-line kiln/raw mill may conduct a performance test of the alkali bypass exhaust when the raw mill of the in-line kiln/raw mill is operating or not operating.
- (i) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with 40 C.F.R. § 63.7 (e). The duration of each run shall be at least 3 hours, and the sample volume for each run shall be at least 2.5 dscm (90 dscf). The concentration shall be determined for each run, and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.
  - (ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test of appendix A to part 60, and the continuous temperature record(s) must be included in the performance test report.
  - (iii) One-minute average temperatures must be calculated for each minute of each run of the test.
  - (iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with 40 C.F.R. § 63.1344 (b).

**[45CSR34, 40 C.F.R. §§ 63.1349 (b) (1) (i) – (v), (2), and (3) (i) – (iv), Group (006, 007, 012, 013, 014, 020, 021, 022, 023, and 024), 45CSR14, R14-026A, B.10., EU3, EU4, EU6, EU7]**

3.3.4. Except as provided in Section 3.3.6 [40 C.F.R. § 63.1349 (e)], performance tests required under Section 3.3.3 (1) through (2) [40 C.F.R. §§ 63.1349 (b) (1) and (b) (2)] shall be repeated every five years, except that the owner or operator of a kiln, in-line kiln/raw mill or clinker cooler is not required to repeat the initial performance test of opacity for the kiln, in-line kiln/raw mill or clinker cooler.

**[45CSR34, 40 C.F.R. § 63.1349 (c), Group (006, 007, 012, 013, 014, 019, 021, 022, 023, and 024), EU3, EU4, EU6, EU7]**

3.3.5. Performance tests required under Section 3.3.3 (3) [40 C.F.R. § 63.1349 (b) (3)] shall be repeated every 30

months.

**[45CSR34, 40 C.F.R. § 63.1349 (d), Group (006, 007, 012, 013, 014, 019, 021, 022, 023, and 024), EU3, EU4, EU6, EU7]**

- 3.3.6. (1) If a source plans to undertake a change in operations that may adversely affect compliance with an applicable D/F standard under 40 C.F.R. Part 63 Subpart LLL, the source must conduct a performance test and establish new temperature limit(s) as specified in Section 3.3.3 (3) [40 C.F.R. § 63.1349 (b) (3)].
- (2) If a source plans to undertake a change in operations that may adversely affect compliance with an applicable PM standard under 40 C.F.R. § 63.1343, the source must conduct a performance test as specified in Section 3.3.3 (1) [40 C.F.R. § 63.1349 (b) (1)].
- (3) In preparation for and while conducting a performance test required in Section 3.3.6 (1) [40 C.F.R. § 63.1349 (e) (1)], a source may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions in Sections 3.3.6 (3) (i) through (3) (iv) [40 C.F.R. §§ 63.1349 (e) (3) (i) through (iv)] are met. The source shall submit temperature and other monitoring data that are recorded during the pretest operations.
- (i) The source must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under 40 C.F.R. Part 63 Subpart LLL, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under Section 3.3.6. (3) (i) [40 C.F.R. § 63.1349 (e) (3) (i)] shall include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under Section 3.3.6. (1) [40 C.F.R. § 63.1349 (e) (1)], including when the planned operational change period would begin.
- (ii) The performance test results must be documented in a test report according to Section 3.3.2 [40 C.F.R. § 63.1349 (a)].
- (iii) A test plan must be made available to the Administrator prior to testing, if requested.
- (iv) The performance test must be conducted, and it must be completed within 360 hours after the planned operational change period begins.

**[45CSR34, 40 C.F.R. § 63.1349 (e)]**

### **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.]**

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

**[45CSR§30-5.1.c.2.B.]**

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

**[45CSR§30-5.1.c. State-Enforceable only.]**

3.4.4. The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by 40 C.F.R. § 63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.

**[45CSR34, 40 C.F.R. § 63.1355 (a)]**

3.4.5. The owner or operator shall maintain records for each affected source as required by 40 C.F.R. §§ 63.10(b) (2) and (b) (3); and

- (1) All documentation supporting initial notifications and notifications of compliance status under 40 C.F.R. § 63.9;
- (2) All records of applicability determination, including supporting analyses; and
- (3) If the owner or operator has been granted a waiver under 40 C.F.R. § 63.8 (f) (6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.

**[45CSR34, 40 C.F.R. § 63.1355 (b)]**

3.4.6. In addition to the recordkeeping requirements in Section 3.4.5 [40 C.F.R. § 63.1355 (b)], the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by 40 C.F.R. § 63.10 (c).

**[45CSR34, 40 C.F.R. § 63.1355 (c)]**

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### 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 West Virginia Code § 22-5-10 and 45CSR31.  
[45CSR§30-5.1.c.3.E.]
- 3.5.3. All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**If to the DAQ:**

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

**If to the US EPA:**

Associate Director  
Office of Enforcement and Permits Review  
(3AP12)  
U. S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. The certified emissions statement and pay fees to be submitted on July 31 of each year unless directed by DAQ.  
[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.  
[45CSR§30-5.3.e.]

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

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

3.5.8. **Deviations.**

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

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

**[45CSR§30-5.1.c.3.C.]**

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

**[45CSR§30-5.1.c.3.B.]**

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

**[45CSR§30-4.3.h.1.B.]**

3.5.10. Each owner or operator subject to the requirements of 40 C.F.R. Part 63 Subpart LLL shall comply with the notification requirements in 40 C.F.R § 63.9 as follows:

- (1) Initial notifications as required by 40 C.F.R. §§ 63.9 (b) through (d). For the purposes of 40 C.F.R. Part 63 Subpart LLL, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under 40 C.F.R. § 63.9 (b), provided the same information is contained in the permit application as required by 40 C.F.R. § 63.9 (b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of Chapter I of Title 40 and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.
- (2) Notification of performance tests, as required by 40 C.F.R. §§ 63.7 and 63.9 (e).
- (3) Notification of opacity and visible emission observations required by 40 C.F.R. § 63.1349 in accordance with 40 C.F.R. §§ 63.6 (h) (5) and 63.9 (f).
- (4) As required by 40 C.F.R. § 63.9 (g), notification of the date that the continuous emission monitor performance evaluation required by 40 C.F.R. § 63.8 (e) is scheduled to begin.
- (5) Notification of compliance status, as required by 40 C.F.R. § 63.9(h).

**[45CSR34, 40 C.F.R. § 63.1353 (b)]**

3.5.11. The owner or operator of an affected source shall comply with the reporting requirements specified in 40 C.F.R. § 63.10 of the general provisions of 40 C.F.R. Part 63 Subpart A as follows:

- (1) As required by 40 C.F.R. § 63.10 (d) (2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.
- (2) As required by 40 C.F.R. § 63.10 (d) (3), the owner or operator of an affected source shall report the opacity results from tests required by 40 C.F.R. § 63.1349.
- (3) As required by 40 C.F.R. § 63.10 (d) (4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under 40 C.F.R. § 63.6 (i) shall submit such reports by the dates specified in the written extension of compliance.
- (4) As required by 40 C.F.R. § 63.10 (d) (5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 C.F.R. § 63.6 (e) (3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and
- (5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

- (6) As required by 40 C.F.R § 63.10 (e) (2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by 40 C.F.R § 63.8 (e). The owner or operator shall submit the report simultaneously with the results of the performance test.
- (7) As required by 40 C.F.R § 63.10 (e) (2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under 40 C.F.R § 63.7 and described in 40 C.F.R § 63.6 (d) (6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under 40 C.F.R § 63.8 (e).
- (8) As required by 40 C.F.R § 63.10 (e) (3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.
- (9) The owner or operator shall submit a summary report semiannually, which contains the information specified in 40 C.F.R § 63.10 (e) (3) (vi). In addition, the summary report shall include:
  - (i) All exceedences of maximum control device inlet gas temperature limits specified in Sections 4.1.7, 5.1.6, 4.1.8 and 5.1.7 [40 C.F.R §§ 63.1344(a) and (b)];
  - (ii) All failures to calibrate thermocouples and other temperature sensors as required under Section 3.2.5 (6) [40 C.F.R § 63.1350 (f) (6)]; and
  - (iv) The results of any combustion system component inspections conducted within the reporting period as required under Section 3.2.6 [40 C.F.R § 63.1350 (i)].
  - (v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with Section 3.2.1 [40 C.F.R § 63.1350 (a)].
- (10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

**[45CSR34, 40 C.F.R. § 63.1354 (b)]**

### **3.6. Compliance Plan**

3.6.1. None

### **3.7. Permit Shield**

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

<b>40 C.F.R. Part 60 Subpart Y</b> (October 24, 1974)	Standards of Performance for Coal Preparation Plants do not apply to Capitol since Capitol began their existing coal handling operation prior to October 24, 1974, and 40 C.F.R. § 63.1356 (b) says that the conveying system transfer points used to convey coal from the mill to the kiln that are associated with coal preparation at a portland cement plant are not subject to Subpart Y. Capitol proposed coal handling operations will be subject to 40 C.F.R. Part 60 Subpart Y when the modifications are completed.
<b>40 C.F.R. Part 60 Subpart F</b> (August 31, 1971)	Standards of Performance for Portland Cement Plants do not apply to Capitol since Capitol commenced construction or modification prior to August 17, 1971. Capitol is also exempt because it is regulated by 40 C.F.R. Part 63 Subpart LLL.
<b>40 C.F.R. Part 60 Subpart LL</b> (August 24, 1982)	Standards of Performance for Metallic Mineral Processing do not apply because lime or limestone is not metallic mineral.
<b>40 C.F.R. Part 60 Subpart OOO</b> (August 1, 1985)	Standards of Performance for Nonmetallic Mineral Processing Plants do not apply to Capitol Cement since Capitol commenced construction or modification prior to August 31, 1983. The existing affected sources regulated by 40 C.F.R. Part 63 Subpart LLL are not subject to this NSPS. Capitol new and modified non-mineral facilities that are not subject to 40 C.F.R. Part 63 Subpart LLL will be subject to 40 C.F.R. Part 60 Subpart OOO when the modifications are completed.
<b>60 C.F.R. Part 60 Subpart UUU</b> (April 23, 1986)	Standards of Performance for Calciners and Dryers in Mineral Industries do not apply because lime or limestone is not listed as a mineral processed or produced in a mineral processing plant.
<b>40 C.F.R. Part 72</b> (01/11/93)	Acid Rain Program General Provisions does not apply to Capitol Cement Corporation because it is not considered a Title IV (Acid Rain) Source.

**4.0. Source-Specific Requirements [Kilns #8 (EP11.01) and #9 (EP12.01), Clinker Cooler #8 (EP11.02) and #9 (EP12.02), Dust Scoop (EP13.08), and #5, #6, #7, #8, #9, and #10 Raw Mills (EP09.01) of source group 009, 010, 011, 012, and 013 and emission point ID(s) CD11.02, CD13.08, Stack 007, Stack 008, Stack 010, and Stack 011]**

**4.1. Limitations and Standards**

4.1.1. When utilizing petroleum hydrocarbon contaminated soils the following provisions shall apply:

- (a) The petroleum hydrocarbon contaminated soils shall be introduced to No. 8 and 9 kilns at a maximum rate of 0.25% by weight of the raw material feed to the kilns. The contaminated soils shall be blended with the normal stone, shale, clay, and other raw materials into a water slurry prior to introduction to the kilns. Certified records of the amounts (tonnage) of contaminated soil and raw materials utilized shall be maintained in accordance with Section 4.1.1 (c).
- (b) The kilns shall provide 99.0% destruction efficiency for the petroleum hydrocarbon constituents.
- (c) The kilns shall utilize only petroleum-contaminated soils containing fuel oil, gasoline, kerosene, motor oil, hydraulic fluid, lubricants, and/or diesel fuel. The total petroleum hydrocarbon (TPH) concentration of contaminated soil shall not exceed 50,000 mg/kg (ppm by weight) as determined by USEPA Methods 8015 (TPH) and 8020 (BTEX) tests set forth in Third Edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Office of Solid Waste Publication SW-846. The permittee shall sample and analyze the soil prior to utilization in the kilns when the quantity removed at one location is greater than 25 tons. Each certified test record shall contain, as a minimum, a description of the soil origin at the plant site, soil quantity, date, TPH concentration, and verification of sampling and analytical method. A certified record for each lot of contaminated soil detailing the approximate quantity of soil, in tons, the known contaminants present, location from which it was removed, and date processed in the kiln shall be maintained for each quantity less than 25 tons.
- (d) No chlorinated or fluorinated hydrocarbon contaminated soils shall be utilized.
- (e) No material defined as hazardous wastes under 47CSR35 and 45CSR25 shall be utilized. Results of TCLP tests and analyses required in Section 4.1.1 (c) for each soil quantity greater than 25 tons removed from one location shall be submitted to the Director of Air Quality prior to utilizing the soil in the kilns.
- (f) The kilns shall utilize a maximum of 3,825 tons of petroleum contaminated soil in any calendar year.
- (g) Only petroleum contaminated soils from the Capitol Cement Corporation's Martinsburg plant property shall be introduced to the kilns.

