



west virginia department of environmental protection

Division of Air Quality  
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Charleston, WV 25304  
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Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
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April 08, 2016

CERTIFIED MAIL

91 7199 9991 7035 6665 8202

Heinz Knopf, Plant Manager  
1826 South Queen Street  
Martinsburg, WV 25401

RE: Essroc Cement Corporation  
Martinsburg Plant  
Permit Application No. R14-0026M  
Plant ID No. 003-00006

Dear Mr. Knopf:

Your application for a permit as required by Section 5 of 45CSR13 - "Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permit, General Permit, and Procedures for Evaluation" has been approved. The enclosed permit R14-0026M is hereby issued pursuant to Subsection 5.7 of 45CSR13. Please be aware of the notification requirements in the permit which pertain to commencement of construction, modification, or relocation activities; startup of operations; and suspension of operations.

In accordance with 45CSR30- Operating Permit Program, 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. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

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.

Should you have any questions, please contact me at (304) 926-0499 ext. 1212.

Sincerely,

Thornton E. Martin Jr.  
Permit Engineer

c: Luis Rodriguez, Corporate Environmental Engineer



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Charleston, WV 25304  
Phone: 304/926-0475 • Fax: 304/926-0479

Earl Ray Tomblin  
Governor

**PREVENTION OF SIGNIFICANT DETERIORATION (PSD)  
PERMIT FOR A MAJOR MODIFICATION OF  
A PORTLAND CEMENT MANUFACTURING FACILITY**

IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL LAW (W. Va. Code §§22-5-1 et seq.), AND REGULATIONS PROMULGATED THEREUNDER, THE FOLLOWING PERMITTEE IS AUTHORIZED TO CONSTRUCT, SUBJECT TO THE TERMS AND CONDITIONS OF THIS PERMIT, THE SOURCE DESCRIBED BELOW.

This permit will supersede and replace Permit R14-0026L

Name of Permittee: Essroc Cement Corporation

Name of Facility: Martinsburg Facility

Permit No.: R14-0026M

Plant ID No.: 003-00006

Effective Date of Permit: April 08, 2016

Permit Writer: Thornton E. Martin Jr.

Facility Mailing Address: 1826 South Queen Street; Martinsburg, WV 25401

County: Berkeley

Nearest City or Town: Martinsburg

UTM Coordinates: Easting: 243.5 km      Northing: 4,369.0 km      Zone: 18

Directions to Exact Location: Take the Queen Street exit off of Route 45 in Martinsburg. Go south on Queen Street. The street will lead to the plant.

Type of Facility or Modification: Class II administrative update for the addition of an alternate crushing system comprised of three (3) mobile crushers.

THE SOURCE IS SUBJECT TO 45CSR30. THE PERMITTEE HAS THE DUTY TO UPDATE THE FACILITY'S TITLE V (45CSR30) PERMIT APPLICATION TO REFLECT THE CHANGES PERMITTED HEREIN.

IN ACCORDANCE WITH THE PERMIT APPLICATION AND ITS AMENDMENTS, THIS PERMIT IS LIMITED AS FOLLOWS:

## A. SPECIFIC REQUIREMENTS

### PLANT AREAS

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

- Group 1: Quarry and Crushing
- Group 2: Raw Material Preparation
- Group 3: Pyroprocessing
- Group 4: Clinker Handling and Storage
- Group 5: Fuel Handling
- Group 6: Cement Production
- Group 7: Shipping
- Group 8: Other Miscellaneous Sources

### Facility Wide Requirements

1. Clinker production from the facility shall not exceed 2,212,890 short 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.
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.

Pollutant	Allowable Emissions (tpy)
PM <sub>2.5</sub>	222.30 <sup>1</sup>
PM <sub>10</sub>	584.65 <sup>1</sup>
TSP	927.69 <sup>1</sup>
SO <sub>2</sub>	4515.50 <sup>1</sup>
NO <sub>x</sub> (as NO <sub>2</sub> )	4,031.75 <sup>1</sup>
CO	4458.50 <sup>1</sup>
VOC	158.78 <sup>1</sup>
Fluorides	1.02
Lead	0.08

<sup>1</sup> Includes emissions from operation of two worst case mobile crushers.