**[45CSR13, R13-1674C, A.1., Kilns #8 (EP11.01) and #9 (EP12.01)]**

4.1.2. When returning cement kiln dust (CKD) into kiln Number 8 utilizing the "dust scoops" the following shall apply:

- (a) The rate of CKD returned shall not exceed 12 tons per hour or a total of 90,960 tons per year. Daily and annual records of the CKD returned shall be maintained on site for a period of 5 years and be readily accessible to the WV Division of Air Quality staff upon request. Records shall at a minimum be certified once per month.

- (b) A bin vent dust collector, identified in permit determination form PD98-208 as CD13.08 shall be installed, maintained, and operated so as to achieve a 99.5% control efficiency of particulate matter emissions from the pneumatic transfer of CKD to the scoop storage bin (EP13.08).

**[45CSR13, R13-1674C, A.2.]**

4.1.3. When utilizing the replacement cooler for # 8 kilns the following apply:

- (a) Clinker Cooler # 8 (ID. EP11.02) shall not be operated with out control device Cooler Dust Filter CD CD 11.02 also operating.
- (b) The Cooler Dust Filter control device for # 8 Clinker Cooler (CD 11.02) shall be operated and maintain with a minimum collection efficiency of 99.96% for particulate matter.
- (c) Particulate Matter Emissions from Emission Points ID Stack 010 (EP11.02) for #8 Clinker Cooler shall each not exceed 6.11 pounds per hour and 26.7 tons per year.
- (d) A continuous opacity monitor shall be installed, operated, and maintained in accordance with 40 C.F.R. 60 for Emission Points Stack 010 (EP11.02).
- (e) Clinker Cooler # 8 (ID. EP11.02) shall not process more than 35 tons per hour and 306,600 tons per year of clinker.

**[45CSR13, R13-1674C, A.3.]**

4.1.4. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-1616, R13-1674, R13-1674A, R13-1674B, and R13-1674C and any amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.

**[45CSR13, R13-1674C, C.3.]**

4.1.5. No owner or operator of a new or existing clinker cooler at a facility which is a major source subject to the provisions of 40 C.F.R. Part 63 Subpart LLL shall cause to be discharged into the atmosphere from the clinker cooler any gases which:

- (1) Contain particulate matter in excess of 0.050 kg per Mg (0.10 LB per ton) of feed (dry basis) to the kiln.
- (2) Exhibit opacity greater than ten percent.

**[45CSR34, 40 C.F.R. § 63.1345 (a), 45CSR13, R13-1674C, B.2. and B.3.]**

4.1.6. *Existing or reconstructed or new brownfield sources.*

No owner or operator of an existing or reconstructed kiln at a facility that is a major source subject to the provisions of 40 C.F.R. Part 63, Subpart LLL, shall cause to be discharged into the atmosphere from these affected sources, any gases which:

- (1) Contain particulate matter (PM) in excess of 0.15 kg per Mg (0.30 LB per ton) of feed (dry basis) to the kiln.

- (2) Exhibit opacity greater than 20 percent.
- (3) Contain D/F in excess of:
  - (i) 0.20 ng per dscm ( $8.7 \times 10^{-11}$  gr per dscf) (TEQ) corrected to seven percent oxygen; or
  - (ii) 0.40 ng per dscm ( $1.7 \times 10^{-10}$  gr per dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

**[45CSR34, 40 C.F.R. § 63.1343 (b), B.2., EP11.02 and EP12.01]**

4.1.7. The owner or operator of a kiln subject to a D/F emission limitation under Section 4.1.6 [40 C.F.R. § 63.1343] must operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) does not exceed the applicable temperature limit specified in Section 4.1.7 [40 C.F.R. § 63.1344 (b)].  
**[45CSR34, 40 C.F.R. § 63.1344 (a), B.2., EP11.01 and EP12.01]**

4.1.8. The temperature limit for affected sources meeting the limits of Section 4.1.7 [40 C.F.R. § 63.1344 (a)] is determined in accordance with Section 3.3.3 (3) (vi) [40 C.F.R. § 63.1349 (b) (3) (iv)].  
**[45CSR34, 40 C.F.R. § 63.1344 (b), B.2., EP11.01 and EP12.01]**

4.1.9. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in 45CSR10 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.  
**[45CSR§10-9.1, Kilns #8 and #9 EP11.01 and EP12.01]**

4.1.10. Standard requirements.

After May 31, 2004, an owner or operator of any Portland cement kiln subject to 45CSR§1-100 shall not operate the kiln during May 1 through September 30 unless the kiln has installed and operates during May 1 to September 30 with low-NO<sub>x</sub> burners, mid-kiln firing or alternative control techniques, subject to approval by the Secretary, that achieve at least the same emissions decreases as low-NO<sub>x</sub> burners or mid-kiln firing.  
**[45CSR§1-100.3., Kiln #9 (EP12.01)]**

4.1.11. No person shall cause, suffer, allow or permit emission of particulate matter into the open air from any fugitive dust control system which is twenty percent (20%) opacity or greater.  
**[45CSR§5-3.4., Coal Handling Operations, Group 015]**

4.1.12. No person shall cause, suffer, allow or permit a coal preparation plant or handling operation to operate that is not equipped with a fugitive dust control system. This system shall be operated and maintained in such a manner as to minimize the emission of particulate matter into the open air.  
**[45CSR§5-6.1., Coal Handling Operations, Group 015]**

4.1.13. The owner or operator of a coal preparation plant or handling operation shall maintain dust control of the premises and owned, leased or controlled access roads by paving, or other suitable measures. Good operating practices shall be observed in relation to stockpiling, car loading, breaking, screening and general maintenance to minimize dust generation and atmospheric entrainment.  
**[45CSR§5-6.2., Coal Handling Operations, Group 015]**

- 4.1.14. Where more than one source operation or combinations thereof, which are part of a duplicate source operation, are vented through separate stacks, the allowable stack emission rates for the separate stacks shall be determined by the following formula:

$$R_s = R_t (W_s / W_t)$$

Where,

$R_s$  is the allowable stack emission rate for the separate stack venting the source operation(s) in question;

$R_t$  is the total allowable emission rate for the duplicate source operation;

$W_s$  is the operating process weight rate for the source operation(s) vented through the separate stack; and

$W_t$  is the total operating process weight rate for the duplicate source operation.

**[45CSR§7-4.8., Kilns #8 and #9 (EP11.01 and EP12.01)]**

- 4.1.15. Mineral acids shall not be released from any type source operation or duplicate source operation or from any air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in Table 45-7B of 45CSR7. Following table lists the equipment with their allowable stack emission rates for hydrogen chloride (HCl) and Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>).

Kiln	Pollutant	Allowable Stack Emission Rate
		Milligrams Per Dry Cubic Meter
Number 8	HCl Mist and/or Vapor	420
	Sulfuric Acid Mist	70
Number 9	HCl Mist and/or Vapor	420
	Sulfuric Acid Mist	70

**[45CSR§7-4.2., Kilns #8 and #9 (EP11.01 and EP12.01)]**

- 4.1.16. No person shall cause, suffer, allow, or permit the emission into open air from any source operation an in-stack sulfur dioxide concentration exceeding 2000 ppmv by volume from existing source operations, except as provided in 45CSR§10-4.1.

- e. Any owner or operator of a manufacturing process source operation(s) which has the potential to emit less than 500 pounds per year of sulfur oxides.

**[45CSR§§10-4.1. and 4.1.e., EP11.01 and EP12.01]**

- 4.1.17. Compliance with the allowable sulfur dioxide concentration limitations from manufacturing process source operation(s) set forth in 45CSR10 shall be based on a block three-(3) hour averaging time.

**[45CSR§10-4.2., EP11.01 and EP12.01]**

## 4.2. Monitoring Requirements

4.2.1. At the request of the Director the owner and/or operator of a source shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of 45CSR§10-8.2.a. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of 45CSR10.

**[45CSR§10-8.2.a., Kilns #8 and #9 (EP11.01 and EP12.01)]**

4.2.2. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) shall demonstrate compliance with 45CSR§§10-3, 4 and 5 (Sections 4.1.16 and 4.1.17) by testing and /or monitoring in accordance with one or more of the following: 40 C.F.R. Part 60, Appendix A, Method 6, Method 15, continuous emissions monitoring systems (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit.

**[45CSR§10-8.2.c, Kilns #8 and #9 (EP11.01 and EP12.01)]**

4.2.3. Monitoring requirements.

a. Any owner or operator of an kiln subject to 45CSR§1-100 shall complete an initial performance test and subsequent annual testing consistent with the requirements of 40 CFR Part 60, appendix A, method 7, 7A, 7C, 7D or 7E; and

b. The operator may use the results of continuous emission monitoring system (CEMS) to replace the annual testing requirements set forth in Section 4.2.3 (a) [45CSR§1-100.6. (a)]. Such equipment shall be installed and operated consistent with 45CSR§1-70 through 76 and 40 C.F.R. Part 75.

**[45CSR§1-100.6, #9 Kilns (EP12.01)]**

## 4.3. Testing Requirements

4.3.1. With regard to the emissions testing required by the WV Department of Environmental Protection, Division of Air Quality (DAQ), 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, testing locations, and any other relevant information. The Director must receive the test protocol no less than thirty (30) days prior to the date the testing is to take place. The Director shall be notified at least fifteen (15) days in advance of the actual dates and times during which the tests will be conducted. The results of emissions testing shall be submitted to the DAQ within thirty (30) days of completion of testing.

**[45CSR13, R13-1674C, B.5.]**

4.3.2. Prior to the installation of calibrated stack gas monitoring devices, sulfur dioxide emission rates shall be calculated on an equivalent fuel sulfur content basis.

**[45CSR§10-8.2.b., Kilns #8 and #9 (EP11.01 and EP12.01)]**

4.3.3. 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 45CSR§§10-3, 4 or 5 (Sections 4.1.16 and 4.1.17). Such tests shall be conducted in accordance with the appropriate test method set forth in 40 C.F.R. Part 60, Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Director. The Director, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Director exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

**[45CSR§10-8.1.a., Kilns #8 and #9 (EP11.01 and EP12.01)]**

4.3.4. See Section 3.3.

4.3.5. See Section 5.3.8 for Kilns #8 and #9 (EP11.01 and EP12.01) for stack testing.

#### **4.4. Recordkeeping Requirements**

4.4.1. Records required under Section 4.1.1 (a), (c), and Section 4.1.2 shall be maintained on-site and be readily accessible to WV Division of Air Quality staff to demonstrate compliance with the conditions of R13-1674C. Each record shall be certified by the plant manager to be true and accurate, based on information and belief after reasonable inquiry. The records shall be maintained for a minimum of five (5) years and be made available to or submitted to the Director or his/her authorized representative upon request or as required by R13-1674C.

**[45CSR13, R13-1674C, B.1.]**

4.4.2. The permittee shall maintain accurate records of daily production and daily average pressure drop across the baghouse for clinker coolers #7 and #8. These records shall be certified by a responsible official, maintained on site for a period of five (5) years, and made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request.

**[45CSR13, R13-1674C, B.6.]**

4.4.3. Recordkeeping requirements. -- Any owner or operator of a kiln subject to 45CSR§1-100 shall produce and maintain records which shall include, but are not limited to:

- a. The emissions, in pounds of NO<sub>x</sub> per ton of clinker produced from each affected Portland cement kiln;
- b. The type of control used for each affected Portland cement kiln;
- c. The date, time and duration of any startup, shutdown or malfunction in the operation of any of the cement kilns or the emissions monitoring equipment;
- d. The results of any performance testing;
- e. Daily cement kiln production records; and
- f. All records required to be produced or maintained shall be retained on site for a minimum of 2 years and be made available to the Secretary or Administrator upon request.

**[45CSR§1-100.7., Kilns #9 (EP12.01)]**

4.4.4. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) subject to 45CSR§§10-3, 4 or 5 (Sections 4.1.16 and 4.1.17) shall maintain on-site a record of all required monitoring data as established in a monitoring plan pursuant to 45CSR§10-8.2.c. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years.

**[45CSR§10-8.3.a., Kilns #8 and #9 (EP11.01 and EP12.01)]**

4.4.5. The owner or operator of a fuel burning unit(s) or a combustion source(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each unit in a manner specified by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.

**[45CSR§10-8.3.c, Kilns #8 and #9 (EP11.01 and EP12.01)]**

#### **4.5. Reporting Requirements**

4.5.1. The owner or operator of an affected source shall comply with the reporting requirements specified in 40 C.F.R. § 63.10 of the general provisions of 40 C.F.R. Part 63 Subpart A as follows:

(1) As required by 40 C.F.R. § 63.10 (d) (2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.

(2) As required by 40 C.F.R. § 63.10 (d) (3), the owner or operator of an affected source shall report the opacity results from tests required by Sections 3.3.2 through 3.3.7 [40 C.F.R. § 63.1349].

**[45CSR34, 40 C.F.R. § 63.1354 (b), 45CSR13, R13-1674C, B.2. and B.3.]**

4.5.2. 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., Kilns #8 and #9 (EP11.01 and EP12.01)]**

4.5.3. Reporting requirements. -- Any owner or operator subject to the requirements of Section 4.1.10 (45CSR§1-100.3.) shall comply by submitting a report documenting for that kiln the total NO<sub>x</sub> emissions from May 1 through September 30 of each year to the Secretary and Administrator by October 31 of each year, beginning in 2004.

**[45CSR§1-100.5 (b), #9 Kilns (EP12.01)]**

#### **4.6. Compliance Plan**

4.6.1. None

**5.0. Source-Specific Requirements [Kiln #7 (EP10.01), Clinker Cooler #7 (EP10.02), and emission point ID(s) CD10.02 and Stack 009, plus the Modern Preheater-Kiln System and related Equipment and emission point ID(s) New Points]**

**5.1. Limitations and Standards**

**PLANT AREAS**

The existing and modified parts of the plant is categorized into the following groups:

- Group 1: Quarry and Crushing --- EU1
- Group 2: Raw Material Preparation --- EU2
- Group 3: Pyroprocessing --- EU3
- Group 4: Clinker Handling and Storage --- EU4
- Group 5: Fuel Handling --- EU5
- Group 6: Cement Production --- EU6
- Group 7: Shipping --- EU7
- Group 8: Other Miscellaneous Sources --- EU8

**Facility Wide Requirements**

- 5.1.1. Clinker production from the facility shall not exceed 2,300,000 tons per year. Compliance with the annual production limit shall be determined using a 12 month rolling total. A 12 month rolling total shall mean the sum of the clinker production at any given time for the previous twelve (12) consecutive calendar months. **[45CSR14, R14-026A, A.1., #7 Kiln (EP10.01), Preheater-Preheater-Kiln (EP42.04)]**
- 5.1.2. Emissions from the facility shall not exceed the following based on a rolling yearly total. A rolling yearly total shall mean the sum of the emissions at any given time for the previous twelve-(12) consecutive calendar months.

<b>Pollutant</b>	<b>Allowable Emissions (TPY)</b>
PM <sub>10</sub>	642.2
TSP	992.1
SO <sub>2</sub>	5,702.6
NO <sub>x</sub> (as NO <sub>2</sub> )	3,704.2
CO	4,493.0
VOC	159.4
Fluorides	1.2
Lead	2.7

**[45CSR14, R14-026A, A.2.]**

- 5.1.3. During periods of startup, shutdown and malfunctions, the source shall follow the procedures found in the site specific Startup, Shutdown, and Malfunction plan as required by 40 C.F.R. Part 63 Subpart LLL. **[45CSR34, 40 C.F.R. 63.6 (e), 45CSR14, R14-026A, A.3., See Section 3.2.12.]**

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

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

**[45CSR14, R14-026A, A.4.]**

- 5.1.5. *Existing, reconstructed, or new brownfield sources.*

No owner or operator of an existing, reconstructed or new brownfield kiln or an existing, reconstructed or new brownfield in-line kiln/raw mill at a facility that is a major source subject to the provisions of 40 C.F.R. Part 63 Subpart LLL shall cause to be discharged into the atmosphere from these affected sources, any gases which:

- (1) Contain particulate matter (PM) in excess of 0.15 kg per Mg (0.30 LB per ton) of feed (dry basis) to the kiln. When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the combined particulate matter emissions from the kiln or in-line kiln/raw mill and the alkali bypass are subject to this emission limit.
- (2) Exhibit opacity greater than 20 percent.
- (3) Contain D/F in excess of:
  - (i) 0.20 ng per dscm ( $8.7 \times 10^{-11}$  gr per dscf) (TEQ) corrected to seven percent oxygen; or
  - (ii) 0.40 ng per dscm ( $1.7 \times 10^{-10}$  gr per dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

**[45CSR34, 40 C.F.R. § 63.1343 (b), 45CSR14, R14-026A, B.10.]**

- 5.1.6. The owner or operator of a kiln subject to a D/F emission limitation under 40 C.F.R. § 63.1343 must operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) and alkali bypass PMCD, if applicable, does not exceed the applicable temperature limit specified in Section 5.1.7. The owner or operator of an in-line kiln/raw mill subject to a D/F emission limitation under Sections 5.1.5 [40 C.F.R. § 63.1343 (b)] must operate the in-line kiln/raw mill, such that:

- (1) When the raw mill of the in-line kiln/raw mill is operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in Section 5.1.20 and established during the performance test when the raw mill was operating is not exceeded.
- (2) When the raw mill of the in-line kiln/raw mill is not operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in Section 5.1.20 and established during the performance test when the raw mill was not operating, is not exceeded.

- (3) If the in-line kiln/raw mill is equipped with an alkali bypass, the applicable temperature limit for the alkali bypass specified in Section 5.1.20 and established during the performance test, with or without the raw mill operating, is not exceeded.

**[45CSR34, 40 C.F.R. § 63.1344 (a), 45CSR14, R14-026A, B.10.]**

- 5.1.7. The temperature limit for affected sources meeting the limits of Section 5.1.19 or Section 5.1.19 (a) (1) through (a) (3) is determined in accordance with Section 3.3.3 (3) (iv) [40 C.F.R. § 63.1349 (b) (3) (iv)].

**[45CSR34, 40 C.F.R. § 63.1344 (b), 45CSR14, R14-026A, B.10.]**

- 5.1.8. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R14-026 and any amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.

**[45CSR14, R14-026A, C.3.]**

**Group 1 - Quarry and Crushing Requirements - - - EU1**

- 5.1.9. Emissions from the Group 1 point sources shall not exceed the following:

Emission Point Identification Number	Emission Point Description	Outlet Loading (gr/dscf)	Existing Or New
CD01.01	Primary Crusher Dust Collector	0.02	Existing
CD01.03	Existing Crusher 40T Bin D\C	0.01	Existing
CD01.05	Existing Crushing 1011 to 1007 D\C	0.01	Existing
CD02.01	Secondary Crusher Dust Collector	0.01	Existing
CD02.03A	Existing Crushing 1000 to 99 D\C	0.01	Existing
CD02.03B	Existing Crushing 999 to 998 D\C	0.01	Existing
CD37.03	New Primary Crusher D\C	0.01	New
CD37.04	New Crushing System D\C1	0.01	New
CD37.06	New Premix Storage Feeding D\C	0.01	New
CD38.01	New Premix Storage Discharge D\C	0.01	New

- Emissions from the Group 1 fugitive sources shall not exceed the following:

Emission Point Identification Number	Emission Point Description	TSP (TPY)	PM10 (TPY)
EPOX.01	Quarry Drilling	0.01	0.01
EPOX.02	Quarry Blasting	0.01	0.01
EPOX.03.01	Loader to truck (good rock)	0.07	0.03
EPOX.03.02	Loader to truck (waste rock)	0.01	0.00
EPOX.03.03	Truck to waste pile	0.01	0.00
EPOX.03.04	Truck to crusher pile	0.07	0.03
EPOX.03.05	Truck or loader to crusher dump	0.07	0.03
EP01.07	Belt conveyor 1007 to surge pile	0.01	0.00

<b>Emission Point Identification Number</b>	<b>Emission Point Description</b>	<b>TSP (TPY)</b>	<b>PM10 (TPY)</b>
EP.01.08	Loader transfer	0.01	0.00
EP.02.01.04	Belt conveyor 1005 to belt conveyor 1004	0.02	0.01
EP.02.01.07	Screen 1003 to conveyor 1002	0.01	0.00
EP02.02	Belt conveyor 1001 to belt conveyor 1000	0.02	0.01
EP02.04	Belt conveyor 999 to stone pile	0.01	0.00
EP03.04.01	Stone pile to loader	0.01	0.00
EP03.04.02	Loader to truck	0.01	0.00
EP03.02	Shuttle conveyor 998 to raw bins	0.04	0.02
EP35.01	Belt conveyor 989 to limestone bin	0.01	0.00
EP37.01.01	Truck to small bin	1.58	0.75
EP37.01.02	Small bin to conveyor	0.40	0.19
EP37.01.03	Conveyor to conveyor	0.40	0.19
EP37.02.01	Truck to large bin	1.58	0.75
EP37.02.02	Large bin to conveyor	0.40	0.19
EP37.04.01	Conveyor to split	0.79	0.37
EP37.05	Split to surge pile	0.12	0.06
EP03.01	5 stone storage piles	0.15	0.07

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 50.4 tons per year of TSP nor 40.6 tons per year of PM<sub>10</sub> based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by the more stringent requirements of Section 5.1.9.

**[45CSR14, R14-026A, A.5.]**

5.1.10. On and after the date on which the performance test required to be conducted by 40 C.F.R. § 60.8 is completed, no owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart OOO shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:

- (1) Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and
- (2) Exhibit greater than 7 percent opacity.

**[45CSR16, 40 C.F.R. § 60.672 (a)]**

5.1.11. No owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart OOO shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity.

**[45CSR16, 40 C.F.R. § 60.672 (b), 45CSR14, R14-026A, B.8.]**

5.1.12. No owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.

**[45CSR16, 40 C.F.R. § 60.672 (c), 45CSR14, R14-026A, B.8.]**

**Group 2 - Raw Material Preparation Requirements - - - EU2**

5.1.13. Emissions from the following sources shall not exceed the following:

<b>CD Identification Number</b>	<b>CD Description</b>	<b>Outlet Loading (gr/dscf)</b>	<b>Existing Or New</b>
CD04.03	No.1 Tertiary Norblo	0.01	Existing
CD04.02	No. 1 Tertiary Torit	0.01	Existing
CD05.06	No. 2 Tertiary Norblo	0.02	Existing
CD05.02	No. 2 Tertiary Torit	0.01	Existing
CD38.01	New Premix Storage Discharge D\C	0.01	New
CD39.01	New Limestone Silos Feeding D\C	0.01	New
CD39.05	New Additive Discharge System D\C	0.01	New
CD39.06	New Additive Discharge System D\C	0.01	New
CD40.01	New Raw Mill High Zone D\C	0.01	New
CD40.06	New Homo Silo Feeding D\C	0.01	New
CD40.07	New Homo Silo Discharge D\C	0.01	New
CD40.02	New Raw Mill Low Zone D\C	0.01	New
CD40.05	New Raw Meal Air Slide D\C	0.01	New

Emissions from the Group 2 fugitive sources shall not exceed the following:

<b>Emission Point Identification Number</b>	<b>Emission Point Description</b>	<b>TSP (TPY)</b>	<b>PM<sub>10</sub> (TPY)</b>
EP04.01.01	Raw bins to feeders East Tunnel	0.03	0.01
EP04.01.02	Feeders to belt conveyor East 917	0.03	0.01
EP05.01.01	Raw bins to feeders West Tunnel	0.01	0.00
EP05.01.02	Feeders to belt conveyor West 956	0.01	0.00
EP26.02.01, EP26.04.01	Truck to stockpile (sand & iron ore)	0.01	0.00
EP26.02.02, EP26.04.02	Pile to loader	0.01	0.00
EP26.02.03, EP26.04.03	Loader to hopper	0.01	0.00
EP26.02.04, EP26.04.04	Hopper to feeder 985	0.01	0.00
EP26.02.05, EP26.04.05	Feeder 985 to elevator 984	0.01	0.00
EP26.02.06, EP26.04.06	Elevator 984 to storage bins 922/924	0.01	0.00
EP26.02.07, EP26.04.07	Storage bins 922/924to feeders 921/923	0.01	0.00
EP26.02.08, EP26.04.08	Feeders to belt conveyor 917	0.01	0.00
EP04.01.03	Hammermill 916 to return belt east 917	0.01	0.00
EP04.03.04	Screens 914/913 to roof belt east 912	0.01	0.00
EP05.01.03	Hammermill 955 to return belt west 956	0.01	0.00
EP05.06.04	Screen 952 to roof belt west 951	0.01	0.00
EP05.05	Raw bin to feeder 993	0.01	0.00
EP05.03	Feeder 993 to belt conveyor 992	0.01	0.00
EP06.01.01	Belt conveyor 992 to hammermill 991	0.01	0.00

<b>Emission Point Identification Number</b>	<b>Emission Point Description</b>	<b>TSP (TPY)</b>	<b>PM<sub>10</sub> (TPY)</b>
EP06.01.02	Hammermill 991	0.01	0.00
EP06.01.03	Hammermill 991 to elevator 990	0.01	0.00
EP07.01	Elevator 990 to roof belt 989	0.01	0.00
EP08.01A.01	Roof belt 912 to #5 & 7 RM feed bin	0.06	0.03
EP08.01A.02	#5 & 7 RM feed bin to feeders 128/277	0.01	0.00
EP09.01A	Feeder 128 to #5 RM 126.5	0.01	0.00
EP09.01B.01	Feeder 277 to #7 RM 275.7	0.01	0.00
EP08.01B.01	Roof belt 951 to #9 RM feed bin	0.01	0.00
EP08.01B.02	#9 RM feed bin to feeder 884	0.01	0.00
EP09.01B.02	Feeder 884 to #9 RM 881.9	0.01	0.00
EP26.02.09, EP26.04.09	Feeder 985 to belt conveyor 917/956	0.01	0.00
EP40.03	Split to surge pile	0.01	0.00

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 32.6 tons per year of TSP nor 27.6 tons per year of PM<sub>10</sub> based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by the more stringent requirements of Section 5.1.13.

[45CSR14, R14-026A, A.7.]

**Group 3 - Pyroprocessing Requirements - - - EU3**

5.1.14. The existing long wet kiln (#7 Kiln) (EP10.01) shall only combust coal, coal fines, coke or on site generated petroleum contaminated soils as outlined in Section 5.1.18.

[45CSR14, R14-026A, A.8., #7 Kiln (EP10.01)]

5.1.15. The new preheater-precalciner kiln may combust any combination of the following fuels: coal, coal fines, coke, and on site generated petroleum contaminated soils (as outlined in Section 5.1.18). If the permittee wishes to use alternative fuels including but not limited to tires, wood, paper cardboard, non-PVC plastics, automobile fluff, carpets, non-hazardous liquids/solids, and refuse derived fuels the permittee shall notify the Director in writing of the fuel to be used within thirty (30) days of the use of the fuel. Use of the alternative fuel shall only commence upon the granting of the written consent of the Director.

[45CSR14, R14-026A, A.9., Preheater-Precalciner Kiln (EP42.04)]

5.1.16. The permittee may combust spent carbon, tires and/or roofing shingles in the new preheater-precalciner kiln provided that the permittee shall first conduct or have conducted EPA approved stack tests to determine compliance with the VOC and PM emission limits as set forth in Section 5.1.22 while combusting the fuel in question. Until compliance with the VOC and PM emission limits are verified and written approval is granted by the Director, the permittee may initially only combust the amount of fuel needed to perform the stack test. A stack test protocol and the anticipated test date shall be submitted to this office at least 7 days prior to the date of the stack test. Results of the stack test shall be reported to this office within 30 days of performance of stack test. The changes in fuel, however, will not be subject to NSR/PSD review since the fuel can be accommodated in the new preheater-precalciner kiln and the Permittee has accounted for the criteria pollutant emissions' potential changes in this PSD (R14-026 Application).

[45CSR14, R14-026A, A.10., Preheater-Precalciner Kiln (EP42.04)]

5.1.17. Both the existing Kiln #7 (EP10.01) and the new preheater-precalciner kiln may combust fuel oil during startup.

**[45CSR14, R14-026A, A.11., EP10.01 and Preheater-Precalciner Kiln (EP42.04)]**

- 5.1.18. When combusting onsite generated petroleum hydrocarbon contaminated soils the following provisions shall apply:
- (a) The petroleum hydrocarbon contaminated soils shall be introduced into the kilns at a maximum rate of 0.25% by weight of the raw material feed to the kilns. Certified records of the amounts (tonnage) of contaminated soil and raw materials utilized per month shall be maintained in accordance with Section 5.1.18 (c).
  - (b) The kilns shall provide at least 99.0% destruction efficiency for the petroleum hydrocarbon constituents.
  - (c) The kilns shall combust only onsite generated petroleum contaminated soils containing fuel oil, gasoline, kerosene, motor oil, hydraulic fluid, lubricants, and/or diesel fuel. The total petroleum hydrocarbon (TPH) concentration of contaminated soil shall not exceed 50,000 mg/kg (ppm by weight) as determined by USEPA Methods 8015 (TPH) and 8020 (BTEX) tests set forth in Third Edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Office of Solid Waste Publication SW-846. The permittee shall sample and analyze the soil prior to utilization in the kilns. Each certified test record shall contain, as a minimum, a description of the soil origin at the plant site, soil quantity, date, TPH concentration, and verification of sampling and analytical method. The aforementioned tests shall be performed at least once for each batch of petroleum contaminated soils burned.
  - (d) No chlorinated or fluorinated hydrocarbon contaminated soils shall be combusted.
  - (e) No material defined as hazardous wastes under 47CSR35 or 45CSR25 shall be combusted. Results of TCLP tests and analyses required in Section 5.1.18 (c) shall be submitted to the Director of the Division of Air Quality prior to utilizing the soil in the kilns.
  - (f) The kilns may combust a maximum of 3,825 tons of petroleum contaminated soil per year based on a 12 month rolling total.
  - (g) Only petroleum contaminated soils from the permittee's Martinsburg plant property shall be introduced to the kilns.

**[45CSR13, R13-1674C, A.1., Kiln #7 (EP10.01), 45CSR14, R14-026A, A.12., Preheater-Precalciner Kiln (EP42.04)]**

- 5.1.19. Clinker production from the preheater-precaciner system shall not exceed 2,200,000 tons per year.  
**[45CSR14, R14-026A, A.13., Preheater-Precalciner Kiln (EP42.04)]**
- 5.1.20. Beginning no later than 180 days following startup of the preheater-precaciner kiln system, clinker production from Kiln 7 shall not exceed 100,000 tons per year based on a rolling 12 month total.  
**[45CSR14, R14-026A, A.14., Kiln #7 (EP10.01)]**
- 5.1.21. Operation of the existing kiln systems (#8 Kiln and #9 Kiln) shall permanently cease after the preheater-precaciner kiln system achieves full production or within 180 days after the preheater-precaciner kiln system first becomes operational whichever comes first.  
**[45CSR14, R14-026A, A.15., Kilns #8 and #9 (EP11.01 and EP12.01)]**
- 5.1.22. Emissions from the preheater-precaciner kiln shall not exceed the following:

Source	Pollutant	Allowable	Compliance Method	Averaging Time
Ph/pc Kiln System	NOx	3098.0 TPY	CEM	TPY, rolling monthly
Ph/pc Kiln System	NOx	1745.0 LB/hr	CEM	8-hr average (LB/hr)
Ph/pc Kiln System	CO	3960.0 LB/hr	CEM	1-hr average (LB/hr)
Ph/pc Kiln System	CO	4425.8 TPY	CEM	TPY, rolling monthly
Ph/pc Kiln System	VOC	38.7 LB/hr	Stack Test	3-hr average (LB/hr)
Ph/pc Kiln System	VOC	154.0 TPY	Stack Test/production data	TPY, rolling monthly
Ph/pc Kiln System	VOC	0.14 LB/ton clinker	CEM/production data	12 month rolling average
Ph/pc Kiln System	SO2	4425.8 TPY	CEM	TPY, rolling monthly
Ph/pc Kiln System	SO2	2111.3 LB/hr	CEM	3-hr average (LB/hr)
Ph/pc Kiln System, with Clinker Cooler & Coal Mill	TSP	195.8 TPY	Stack Test / production data	TPY, rolling monthly
Ph/pc Kiln System, with Clinker Cooler & Coal Mill	PM <sub>10</sub>	166.4 TPY	Stack Test / production data	TPY, rolling monthly
Ph/pc Kiln System, with Clinker Cooler & Coal Mill	TSP	60.1 LB/hr	Stack Test	Average (3) 1-hr tests
Ph/pc Kiln System, with Clinker Cooler & Coal Mill	PM <sub>10</sub>	51.1 LB/hr	Stack Test	Average (3) 1-hr tests
Ph/pc Kiln System with Clinker Cooler	Opacity	20 %	COM	6-minute block average
Ph/pc Kiln System with Clinker Cooler	Pb	2.37 TPY	Production data	TPY, rolling monthly
Ph/pc Kiln System with Clinker Cooler	Fluorides	1.0 TPY	Production data	TPY, rolling monthly

**[45CSR14, R14-026A, A.16., Preheater-Precalciner Kiln (EP42.04)]**

5.1.23. Emissions from Kiln #7 (EP10.01) shall not exceed the following:

Pollutant	Allowable	Compliance Method	Averaging Time
NOx	500.00 TPY	Stack Test/production data	TPY, 12 rolling monthly total
NOx	807LB/hr	Stack Test	Average (3) 1-hr tests
CO	60 LB/hr	Stack Test	Average (3) 1-hr tests
CO	6.00 TPY	Stack Test/production data	TPY, 12 rolling monthly total
VOC	10 LB/hr	Stack Test	Average (3) 1-hr tests
VOC	1.40 TPY	Stack Test/production data	TPY, 12 rolling monthly total
SO2	900.00 TPY	Stack Test/production data	TPY, 12 rolling monthly total
SO2	2000 ppm	Stack Test	3-hr average (ppmdv)

Pollutant	Allowable	Compliance Method	Averaging Time
TSP	28.1 TPY	Stack Test/production data	TPY, 12 rolling monthly total
TSP	0.3 LB/ton dry feed	Stack Test/production data	Average (3) 1-hr tests
PM <sub>10</sub>	23.9 TPY	Stack Test/production data	TPY, 12 month rolling total
PM <sub>10</sub>	0.26 LB/ton dry feed	Stack Test/production data	Average (3) 1-hr tests
Opacity	20 %	COM	6-minute block average
Pb	0.36 TPY	Production data	TPY, 12 rolling monthly total
Fluorides	0.05 TPY	Production data	TPY, 12 rolling monthly total

**[45CSR14, R14-026A, A.17., Kiln #7 (EP10.01)]**

5.1.24. Emissions from the Group 3 sources shall not exceed the following:

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD42.04	New Raw Mill Kiln/Clinker Cooler D\C	0.01	New
CD10.01	No. 7/8 Kiln and Torch	0.03	Existing
CD10.02	No. 7 Kiln Clinker Cooler	0.02	Existing
CD42.02	New Kiln Feeding Bucket Elevator D\C	0.01	New
CD42.03	New Kiln Feeding with pump D\C	0.01	New
CD43.02	New Cooler Discharge D\C	0.01	New

Additionally, emissions from the combined above sources shall not exceed 241.6 tons per year of TSP nor 205.3 tons per year of PM<sub>10</sub> based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by the more stringent requirements of Section 5.1.24.