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 CFR 63 Subpart LLL.

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.

Group 1 - Quarry and Crushing Requirements

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

Identification Number	Description	Outlet Loading (gr/dSCF)	Existing Or New
CD37.03	New Primary Crusher D\C	0.01	New
CD37.04	Crushing System Transfer Tower D\C	0.01	New
CD37.06	Premix Conveying D\C	0.01	New
CD38.01	Premix Storage Feeding 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)	PM <sub>10</sub> (tpy)
EP0X.01	Quarry Drilling	0.28	0.13
EP0X.02	Quarry Blasting	0.28	0.13
EP0X.03.01	Loader to truck (good rock)	8.07	3.82
EP0X.03.02	Loader to truck (waste rock)	0.40	0.19
EP0X.03.03	Truck to waste pile	0.40	0.19
EP37.06	Limestone Crusher Feed Pile (for Finish Mills)	0.13	0.06
EP37.07	Limestone Crusher Feed Pile Reclaim	0.12	0.06
EP37.08	Limestone/Clinker Storage Pile (Quarry)	0.08	0.04
EP37.09	Limestone/Clinker Reclaim from Quarry Storage Pile	0.25	0.12

EP37.10	Truck Dump to Craneway Storage Pile	0.22	0.10
EP37.11	Limestone/Clinker Storage Pile (Outside Craneway)	0.04	0.02
EP37.12	Limestone/Clinker Transfer to Craneway Storage Bldg	0.22	0.10
EP37.13	Clinker Transfer from Craneway to Truck	0.77	0.37
EP37.14	Limestone Dump to Mobile Crushers <sup>1</sup>	1.73	0.82
EP37.15	Mobile Limestone Crushers Operations <sup>1</sup>	1.54	1.20
EP37.02.01	Truck to large bin	7.79	3.68
EP37.02.02	Large bin to conveyor	2.60	1.23
EP37.05	Split to surge pile	1.04	0.49

- <sup>1</sup> Fugitive emissions from operation of two worst case mobile crushers.

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 37.35 tons per year of TSP nor 22.43 tons per year of PM<sub>10</sub> based on a 12 month rolling total.

6. Owners and operators must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.
7. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.
8. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Specific Requirement A.5 and A.9. 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.

#### Group 2 - Raw Material Preparation Requirements

9. Emissions from Group 2 point sources shall not exceed the following:

CD Identification Number	CD Description	Outlet Loading (gr/dSCF)	Existing, New or Modified
CD38.02	Premix Storage Discharge D\C	0.01	New
CD39.05	Additive Delivery System D\C	0.01	New
CD39.01	Additive Feeding System D\C	0.01	New
CD39.02	Limestone Bin D\C	0.01	New
CD39.03	Raw Material Discharge D\C1	0.01	New
CD39.04	Raw Material Discharge D\C2	0.01	New
CD39.06	Raw Mill Feeding D\C	0.01	New
CD40.01	New Raw Mill High Zone 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
CD40.06	New Homo Silo Feeding D\C	0.01	New
CD40.07	New Homo Silo Discharge D\C	0.01	New
CD40.08	Top of Homo Silo D\C	0.01	New

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

Emission Point Identification Number	Emission Point Description	TSP (tpy)	PM <sub>10</sub> (tpy)
EP39.14	Additive dump to pile in Additives Storage Building	0.07	0.03
EP39.15	Additives Storage Building (4 piles)	0.15	0.08
EP39.16	Reclaim from additives pile	0.07	0.03
EP40.03	Split to surge pile	0.00	0.00
EP39.07.03	Inert Raw Material Hauling to Quarry (Paved)	0.09	0.02
EP39.07.04	Inert Raw Material Hauling to Quarry (Unpaved)	13.70	4.04
EP39.08	Inert Raw Material Truck Dump to Pile	0.10	0.05
EP39.09	Inert Raw Material Storage Pile (Within Mines)	0.17	0.08
EP39.10	Inert Raw Material Pile Reclaim	0.10	0.05
EP39.11	Inert Raw Material Dump to Primary Crusher	0.10	0.05
EP39.12.01	Hauling to Additives Unloading Bin (Paved)	0.05	0.01
EP39.12.02	Hauling to Additives Unloading Bin (Unpaved)	2.06	0.61

Additionally, emissions from the combined above sources (both point and

fugitive) shall not exceed 48.06 tons per year of TSP nor 31.73 tons per year of PM<sub>10</sub> based on a 12 month rolling total.