**[45CSR14, R14-026A, A.18.]**

5.1.25. The new in-line raw mill kiln will be equipped with low-NO<sub>x</sub> burners.

**[45CSR14, R14-026A, A.19.]**

5.1.26. No person shall cause, suffer, allow or permit emission of particulate matter into the open air from any fugitive dust control system which is twenty percent (20%) opacity or greater.

**[45CSR§5-3.4., 45CSR14, R14-026A, B.3., Coal Handling Operations, EU5]**

5.1.27. No person shall cause, suffer, allow or permit a coal preparation plant or handling operation to operate that is not equipped with a fugitive dust control system. This system shall be operated and maintained in such a manner as to minimize the emission of particulate matter into the open air.

**[45CSR§5-6.1., 45CSR14, R14-026A, B.3., Coal Handling Operations, EU5]**

5.1.28. The owner or operator of a coal preparation plant or handling operation shall maintain dust control of the premises and owned, leased or controlled access roads by paving, or other suitable measures. Good operating practices shall be observed in relation to stockpiling, car loading, breaking, screening and general maintenance to minimize dust generation and atmospheric entrainment.

**[45CSR§5-6.2., 45CSR14, R14-026A, B.3., Coal Handling Operations, EU5]**

5.1.29. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

**[45CSR§10-11.1., 45CSR14, R14-026A, B.5.]**

5.1.30. No owner or operator of a new or existing clinker cooler at a facility which is a major source subject to the provisions of 40 C.F.R. Part 63 Subpart LLL shall cause to be discharged into the atmosphere from the clinker coolers any gases which:

- (1) Contain particulate matter in excess of 0.050 kg per Mg (0.10 LB per ton) of feed (dry basis) to the kiln.
- (2) Exhibit opacity greater than ten percent.

**[45CSR34, 40 C.F.R. § 63.1345 (a), 45CSR14, R14-026A, B.10., EP10.02 and EP43.01]**

5.1.31. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in 45CSR10 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

**[45CSR§10-9.1, 45CSR13, R13-1674C, Kiln #7 (EP10.01), 45CSR14, R14-026A, B.5., and Preheater-Precalciner Kiln (EP42.04)]**

5.1.32. Standard requirements.

After May 31, 2004, an owner or operator of any Portland cement kiln subject to 45CSR§1-100 shall not operate the kiln during May 1 through September 30 unless the kiln has installed and operates during May 1 to September 30 with low-NO<sub>x</sub> burners, mid-kiln firing or alternative control techniques, subject to approval by the Secretary, that achieve at least the same emissions decreases as low-NO<sub>x</sub> burners or mid-kiln firing.

**[45CSR§1-100.3., 45CSR14, R14-026A, B.2., Preheater-Precalciner Kiln (EP42.04)]**

5.1.33. Mineral acids shall not be released from any type source operation or duplicate source operation or from any air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in Table 45-7B of 45CSR7. Following table lists the equipment with their allowable stack emission rates for hydrogen chloride (HCl) and Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>).

Kiln	Pollutant	Allowable Stack Emission Rate
		Milligrams Per Dry Cubic Meter
Precalciner Kiln	HCl Mist and/or Vapor	210
	Sulfuric Acid Mist	35
Number 7	HCl Mist and/or Vapor	210
	Sulfuric Acid Mist	35

**[45CSR§7-4.2., 45CSR14, R14-026A, B.2., Kilns #7 (EP10.01) and Preheater-Precalciner Kiln (EP42.04)]**

- 5.1.34. No person shall cause, suffer, allow, or permit the emission into open air from any source operation an in-stack sulfur dioxide concentration exceeding 2000 ppmv by volume from existing source operations, except as provided in 45CSR§10-4.1.
- e. Any owner or operator of a manufacturing process source operation(s) which has the potential to emit less than 500 pounds per year of sulfur oxides.

**[45CSR§§10-4.1. and 4.1.e., EP10.01 and EP42.04]**

- 5.1.35. Compliance with the allowable sulfur dioxide concentration limitations from manufacturing process source operation(s) set forth in 45CSR10 shall be based on a block three-(3) hour averaging time.  
**[45CSR§10-4.2., EP10.01 and EP42.04]**
- 5.1.36. Where more than one source operation or combinations thereof, which are part of a duplicate source operation, are vented through separate stacks, the allowable stack emission rates for the separate stacks shall be determined by the following formula:

$$R_s = R_t (W_s / W_t)$$

Where,

$R_s$  is the allowable stack emission rate for the separate stack venting the source operation(s) in question;

$R_t$  is the total allowable emission rate for the duplicate source operation;

$W_s$  is the operating process weight rate for the source operation(s) vented through the separate stack; and

$W_t$  is the total operating process weight rate for the duplicate source operation.

**[45CSR§7-4.8., Kilns #7 (EP10.01) and Preheater-Precalciner Kiln (EP42.04)]**

**Kiln #7**

- 5.1.37. When utilizing the replacement coolers for Kiln # 7 the following apply:
- (a) Clinker Cooler # 7 (ID. EP10.02) shall not be operated with out control device Cooler Dust Filter CD 10.02.
- (b) The Cooler Dust Filter control device for Clinker Cooler (CD 10.02) # 7 shall be operated and maintain with a minimum collection efficiency of 99.96% for particulate matter.
- (c) Particulate Matter Emission from Emission Points ID Stack 009 (EP10.02) for Clinker Cooler #7 shall not exceed 6.11 pounds per hour and 26.7 tons per year.
- (d) A continuous opacity monitor shall be installed, operated, and maintained in accordance with 40 C.F.R. 60 for Emission Points Stack 009 (EP10.02).

- (e) Clinker Cooler # 7 (ID. EP10.02) shall not process more than 35 tons per hour and 306,600 tons per year.

**[45CSR13, R13-1674C, A.3., EP10.02]**

5.1.38. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-1616, R13-1674, R13-1674A, R13-1674B, and R13-1674C and any amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.

**[45CSR13, R13-1674C, C.3., EP10.01.]**

**Group 4 - Clinker Handling and Storage Requirements --- EU4**

5.1.39. Emissions from the Group 4 point sources shall not exceed the following:

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD43.03	New Clinker Storage Feeding D\C	0.01	New
CD43.04	Small Clinker Storage Discharge D\C	0.01	New
CD43.06	Small Clinker Storage Feeding D\C	0.01	New
CD43.07	New Clinker Storage Discharge D\C	0.01	New
CD43.08	New Steel Conveyor Discharge D\C	0.01	New
CD43.09	New Shipping Plant Feeding D\C	0.01	New
CD43.10	New Shipping System D\C	0.01	New

Emissions from the Group 4 fugitive sources shall not exceed the following:

Emission Point Identification Number	Emission Point Description	TSP (TPY)	PM <sub>10</sub> (TPY)
EP10.04A.01	Cooler #7 to cooler drag conveyor 7CPC1	5.88	2.78
EP10.04A.02	Cooler drag 7CPC1 to drag conveyors 692/209/85	5.88	2.78
EP10.04A.03	Drag conveyor 692/209/85 to bucket elevators 289/83	5.88	2.78
EP14.01	Bucket elevator 289/83 to clinker storage hall	5.88	2.78
EP14.02.01	Clam bucket pickup	5.88	2.78
EP14.02.02	Clam bucket to clinker pile	5.88	2.78
EP14.03.01	Clam bucket pickup	45.0	21.28
EP14.03.02	Clam bucket to clinker bins	45.0	21.28
EP14.05	Clinker reclaim screen	0.07	0.03
EP14.07	Clinker received to pile	0.07	0.03

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 147.18 tons per year of TSP nor 77.78 tons per year of PM<sub>10</sub> based on a 12 month rolling total Compliance with 45CSR§7-4.1 will be shown by more the stringent requirements of Section 5.1.39.

[45CSR14, R14-026A, A.20.]

**Group 5 - Fuel Handling Requirements - - - EU5**

5.1.40. Emissions from the Group 5 point sources shall not exceed the following:

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD41.03	New Coal Dust Silo for Kiln D\C	0.01	New
CD41.04	New Coal Dust Silo for PRS D\C	0.01	New

Emissions from the Group 5 fugitive sources shall not exceed the following:

Emission Point Identification Number	Emission Point Description	TSP (TPY)	PM <sub>10</sub> (TPY)
EP15.01.01	Rail unloading to hopper	0.08	0.04
EP15.01.02	Hopper to feeders 585/586	0.03	0.01
EP15.02	Feeders 585/586 to conveyor 584	0.01	0.00
EP15.03	Conveyor 584 to coal tower	0.01	0.00
EP15.04.01	Coal tower to stockpile	0.01	0.00
EP15.11	Truck unloading to stockpile	0.01	0.00
EP15.04.02	Stockpile to feeders 569/570	0.01	0.00
EP15.05.01	Feeders 569/570 to belt conveyor 567	0.01	0.00
EP15.05.02	Belt conveyor 567 to hammermill 566	0.01	0.00
EP15.06	Hammermill 566	0.01	0.00
EP15.07.01	Hammermill 566 to belt conveyor 564	0.01	0.00
EP15.07.02	Belt conveyor 564 to belt conveyor 562	0.01	0.00
EP15.09A	Belt conveyor 562 to belt conveyor 557	0.01	0.00
EP15.10.01	Belt conveyor 557 to #7 coal tank	0.01	0.00
EP15.10.02	#7 coal tank to weigh belt 81	0.01	0.00
EP15.10.03	Weigh belt 81 to #7 coal mill feeder 80	0.01	0.00
EP41.01.01	Coal feeder to conveyor	0.02	0.01
EP41.01.02	Conveyor to CSH fuel bins	0.01	0.00
EP41.02.01	CSH fuel bins to feeders	0.01	0.00
EP41.03.02	Feeders to conveyor	0.02	0.01

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 1.36 tons per year of TSP nor 1.14 tons per year of PM<sub>10</sub> based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by more the stringent requirements of Section 5.1.40.

[45CSR14, R14-026A, A.22.]

5.1.41. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate, any affected facility including associated air pollution equipment in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR16, 40 C.F.R. § 60.11 (d), 45CSR14, R14-026A, B.8.]

5.1.42. On and after the date on which the performance test required to be conducted by 40 C.F.R. § 60.8 is completed, an owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart Y shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.  
**[45CSR16, 40 C.F.R. § 60.252 (c), 45CSR14, R14-026A, B.8., Fuel Handling System]**

**Group 6 - Cement Production Requirements - - - EU6**

5.1.43. Emissions from the Group 6 point sources shall not exceed the following:

<b>CD Identification Number</b>	<b>CD Description</b>	<b>Outlet Loading (gr/dscf)</b>	<b>Existing Or New</b>
CD49.01	Finish Mill Transfer D\C	0.02	Existing
CD43.13	New Chain Conveyor D\C	0.01	New
CD44.01	New Mill 12 Feeding System D\C	0.01	New
CD44.02	New Mill 11 Feeding System D\C	0.01	New
CD44.07	No. 11 Cement Mill D\C	0.01	New
CD44.09	New Cement Mill 11 D\C	0.01	New
CD44.10	No. 12 Cement Mill D\C	0.01	New
CD44.12	New Cement Mill 12 D\C	0.01	New
CD16.01	No. 7 Finish Mill Norblo D\C	0.01	Existing
CD16.02	No. 7 Finish Mill Torit D\C	0.01	Existing
CD17.01	No. 8 Finish Mill Norblo D\C	0.01	Existing
CD18.01	No. 9 Finish Mill Norblo D\C	0.01	Existing
CD18.02	No. 9 Finish Mill Torit D\C	0.01	Existing
CD19.02	No. 10 Finish Mill Baghouse D\C	0.01	Existing
CD19.01	No. 10 Finish Mill Norblo D\C	0.01	Existing

Emissions from the Group 6 fugitive sources shall not exceed the following:

<b>Emission Point Identification Number</b>	<b>Emission Point Description</b>	<b>TSP (TPY)</b>	<b>PM<sub>10</sub> (TPY)</b>
EP26.06.03	Truck unloading to stockpile	0.01	0.00
EP26.06.04	Stockpile to truck	0.01	0.00
EP26.06.05	Truck to storage hall	0.01	0.00
EP26.06.06	Clam bucket to gypsum bin	0.01	0.00
EP16.01U	Feed bins to feeders 43 and 44	0.64	0.30
EP17.01U	Feed bins to feeders 246/245/244	0.64	0.30
EP18.01U	Feed bins to feeders 361/362	1.29	0.61
EP19.01U	Feed bins to feeders 652/651	1.68	0.79

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 168.94 tons per year of TSP nor 141.67 tons per year of PM<sub>10</sub> based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by more the stringent requirements of Section 5.1.43.

**[45CSR14, R14-026A, A.24.]**

5.1.44. Emissions from the new Finish Mills 11 & 12 air heater shall not exceed the following:

Pollutant	LB/hr	TPY
CO	11.5	50.5
NO <sub>x</sub>	20.0	87.6
TSP	3.3	14.4
SO <sub>2</sub>	71.0	310.8
VOC	0.8	3.3
Fluorides	0.04	0.16

**[45CSR14, R14-026A, A.26.]**

5.1.45. Emissions from the new Finish Mill 10 air heater shall not exceed the following:

Pollutant	LB/hr	TPY
CO	2.4	10.7
NO <sub>x</sub>	4.2	18.6
TSP	0.7	3.1
SO <sub>2</sub>	15.1	66.0
VOC	0.2	0.7

**[45CSR14, R14-026A, A.27.]**

5.1.46. Finish Mills 10 and 11 & 12 air heaters shall only combust fuel oil or natural gas. Additionally, the Finish Mill 10 air heater shall not exceed 29.7 MMBTU/hr MDHI and the Finish Mills 11 and 12 air heater shall not exceed 139.9 MMBTU/hr MDHI.

**[45CSR14, R14-026A, A.28.]**

**Group - 7 Shipping Requirements - - - EU7**

5.1.47. Emissions from the Group 7 point sources shall not exceed the following:

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD24.03	S. Truck Plant D\C	0.02	Existing
CD23.01	N.E. Packer D\C	0.01	Existing
CD45.01	New Bulk Lane 1 D\C	0.01	New
CD45.02	New Bulk Lane 2 D\C	0.01	New
CD45.03	New Bulk Rail Lane D\C	0.01	New
CD23.02	S.E. Packer D\C	0.01	Existing

CD23.04	S.W. Packer D\C	0.01	Existing
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CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD23.03	N.W. Packer D\C	0.01	Existing
CD24.01	Truck Plant Bins D\C	0.01	Existing
CD24.02	N. Truck Plant D\C	0.02	Existing
CD24.04	Truck Plant B-Lock D\C	0.01	Existing
CD45.04	New Ext.1 Cement Silo Feeding D\C	0.01	New
CD45.05	New Ext. 2 Cement Silo Feeding D\C	0.01	New
CD45.06	New Ext.3 Cement Silo Feeding D\C	0.01	New
CD45.07	New Int. Cement Silo Feeding D\C	0.01	New
CD45.08	New Int. Cement Silo Discharge D\C	0.01	New
CD46.01	Cement Receiving DC1	0.01	New
CD46.02	Cement Receiving DC2	0.01	New
CD46.03	Cement Receiving DC3	0.01	New
CD46.04	Cement Receiving DC4	0.01	New
CD46.05	Cement Receiving DC5	0.01	New
CD47.01	East Bank Silos 1DC	0.01	New
CD20.04	East Bank Silos 2DC	0.01	New
CD20.05	East Bank Silos 3DC	0.01	New
CD20.06	East Bank Silos 4DC	0.01	New
CD20.07	East Bank Silos 5DC	0.01	New
CD21.06	Middle Bank Silos 2DC	0.01	New
CD21.07	Middle Bank Silos 3DC	0.01	New
CD21.08	Middle Bank Silos 4DC	0.01	New
CD22.04	West Bank Silos 1DC	0.01	New
CD22.05	West Bank Silos 2DC	0.01	New
CD22.06	West Bank Silos 3DC	0.01	New
CD22.07	West Bank Silos 4DC	0.01	New
CD48.01	Miscellaneous D\C; Packhouse	0.01	New
CD48.02	Color Loading D\C	0.01	New
CD48.03	Bin Filters (14)	0.01	New

Emissions from the Group 7 fugitive sources shall not exceed the following:

Emission Point Identification Number	Emission Point Description	TSP (TPY)	PM <sub>10</sub> (TPY)
EP23.08	Northwest bulk bins	1.62	0.77

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 68.49 tons per year of TSP nor 57.57 tons per year of PM<sub>10</sub> based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by more the stringent requirements of Section 5.1.47.

[45CSR14, R14-026A, A.29.]

**Group - 8 Miscellaneous Sources Requirements - - - EU8**

5.1.48. Emissions from the Group 8 point sources shall not exceed the following:

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD13.01	Waste Dust Tank D\C	0.01	Existing
CD31.03	Flyash Loadout D\C	0.01	Existing
CD42.01	Kiln Bypass D\C	0.01	Existing
CD13.03	Dry Dust Loading D\C	0.01	Existing
EP30.01	Maint. Bldg. Boiler	0.02	Existing
CD31.01	Flyash Tank No. 1 D\C	0.01	Existing
CD31.02	Flyash Tank No. 2 D\C	0.01	Existing
CD13.08	7&8 Kiln Dust Scoop Bin	0.01	Existing

Emissions from the Group 8 fugitive sources shall not exceed the following:

Emission Point Identification Number	Emission Point Description	TSP (TPY)	PM <sub>10</sub> (TPY)
EP13.04	Waste dust bin/wet drum to dump truck	0.69	0.33
EP13.06	Dump truck to CKD pile	2.06	0.98
EP34.01	Vacuum truck and sweeper	5.15	2.44
EP0X.04	Crusher feed pile	0.14	0.07
EP0X.05	Quarry waste pile	0.14	0.07
EP26.01	Sand storage pile	0.04	0.02
EP26.03	Iron storage pile	0.16	0.08
EP47.02	Slag storage pile	0.08	0.04
EP03.03	Calcium rock storage pile	0.03	0.01
EP26.05	Gypsum storage pile	0.15	0.08
EP15.04.03	Coal storage	0.52	0.26
EP13.07	CKD stockpile	4.70	2.35
EP25.01	Quarry haul roads	176.64	52.14
EP25.02	Quarry haul roads (shale)	3.63	1.07
EP25.03	Quarry haul roads (waste)	15.02	4.43
EP25.05.01	Additive trucks (unpaved)	6.23	1.84
EP50.03	Slag receipts (unpaved)	2.84	0.84
EP25.07	Waste dust trucks (unpaved)	4.45	1.31
EP25.06.01	Fuel deliveries (unpaved)	1.49	0.44
EP25.09.01	Flyash trucks (unpaved)	10.94	3.23
EP25.11.01	Stone bought/sold (unpaved)	1.71	0.51

EP25.10.01	Waste dust customer trucks (unpaved)	0.82	0.24
EP25.08	Misc. plant vehicles (unpaved)	6.90	2.04

Emission Point Identification Number	Emission Point Description	TSP (TPY)	PM <sub>10</sub> (TPY)
EP25.04.02	Cement shipments (paved)	11.22	2.19
EP50.02	Slag shipments (paved)	1.22	0.24
EP25.05.02	Slag receipts (paved)	2.09	0.41
EP50.04	Waste dust trucks (paved)	0.95	0.19
EP25.06.02	Fuel deliveries (paved)	0.57	0.11
EP25.09.02	Flyash trucks (paved)	1.88	0.37
EP25.11.02	Stone bought/sold (paved)	0.82	0.16
EP25.10.02	Waste dust trucks (paved)	0.44	0.09
EP43.18	Emergency outside clinker pile	0.07	0.03
EP43.19	Transfer to emergency outside clinker pile	5.88	2.78
EP43.20	Emergency outside clinker pile to underground conveyor	3.68	1.74

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 269.37 tons per year of TSP nor 80.18 tons per year of PM<sub>10</sub> based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by more the stringent requirements of Section 5.1.48.

[45CSR14, R14-026A, A.31.]

## 5.2. Monitoring Requirements

### Facility Wide Requirements

5.2.1. See Section 3.2.

5.2.2. At the request of the Director the owner and/or operator of a source shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of 45CSR§10-8.2.a. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of 45CSR10.

[45CSR§10-8.2.a., EP10.01 and EP42.04]

### Quarry and Crushing and Raw Material Preparation - - - EU1 and EU2

5.2.3. No additional requirements.

### Pyroprocessing - - - EU3

5.2.4. A continuous emission monitoring system (CEMS) shall be installed, operated, and maintained to measure the emissions of SO<sub>2</sub>, NO<sub>x</sub>, and CO from the preheater-precalciner kiln system exhaust stack. The CEMS shall be installed within 180 days of startup of the pyroprocessing line, and operated in compliance with the USEPA Part

60, Appendix B, Performance Specification 2 (NO<sub>x</sub> and SO<sub>2</sub>) and Performance Specification 4, 4a or 4b (CO) as appropriate.

**[45CSR14, R14-026A, B.11.]**

- 5.2.5. A continuous opacity monitoring system (COMS) shall be installed, operated, and maintained to measure the opacity from the preheater-precalsiner kiln system exhaust stack, kiln #7 (EP10.01), and the clinker coolers. The COMS shall be installed within 180 days of startup of the pyroprocessing line, and operated as outlined in Section 5.2.12 [40 C.F.R. § 63.1350 (m)].

**[45CSR14, R14-026A, B.12.]**

- 5.2.6. Monitoring requirements.

- a. Any owner or operator of an kiln subject to 45CSR§1-100 shall complete an initial performance test and subsequent annual testing consistent with the requirements of 40 CFR Part 60, appendix A, method 7, 7A, 7C, 7D or 7E;

**[45CSR§1-100.6.a., 45CSR14, R14-026A, B.2., Preheater-Precalsiner Kiln, (EP42.04)]**

- 5.2.7. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) shall demonstrate compliance with 45CSR§§10-3, 4 and 5 (Sections 5.1.34 and 5.1.35) by testing and/or monitoring in accordance with one or more of the following: 40 C.F.R. Part 60, Appendix A, Method 6, Method 15, continuous emissions monitoring systems (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit.

**[45CSR§10-8.2.c, B.5., Kiln #7 (EP10.01), Preheater-Precalsiner Kiln, (EP42.04)]**

#### **Clinker Handling and Storage - - - EU4**

- 5.2.8. No additional requirements.

#### **Fuel Handling - - - EU5**

- 5.2.9. See Section 3.2.

- 5.2.10. Compliance with opacity standards shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 C.F.R. 60. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

**[45CSR16, 40 C.F.R. § 60.11 (b), B.8., 45CSR14, R14-026A]**

#### **Cement Production - - - EU6**

- 5.2.11. See Section 3.2.

- 5.2.12. The requirements under Section 3.2.4 [40 C.F.R. § 63.1350 (e)] to conduct daily Method 22 testing shall not apply to any specific raw mill or finish mill equipped with a continuous opacity monitor COM or bag leak detection system (BLDS). If the owner or operator chooses to install a COM in lieu of conducting the daily visual emissions testing required under Section 3.2.4 [40 C.F.R. § 63.1350 (e)], then the COM must be installed at the outlet of the PM control device of the raw mill or finish mill, and the COM must be installed, maintained, calibrated, and operated as required by the general provisions in 40 C.F.R. Part 63 Subpart A and according to PS-1 of appendix B to 40 C.F.R. Part 60. To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity

for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard. If the owner or operator chooses to install a BLDS in lieu of conducting the daily visual emissions testing required under Section 3.2.4 [40 C.F.R. § 63.1350 (e)], the requirements in Section 5.2.12 (1) through (9) [40 C.F.R. § 63.1350 (m) (1) through (9)] apply to each BLDS:

- (1) The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less. “Certify” shall mean that the instrument manufacturer has tested the instrument on gas streams having a range of particle size distributions and confirmed by means of valid filterable PM tests that the minimum detectable concentration limit is at or below 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- (2) The sensor on the BLDS must provide output of relative PM emissions.
- (3) The BLDS must have an alarm that will activate automatically when it detects a significant increase in relative PM emissions greater than a preset level.
- (4) The presence of an alarm condition should be clearly apparent to facility operating personnel.
- (5) For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm.
- (6) All BLDS must be installed, operated, adjusted, and maintained so that they are based on the manufacturer's written specifications and recommendations. The EPA recommends that where appropriate, the standard operating procedures manual for each bag leak detection system include concepts from EPA's “Fabric Filter Bag Leak Detection Guidance” (EPA-454/R-98-015, September 1997).
- (7) The baseline output of the system must be established as follows:
  - (i) Adjust the range and the averaging period of the device; and
  - (ii) Establish the alarm set points and the alarm delay time.
- (8) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the operations and maintenance plan required by paragraph (a) of this section. In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 1 calendar year period unless a responsible official as defined in 40 C.F.R. § 63.2 certifies in writing to the Administrator that the fabric filter has been inspected and found to be in good operating condition.
- (9) The owner or operator must maintain and operate the fabric filter such that the bag leak detector alarm is not activated and alarm condition does not exist for more than 5 percent of the total operating time in a 6-month block period. Each time the alarm activates, alarm time will be counted as the actual amount of time taken by the owner or operator to initiate corrective actions. If inspection of the fabric filter demonstrates that no corrective actions are necessary, no alarm time will be counted. The owner or operator must continuously record the output from the BLDS during periods of normal operation. Normal operation does not include periods when the BLDS is being maintained or during startup, shutdown or malfunction.