### Group 3 - Pyroprocessing Requirements

10. 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 Specific Requirement A.13 of this permit). If the permittee wishes to use alternative fuels including but not limited to 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.
11. 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 Specific Requirement A.16 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 application.
12. The new preheater-precalciner kiln may combust fuel oil during startup. Additionally the kiln may combust fuel oil during periods of primary fuel system maintenance or breakdown so long as no emission limits contained in this permit or any applicable rule are exceeded.
13. When combusting onsite generated petroleum hydrocarbon contaminated soils the following provisions shall apply:
  - (a) The petroleum hydrocarbon contaminated soils shall be introduced into the new preheater-precalciner kiln at a maximum rate of 0.25% by weight of the raw material feed to the kiln. Certified records of the amounts (tonnages) of contaminated soil and raw materials utilized per month shall be maintained in accordance with Section A.13(c).
  - (b) The new preheater-precalciner kiln shall provide at least a 99.0% destruction efficiency for the petroleum hydrocarbon constituents.
  - (c) The new preheater precalciner kiln 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 new preheater -precalciner kiln. 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 Paragraph A.13(c) shall be submitted to the Director of the Division of Air Quality prior to utilizing the soil in the new preheater-precalciner kiln.
  - (f) The new preheater-precalciner kiln 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 new preheater-precalciner kiln.
14. The permittee shall install, operate and maintain a scrubber to reduce SO<sub>2</sub> emissions from the new preheater-precalciner as necessary to meet the emission limits set in condition A.17 of this permit.
  15. Clinker production from the new preheater-precalciner kiln shall not exceed 2,212,890 short tons per year.
  16. Operation of the existing Kilns 7 and 8 system shall permanently cease after the preheater-precalciner kiln system achieves full production or within 180 days after the preheater-precalciner kiln system first becomes operational whichever comes first. Operation of the existing Kiln 9 system shall permanently cease after the preheater-precalciner kiln system achieves full production or within 180 days after the preheater-precalciner kiln system first becomes operational or before the BART compliance deadline (approximately 2013) whichever comes first.
  17. Emissions from the main stack which consists of emissions from the new preheater-precalciner kiln, in-line raw mill, clinker cooler, coal mill and bypass (PH/PC Kiln System) shall not exceed the following:

Source	Pollutant	Allowable	Compliance Method	Averaging Time
Ph/pc Kiln System	NOx	3983.2 tpy	CEM	TPY, 12 month rolling total
Ph/pc Kiln System	NOx	1745.0 lbs/hr	CEM	30-day average (lb/hr)

Ph/pc Kiln System	NOx	2.15 lb/ton clinker	CEM/production data	30-day rolling average
Ph/pc Kiln System	CO	3960.0 lbs/hr	CEM	24-hr average (lb/hr)
Ph/pc Kiln System	CO	4425.8 tpy	CEM	TPY, 12 month rolling total
Ph/pc Kiln System	VOC	38.7 lbs/hr	Stack Test	3-hr average (lb/hr)
Ph/pc Kiln System	VOC	154.9 tpy	Stack Test/production data	TPY, 12 month rolling total
Ph/pc Kiln System	VOC	0.14 lb/ton clinker	Stack Test/production data	12 month rolling average
Ph/pc Kiln System	SO2	3230.8 tpy	CEM	TPY, 12 month rolling total
Ph/pc Kiln System	SO2	2111.3 lbs/hr	CEM	3-hr average (lb/hr)
Ph/pc Kiln System	SO2	1.50 lb/ton clinker	CEM/production data	30-day rolling average
Ph/pc Kiln System,	TSP	268.1 tpy	Stack Test/production data	TPY, 12 month rolling total
Ph/pc Kiln System,	TSP	69.8 lbs/hr	Stack Test	Average (3) 1-hr tests
Ph/pc Kiln System,	PM <sub>10</sub>	225.2 tpy	Stack Test/production data	TPY, 12 month rolling total
Ph/pc Kiln System,	PM <sub>10</sub>	58.6 lbs/hr	Stack Test	Average (3) 1-hr tests
Ph/pc Kiln System,	PM (filterable)	0.07 lb/ton clinker	CPMS <sup>1</sup>	30-day rolling average
Ph/pc Kiln System	HCl <sup>3</sup>	3.0 ppmvd at 7% Oxygen	CEM	30-day rolling average
Ph/pc Kiln System	THC	24.0 ppmvd at 7% Oxygen <sup>2</sup>	CEM	30-day rolling average
Ph/pc Kiln System	Hg <sup>3</sup>	55.0 lbs/MMton clinker	CEM	30-day rolling average
Ph/pc Kiln System	Pb	0.08 tpy	Production data	TPY, 12 month rolling total
Ph/pc Kiln System	Fluorides	1.0 tpy	Production data	TPY, 12 month rolling total

<sup>1</sup>Filterable Particulate Matter shall be parametrically monitored with a Continuous Parametric Monitoring System (CPMS) per 40 CFR 63.1350(b). The CPMS will be used to establish a site specific operating limit corresponding to the results of the most recent annual Method 5 or 5I performance test demonstrating compliance with the PM limit. Compliance shall be demonstrated by not exceeding this site-specific operating limit on a 30-kiln operating day CPMS rolling average basis. Any exceedance of the site-specific operating limit requires the Plant to comply with the requirements of 40 CFR 63.1350(b)(ii), including conducting a new PM emissions compliance test within 30 days of the exceedance to verify or re-establish the site specific operating limit. PM exceedances leading to more than four required emissions compliance tests within a 12-month rolling period will constitute a presumptive violation of the PM limit.

<sup>2</sup> In lieu of complying with the THC emissions limit of 24.0 ppmvd corrected to 7 percent oxygen on a 30-day rolling average; the Plant may elect to comply with an alternative limit of 12.0 ppmvd for total organic HAP (O-HAP). O-HAP shall be parametrically monitored with a THC CEMS per 40 CFR 63.1350(j). The THC CEMS will be used to establish a site-specific operating limit corresponding to the most recent O-HAP performance test demonstrating compliance the O-HAP limit.

<sup>3</sup>Per a 1-year extension granted on July 1, 2015 by WV DEP, the Plant must demonstrate compliance with the HCl and Hg emission limits and CEM monitoring requirements by September 9, 2016. Semi-annual reports are required to be submitted documenting the status and timing for meeting the extended compliance date.

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

CD Identification Number	CD Description	Outlet Loading (gr/dSCF)	Existing Or New
CD41.04	Alternate Fuel Feeding System D/C	0.01	New

CD41.05	Alternate Fuel Dosing System D\C	0.01	New
CD42.04	Inline Raw Mill/PH-PC Kiln/Clinker Cooler & Bypass & Coal Mill D\Cs	0.01	New
CD42.02	Kiln Feeding Bucket Elevator D\C	0.01	New
CD42.03	Kiln Feeding D\C1	0.01	New
CD42.05	Kiln Feeding D\C2	0.01	New
CD42.01	Cement Fringe Bin D\C	0.01	New
CD42.06	Lime Storage D\C	0.01	New
CD42.07	Bypass Truck Spout Dedusting	0.01	New

Additionally, emissions from the combined above sources shall not exceed 278.97 tons per year of TSP nor 234.44 tons per year of PM<sub>10</sub> based on a 12 month rolling total.

19. The preheater section of the new PH/PC kiln will be equipped with low-NO<sub>x</sub> burners. The precalciner section of the new PH/PC kiln will be designed with low-NO<sub>x</sub> and CO technology. The PH/PC kiln shall be equipped with an SNCR NO<sub>x</sub> control system in order to comply with a future NO<sub>x</sub> limit to be determined by the USEPA.