**[45CSR34, 40 C.F.R. § 63.1350 (m), 45CSR14, R14-026A, B.10.]**

**Shipping - - - EU7**

5.2.13. See Section 3.2.

**Other Miscellaneous Sources - - - EU8**

5.2.14. See Section 3.2.

**5.3. Testing Requirements**

**Facility Wide Requirements**

5.3.1. See Section 3.3.

**Quarry and Crushing and Raw Material Preparation - - - EU1 and EU2**

5.3.2. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Sections 5.1.9 and 5.1.13. If any emissions are observed in accordance with the Method 22 testing the permittee shall, within 24 hours, perform a Method 9 test in accordance with 40 CFR Part 60, Appendix A. If six (6) consecutive monthly inspections reveal no visible emissions, then the observer shall take the readings semi-annually. If there are no emissions observed in the semi-annual inspection, then the readings shall be annual. If, at any time a visible emission is observed, the inspections shall revert back to monthly, until (6) consecutive monthly readings have no visible emissions observed. Records of the Method 22 testing and any necessary Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.

**[45CSR14, R14-026A, A.6.]**

5.3.3. (1) In determining compliance with the particulate matter standards in Sections 5.1.11 and 5.1.12 [40 C.F.R. § 60.672 (b) and (c)], the owner or operator shall use Method 9 and the procedures in 40 C.F.R. § 60.11, with the following additions:

- (i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
- (ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
- (iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

(2) When determining compliance with the fugitive emissions standard for any affected facility described under Sections 5.1.11 [40 C.F.R. § 60.672 (b)], the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

- (i) There are no individual readings greater than 10 percent opacity; and

- (ii) There are no more than 3 readings of 10 percent for the 1-hour period.
  
- (4) When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under Section 5.1.12 [40 C.F.R. § 60.672 (c)], the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
  - (i) There are no individual readings greater than 15 percent opacity; and
  - (ii) There are no more than 3 readings of 15 percent for the 1-hour period.

**[45CSR16, 40 C.F.R. § 60.675 (c) (1), (3), and (4), 45CSR14, R14-026A, B.8.]**

5.3.4. The owner or operator shall determine compliance with the particulate matter standards in Section 5.1.10 [40 C.F.R. § 60.672 (a)] as follows:

- (1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.
- (2) Method 9 and the procedures in 40 C.F.R. § 60.11 shall be used to determine opacity.

**[45CSR16, 40 C.F.R. § 60.675 (b)]**

### **Pyroprocessing - - - EU3**

5.3.5. Prior to the installation of calibrated stack gas monitoring devices, sulfur dioxide emission rates shall be calculated on an equivalent fuel sulfur content basis.

**[45CSR§10-8.2.b., Kiln #7 and Preheater-Precalciner Kiln, (EP42.04)]**

5.3.6. 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 45CSR§§10-3, 4 or 5 (Sections 5.1.34 and 5.1.35). Such tests shall be conducted in accordance with the appropriate test method set forth in 40 C.F.R. Part 60, Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Director. The Director, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Director exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

**[45CSR§10-8.1.a., Kiln #7 (EP10.01), 45CSR14, R14-026A, B.5., Preheater-Precalciner Kiln (EP42.04), Finish Mills (EP44.09, EP44.13 and EP19.02Pb)]**

5.3.7. In order to determine compliance with the D/F limits set forth in 40 C.F.R. 63 Subpart LLL, the permittee shall perform EPA approved stack tests on Kiln #7 (EP10.01) and the new precalciner-preheater kiln (EP42.04). The compliance test on Kiln #7 must be performed in accordance with Kiln #7's existing D/F testing cycle. The compliance test for the new preheater-precalciner kiln must be performed within 180 days of startup of the said kilns pyroprocessing system.

**[45CSR14, R14-026A, B.15., Kiln #7 (EP10.01), Preheater-Precalciner Kiln, (EP42.04)]**

5.3.8. The permittee shall conduct tests to determine compliance with the nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), volatile organic compounds (VOC), total suspended particulate (TSP), particulate matter 10 (PM<sub>10</sub>), hydrogen chloride (HCl) and sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) emission limitations in the Kiln #7, Section 5.1.23. The Methods listed below from Appendix A of 40 C.F.R. Part 60 shall be utilized for purposes of conducting performance tests, unless the Director approves an alternate or equivalent method. Requirements shall be met with respect to submission of a test protocol and notification of testing. For the equipment subject to 40 C.F.R. 63 Subpart LLL, compliance for opacity will be shown by the more stringent rule, 45CSR7 or 40 C.F.R. 63 Subpart LLL. Kiln #7 testing must be performed within 120 days of the Title V Permit effective date.

<b><u>Pollutant</u></b>	<b><u>Method</u></b>
Nitrogen Oxides (NO <sub>x</sub> )	7
Carbon Monoxide (CO)	10
Sulfur Dioxide (SO <sub>2</sub> )	6
Volatile Organic Compounds (VOC)	25 or 25A
Particulate Matter 10 (PM <sub>10</sub> )	5 or 5A
Total Suspended Particulate (TSP)	5 or 5A
Hydrochloric Acid (HCl)	26
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	8

The initial testing of the hydrogen chloride (HCl) and sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) and the subsequent testing to determine compliance with the nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), volatile organic compounds (VOC), total suspended particulate (TSP), and particulate matter 10 (PM<sub>10</sub>) limitations of Sections 5.1.23 and 5.1.33 shall be conducted in accordance with the schedule set forth in the following table:

<b>Test</b>	<b>Test Results</b>	<b>Testing Frequency</b>
Initial	≤50% of NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10</sub> , TSP, VOC, HCl, H <sub>2</sub> SO <sub>4</sub> limits	Once/5 years
Initial	between 50% and 90 % of NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10</sub> , TSP, VOC, HCl, H <sub>2</sub> SO <sub>4</sub> limits	Once/3 years
Initial	≥90% NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10</sub> , TSP, VOC, HCl, H <sub>2</sub> SO <sub>4</sub> limits	Annual
Annual	If annual testing is required, after two successive tests indicate mass emission rates between 50% and 90 % NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10</sub> , TSP, VOC, HCl, H <sub>2</sub> SO <sub>4</sub> limits	Once/3 years
Annual	If annual testing is required, after three successive tests indicate mass emission rates ≤50% of NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10</sub> , TSP, VOC, HCl, H <sub>2</sub> SO <sub>4</sub> limits	Once/5 years
Once/3 years	If testing is required once/3 years, after two successive tests indicate mass emission rates 50% of NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10</sub> , TSP, VOC, HCl, H <sub>2</sub> SO <sub>4</sub> limits	Once/5 years
Once/3 years	If testing is required once/3 years and any test indicates a mass emission rate ≥90% of NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10</sub> , TSP, VOC, HCl, H <sub>2</sub> SO <sub>4</sub> limits	Annual
Once/5 years	If testing is required once /5 years and any test indicates mass emission rates between 50% and 90 % of NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10</sub> , TSP, VOC, HCl, H <sub>2</sub> SO <sub>4</sub> limits	Once/3 years

Test	Test Results	Testing Frequency
Once/5 years	If testing is required once/5 years and any test indicates a mass emission rate $\geq 90\%$ of NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10</sub> , TSP, VOC, HCl, H <sub>2</sub> SO <sub>4</sub> limits	Annual

**[45CSR§30-5.1.c., 45CSR§7-8.1., #7 Kiln (EP10.01),]**

5.3.9. In order to determine compliance with the hourly VOC, TSP, and PM<sub>10</sub> emissions limits set forth in Section 5.1.22 and the particulate loading limit set forth in Section 5.1.24, the permittee shall perform EPA approved stack tests on the preheater-precalciner kiln system exhaust stack as outlined in the following table. The initial compliance test must be performed within 180 days of startup of the pyroprocessing system. Said stack tests shall be used to determine a “LB of pollutant per ton of clinker produced” emission factor. This emission factor along with clinker production records shall be used to determine compliance with the annual VOC and PM emission limits set forth in Section 5.1.22.

Test	Test Results	Testing Frequency
Initial	$\leq 50\%$ of VOC, TSP, PM <sub>10</sub> limits	Once/5 years
Initial	Between 50% and 90% of VOC, TSP, PM <sub>10</sub> limits	Once/3 years
Initial	$\geq 90\%$ of VOC, TSP, PM <sub>10</sub> limits	Annual
Annual	After two successive tests indicate emission rates $\leq 50\%$ of VOC, TSP, PM <sub>10</sub> limits	Once/5 years
Annual	After two successive tests indicate emission rates $< 90\%$ of VOC, TSP, PM <sub>10</sub> limits	Once/3 years
Annual	$\geq 90\%$ of VOC, TSP, PM <sub>10</sub> limits	Annual
Once/3 years	After two successive tests indicate emission rates $\leq 50\%$ of VOC, TSP, PM <sub>10</sub> limits	Once/5 years
Once/3 years	$< 90\%$ of VOC, TSP, PM <sub>10</sub> limits	Once/3 years
Once/3 years	$\geq 90\%$ of VOC, TSP, PM <sub>10</sub> limits	Annual
Once/5 years	$\leq 50\%$ of VOC, TSP, PM <sub>10</sub> limits	Once/5 years
Once/5 years	$< 90\%$ of VOC, TSP, PM <sub>10</sub> limits	Once/3 years
Once/5 years	$\geq 90\%$ of VOC, TSP, PM <sub>10</sub> limits	Annual

**[45CSR14, R14-026A, B.13., Preheater-Precalciner (EP42.04)]**

5.3.10. In order to determine compliance with the hourly emissions limits set forth in Section 5.1.23, and the particulate loading limit set forth in Section 5.1.24, the permittee shall perform EPA approved stack tests on Kiln #7. The compliance tests must be performed within 180 days following startup of the preheater-precalciner kiln system. Said stack tests shall be used to determine a “LB of pollutant per ton of clinker produced” emission factor. This emission factor along with clinker production records shall be used to determine compliance with the annual emission limits set forth in Section 5.1.23. Said stack tests shall be repeated at least every 5 years.

**[45CSR14, R14-026A, B.14., #7 Kiln (EP10.01), Preheater-Precalciner Kiln, (EP42.04)]**

5.3.11. Within 180 days of startup of the new ph-pc kiln Capitol will perform tests using EPA Method 202 or an alternative test method approved by the Director to determine the emission rate of Condensable Particulate Matter (CPM) emitted by the new ph-pc kiln and Kiln 7.

**[45CSR14, R14-026A, B.18., #7 Kiln (EP10.01), Preheater-Precalciner Kiln, (EP42.04)]**

**Clinker Handling and Storage - - - EU4**

5.3.12. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed

in Section 5.1.35. If a positive emission is observed during the monthly USEPA Method 22 inspections, a corrective action as listed in the site-specific Startup, Shutdown, and Malfunction plan must be initiated within one hour. Additionally, within one hour a certified USEPA Method 9 observer must conduct a USEPA Method 9 "Opacity Measurement" (6-minutes) on the affected source. Records of the Method 22 testing and any necessary Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.