Group 4 - Clinker Handling and Storage Requirements

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

CD Identification Number	CD Description	Outlet Loading (gr/dSCE)	Existing Or New
CD43.03	Clinker Storage Feeding D\C	0.01	New
CD43.04	Small Clinker Storage Feeding D\C	0.01	New
CD43.06	Small Clinker Storage Discharge D\C	0.01	New
CD43.07	Clinker Storage Discharge D\C	0.01	New
CD43.08	Finish Mill Conveying D\C1	0.01	New
CD43.09	Finish Mill Conveying D\C2	0.01	New
CD43.13	Finish Mill Conveying D\C3	0.01	New
CD43.19	Top of LA Clinker Silo	0.01	New
CD43.20	Normal Clinker Bin at Pan Conv. 73	0.01	New
CD43.21	Top of Normal Clinker Silo	0.01	New

There shall be no Group 4 fugitive sources.

Additionally, emissions from the above point sources shall not exceed 13.25 tons per year of TSP nor 11.25 tons per year of PM<sub>10</sub> based on a 12 month rolling total.

21. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Specific Requirement A.19. 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.

Group 5 - Fuel Handling Requirements

22. There shall be no Group 5 point sources.

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 Petcoke hopper	0.01	0.01
EP15.01.02	Petcoke Hopper to feeders	0.00	0.00
EP41.01.01	Petcoke feeders to conveyor	0.01	0.00
EP41.01.02	Petcoke Conveyor to split to conveyor	0.01	0.00
EP41.01.03	Petcoke Conveyor to CSH Fuel Bins or Pile	0.01	0.00
EP41.01.04	Coal Truck Unloading to Storage Hall	0.03	0.01
EP41.01.05	Clam Bucket to Coal Pile	0.03	0.01
EP41.01.06	Pile to Clam Bucket	0.05	0.02
EP41.01.07	Clam Bucket to CSH Fuel Bins	0.05	0.02
EP41.02.01	CSH fuel bins to feeders	0.04	0.02
EP41.02.02	Feeders to Coveyor	0.08	0.04
EP41.02.03	Conveyor to Split to Conveyor	0.08	0.04

Additionally, emissions from the above fugitive sources shall not exceed 0.39 tons per year of TSP nor 0.18 tons per year of PM<sub>10</sub> based on a 12 month rolling total.

23. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Specific Requirement A.21. 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.

Group 6 - Cement Production Requirements

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

CD Identification Number	CD Description	Outlet Loading (gr/dSCF)	Existing Or New
CD43.14	Finish Mill 1 & 2 Hoppers D\C	0.01	New
CD43.16	Finish Mill 3 Hopper D\C	0.01	New
CD43.17	Normal Clinker Bin-Bin Vent D\C	0.01	New
CD44.01	Finish Mill 2 Feeding D\C1	0.01	New
CD44.02	Finish Mill 1 Feeding D\C1	0.01	New
CD44.03	Finish Mill 2 Feeding D\C2	0.01	New
CD44.04	Finish Mill 2 Feeding D\C3	0.01	New
CD44.05	Finish Mill 1 Feeding D\C2	0.01	New
CD44.06	Finish Mill 1 Conveying D\C	0.01	New
CD44.07	Finish Mill 1 High Zone D\C	0.01	New
CD44.08	Finish Mill 1 Low Zone D\C	0.01	New
CD44.09	Finish Mill 1 D\C	0.01	New
CD44.13	Finish Mill 1 Discharge D\C	0.01	New
CD44.14	Finish Mill 2 D\C	0.01	New
CD44.10	Finish Mill 2 High Zone D\C	0.01	New
CD44.11	Finish Mill 2 Low Zone D\C	0.01	New
CD44.12	Finish Mill 2 D\C	0.01	New
CD44.15	Finish Mill 2 Discharge D\C	0.01	New