**[45CSR14, R14-026A, A.21.]**

### **Fuel Handling - - - EU5**

5.3.13. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Section 5.1.40. If a positive emission is observed during the monthly USEPA Method 22 inspections, a corrective action as listed in the site-specific Startup, Shutdown, and Malfunction plan must be initiated within one hour. Additionally, within one hour a certified USEPA Method 9 observer must conduct a USEPA Method 9 "Opacity Measurement" (6-minutes) on the affected source. Records of the Method 22 testing and any necessary Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.

**[45CSR14, R14-026A, A.23.]**

5.3.14. 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 of such facility, the owner or operator of such facility shall conduct performance test(s) to determine compliance with emission limitations set forth in §60.252(c) and furnish a written report of the results of such performance test(s).

**[45CSR16, 40 C.F.R. § 60.8 (a), 45CSR14, R14-026A, B.8.]**

5.3.15. The owner or operator shall determine compliance with the particular matter standards in Section 5.1.42 [40 C.F.R. § 60.252] as follows:

(2) Method 9 and the procedures in Section 5.2.12 [40 C.F.R. § 60.11] shall be used to determine opacity.

**[45CSR16, 40 C.F.R. §§ 60.254 (b) and (b) (2), 45CSR14, R14-026A, B.8.]**

### **Cement Production - - - EU6**

5.3.16. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Section 5.1.43. If a positive emission is observed during the monthly USEPA Method 22 inspections, a corrective action as listed in the site-specific Startup, Shutdown, and Malfunction plan must be initiated within one hour. Additionally, within one hour a certified USEPA Method 9 observer must conduct a USEPA Method 9 "Opacity Measurement" (6-minutes) on the affected source. Records of the Method 22 testing and any necessary Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.

**[45CSR14, R14-026A, A.25.]**

### **Shipping - - - EU7**

5.3.17. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Section 5.1.47. If a positive emission is observed during the monthly USEPA Method 22 inspections, a corrective action as listed in the site-specific Startup, Shutdown, and Malfunction plan must be initiated within one hour. Additionally, within one hour a certified USEPA Method 9 observer must conduct a USEPA Method 9 "Opacity Measurement" (6-minutes) on the affected source. Records of the Method 22 testing and any necessary Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.

**[45CSR14, R14-026A, A.30.]**

### **Other Miscellaneous Sources - - - EU8**

- 5.3.18. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Section 5.1.48. If a positive emission is observed during the monthly USEPA Method 22 inspections, a corrective action as listed in the site-specific Startup, Shutdown, and Malfunction plan must be initiated within one hour. Additionally, within one hour a certified USEPA Method 9 observer must conduct a USEPA Method 9 "Opacity Measurement" (6-minutes) on the affected source. Records of the Method 22 testing and any necessary Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.  
**[45CSR14, R14-026A, A.32.]**

## **5.4. Recordkeeping Requirements**

### **Facility Wide Requirements**

- 5.4.1. See Section 3.4.
- 5.4.2. For the purpose of determining compliance with production limits set forth in Sections 5.1.1, 5.1.19, and 5.1.20, the permittee shall maintain daily and monthly records of the amount of clinker produced in each kiln. Such records shall be retained on-site by the permittee for at least five (5) years and shall be certified and made available to the Director or his duly authorized representative upon request.  
**[45CSR14, R14-026A, B.16.]**
- 5.4.3. The permittee shall maintain monthly hours of operation for the major processing operations at the facility. Such records shall be retained on-site by the permittee for at least five (5) years and shall be certified and made available to the Director or his duly authorized representative upon request.  
**[45CSR14, R14-026A, B.17.]**

### **Quarry and Crushing and Raw Material Preparation - - - EU1 and EU2**

- 5.4.4. See Section 3.4.
- 5.4.5. Any owner or operator subject to the provisions of 40 C.F.R. Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:
- (1) A notification of the date construction (or reconstruction as defined under 40 C.F.R. § 60.15) of an affected facility is commenced postmarked no later than 30 days after such date.
  - (2) A notification of the anticipated date of initial startup of an affected facility postmarked not more than 60 days not less than 30 days prior to such date.
  - (3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

**[45CSR16, 40 C.F.R. § 60.7 (a) (1), (2), (3), 45CSR14, R14-026A, B.8.]**

**Pyroprocessing - - - EU3**

5.4.6. See Section 3.4.

5.4.7. Recordkeeping requirements. -- Any owner or operator of an kiln subject to 45CSR§1-100 shall produce and maintain records, which shall include, but are not limited to:

- a. The emissions, in pounds of NO<sub>x</sub> per ton of clinker produced from each affected Portland cement kiln;
- b. The type of control used for each affected Portland cement kiln;
- c. The date, time and duration of any startup, shutdown or malfunction in the operation of any of the cement kilns or the emissions monitoring equipment;
- d. The results of any performance testing;
- e. Daily cement kiln production records; and
- f. All records required to be produced or maintained shall be retained on site for a minimum of 2 years and be made available to the Secretary or Administrator upon request.

**[45CSR§1-100.7., 45CSR14, R14-026A, B.2., Preheater-Precalciner Kiln, (EP42.04)]**

5.4.8. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) subject to 45CSR§§10-3, 4 or 5 (Sections 5.1.34 and 5.1.35) shall maintain on-site a record of all required monitoring data as established in a monitoring plan pursuant to 45CSR§10-8.2.c. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years.

**[45CSR§10-8.3.a, Kiln #7 (EP10.01), 45CSR14, R14-026A, B.5., Preheater-Precalciner Kiln, (EP42.04)]**

5.4.9. The owner or operator of a fuel burning unit(s) or a combustion source(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each unit in a manner specified by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.

**[45CSR§10-8.3.c, Kiln #7 (EP10.01), 45CSR14, R14-026A, B.5., Preheater-Precalciner Kiln, (EP42.04)]**

**Clinker Handling and Storage - - - EU4**

5.4.10. See Section 3.4.

**Fuel Handling - - - EU5**

5.4.11. See Section 3.4.

**Cement Production - - - EU6**

5.4.12. See Section 3.4.

**Shipping - - - EU7**

5.4.13. See Section 3.4.

**Other Miscellaneous Sources - - - EU8**

5.4.14. See Section 3.4.

**5.5. Reporting Requirements**

**Facility Wide Requirements**

5.5.1. See Section 3.5.

**Quarry and Crushing and Raw Material Preparation - - - EU1 and EU2**

5.5.2. See Section 3.5.

5.5.3. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in Sections 5.1.10 and 5.1.12 [40 C.F.R. § 60.672], including reports of opacity observations made using Method 9 to demonstrate compliance with Sections 5.1.11 and 5.1.12 [40 C.F.R. § 60.672 (b) and (c)], and 40 C.F.R. § 60.672 (f).  
**[45CSR16, 40 C.F.R. § 60.676 (f), 45CSR14, R14-026A, B.8.]**

**Pyroprocessing - - - EU3**

5.5.4. See Section 3.5.

5.5.5. Reporting requirements. -- Any owner or operator subject to the requirements of Section 5.1.32 (45CSR§1-100.3.) shall comply with the following requirements:

- b. Submit a report documenting for that kiln the total NO<sub>x</sub> emissions from May 1 through September 30 of each year to the Secretary and Administrator by October 31 of each year, beginning in 2004.

**[45CSR§1-100.5 (b), 45CSR14, R14-026A, B.2., Kiln #7 (EP10.01), Preheater-Precalciner Kiln, (EP42.04)]**

5.5.6. 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, Preheater-Precalciner Kiln, (EP42.04) and Kiln #7 (EP10.01)]**

**Clinker Handling and Storage - - - EU4**

5.5.7. See Section 3.5.

**Fuel Handling - - - EU5**

5.5.8. See Section 3.5.

**Cement Production - - - EU6**

5.5.9. See Section 3.5.

**Shipping - - - EU7**

5.5.10. See Section 3.5.

**Other Miscellaneous Sources - - - EU8**

5.5.11. See Section 3.4.

**5.6. Compliance Plan**

5.6.1. None

## **APPENDIX A**

### **45CSR10 Monitoring Plan for Capitol Cement**

- ø **No. 7 Kiln**
- ø **No. 8 Kiln**
- ø **No. 9 Kiln**

### **Facility Information:**

Name: **Capitol Cement Corporation**

Location: 18264 South Queen Street, Martinsburg WV 25401

Mailing Address: P O Box 885, Martinsburg, WV 25402

Phone Number: (304)- 260-1800

Contact Person and Title: Mark A. Andrews, Environmental Engineer

### **Facility Description:**

Capitol Cement Corporation (CCC) owns and operates a cement manufacturing plant near Martinsburg WV. The plant is a wet process type, which uses coal and coke, supplemented with scrap tires, as fuel for three rotary cement kilns. The kilns produce cement clinker, which is then ground into finished cements and shipped to customers in the mid-Atlantic region.

The three kilns are identified locally as numbers 7, 8 and 9. They are identified as emission units 10.01, 11.01, and 12.01 respectively in the Title V application currently on file with the West Virginia Division of Air Quality. The kilns are “ manufacturing process sources “ by definition of 45 CSR 10.2.11. Kilns 7 and 8 vent through a common stack. Number 9 kiln has a separate stack. The only current applicable air permit pertaining to the three kilns is R13-1674C.

### **Cement Kiln Process Description:**

The only sulfur in cement kilns comes from the fuel and raw material. Cement kilns by nature are natural scrubbers for SO<sub>2</sub>. As part of the clinkering process calcium carbonate is converted inside the kiln to lime or CaO. When there is excess oxygen present SO<sub>2</sub> converts to calcium and aluminum sulfates. As a result, SO<sub>2</sub> emissions are far below the 45 CSR 10.4.1 limit of 2000 ppm and the R13-1674C permit limits of 924 lb./ hr. for # 7 or # 8 kiln and 1531 lb./ hr. for # 9 kiln. In the discussion of cement manufacturing in AP-42, Section 11.6.1 of 1/ 95 it is stated that “ Sulfur Dioxide may be generated both from the sulfur compounds in the raw materials and from sulfur in the fuel. The sulfur content of both raw materials and fuels varies from plant to plant and with geographic location. However, the alkaline nature of the cement provides for direct absorption of SO<sub>2</sub> into the product, thereby mitigating the quantity of SO<sub>2</sub> emissions in the exhaust stream. Depending on the process and the source of sulfur , SO<sub>2</sub> absorption ranges from about 70 percent to more than 95 percent. “ No continuous emission monitors for SO<sub>2</sub> are installed on the kilns. Past stack testing results verifies the low SO<sub>2</sub> emissions from these wet process kilns. The stack test results are summarized below:

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<u>Kiln Number</u>	<u>Test Date</u>	<u>SO2 Concentration (ppm)</u>	<u>SO2 Emission Rate ( lb./ hr.)</u>
7	June 23, 1999	273.29	418
	July 15, 1993	18.80	21
	June 22, 2001	330.31	288
8	March 24, 1994	71.25	47
9	July 13, 1993	91.89	97

### **Monitoring :**

Normal kiln operation requires that excess oxygen be available for proper combustion and to maintain kiln temperatures. If an oxygen deficiency does occur, the kiln will cool down and not produce an acceptable product. When excess oxygen is present, the kiln is a natural scrubber for SO<sub>2</sub> as described above. CCC therefore petitions the Director approve the continued monitoring of the kiln oxygen level as an alternate to installing CEMs per 45 CSR 10A6.2.b.1. The oxygen level is measured continuously and recorded on a strip chart recorder. If an oxygen deficiency occurs ( less than 0.25 % ), an alarm sounds and the control room operator makes corrections by adjusting the kiln induced draft and/or fuel.

### **Recordkeeping and Reporting:**

CCC proposes that the kiln oxygen level be recorded hourly by the control room operator and that this record be maintained on site for review by the Director or his / her representative for five years per 45 CSR 10A7.1.d.

Because of the low level of SO<sub>2</sub> emissions from CCC's cement kilns relative to 45 CSR 10 and permit R13-1674C limits and the inherent natural scrubbing action of the cement kiln process, CCC petitions the Director to waive any requirement for exception reporting under 45 CSR 10A7.2.b.

### **Compliance Testing:**

Because of the natural scrubbing action of the wet cement kiln process and the results of past stack testing -- which showed the SO<sub>2</sub> concentration to be far below fifty percent of the 45CSR10 4.1 limit of 2000 ppm and the R13-1674C permit emission rate limits -- , CCC petitions the Director not to require additional stack testing per 45CSR10A 5.2.c.

(reg10a)