CD44.17	Finish Mills Reject Bin D\IC	0.01	New
CD44.18	Finish Mill 1 Reject Elevator High Zone	0.01	New
CD44.19	Finish Mill 2 Reject Elevator High Zone	0.01	New
CD19.02	Finish Mill 3 Baghouse D\IC	0.02	Existing
CD19.01	Finish Mill 3 Norblo D\IC	0.02	Existing

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

Emission Point Identification Number	Emission Point Description	TSP (tpy)	PM <sub>10</sub> (tpy)
EP26.06.03	Gypsum/Synthetic Gypsum Truck unloading to storage hall	0.07	0.03
EP26.06.04	Clam Bucket to Gypsum/Synthetic Gypsum Pile	0.02	0.01
EP26.06.05	Gypsum/Synthetic Gypsum Pile to Clam Bucket	0.02	0.01
EP26.06.06	Clam bucket to gypsum/synthetic gypsum bin (FM 1/2/3)	0.02	0.01
EP26.07.01	Limestone Pile to Clam Bucket	0.11	0.05
EP26.07.02	Clam Bucket to Limestone Bin (FM1/2/3)	0.11	0.05
EP27.01	Conveyor to clinker Hopper	2.21	1.04
EP27.02	Clinker Hopper to Crane	2.21	1.04
EP27.03	Crane to Clinker pile	2.21	1.04
EP27.04	Clinker pile to Crane	2.21	1.04
EP27.05	Crane to Clinker Bins (FM 1/2/3)	2.21	1.04
EP27.06	Transfer to Outdoor Clinker Storage Pile	0.65	0.31
EP27.07	Outdoor Clinker Storage Pile - Tarped	0.76	0.38
EP27.08	Outdoor Clinker Storage Pile Reclaim	0.65	0.31

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 156.87 tons per year of TSP nor 128.30 tons per year of PM<sub>10</sub> based on a 12 month rolling total.

25. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Specific Requirement A.23. 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.

26. Emissions from the new Finish Mill 1 & 2 air heater shall not exceed the following:

	lb/hr	tpy
CO	1.6	7.2
NO <sub>x</sub>	2.8	12.4
TSP	0.5	2.0
SO <sub>2</sub>	10.1	44.1
VOC	0.11	0.5
Flourides	0.005	0.023

27. Finish Mill 1 and 2 air heater shall only combust fuel oil, propane or natural gas. Additionally, the Finish Mills 1 and 1 air heater shall not exceed 19.84 MMBTU/hr MDHI.

Group - 7 Shipping Requirements

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

CD Identification Number	CD Description	Outlet Loading (gr/dSCF)	Existing Or New
CD45.01	Finish Mill 1 Airslides D\C	0.01	New
CD45.02	Finish Mill 2 Airslides D\C	0.01	New
CD45.03	Cement Silos Feeding D\C1	0.01	New
CD45.04	Cement Silos Feeding D\C2	0.01	New
CD45.05	Cement Silo A1 & A2 D\C	0.01	New
CD45.06	Cement Silo B1 & B2 D\C	0.01	New
CD45.07	Cement Silo C1 & C2 D\C	0.01	New
CD45.08	Truck Loadout 1 D\C	0.01	New
CD45.09	Truck Loadout 2 D\C	0.01	New
CD45.10	Truck Loadout 3 D\C	0.01	New
CD45.11	Truck Loadout 4 D\C	0.01	New

CD45.14	Cement Analyzer D\C	0.01	New
CD45.15	Transfer Airslide D\C at the Multi Cell	0.01	New
CD46.01	Truck Loadout Silo 1 D\C	0.01	Modified
CD46.02	Truck Loadout Silo 2 D\C	0.02	Existing
CD46.03	Truck Loadout Silo 3 D\C	0.01	Modified
CD46.04	Truck Loadout Silo 4 D\C	0.01	Modified
CD46.05	Truck Loadout Silo 5 D\C	0.01	Modified
CD46.06	Truck Loadout 5 D\C	0.02	Existing
CD46.07	Truck Loadout 6 D\C	0.02	Existing
CD20.04	East Bank Silos 1 D\C	0.01	Modified
CD20.05	East Bank Silos 2 D\C	0.01	Modified
CD20.06	East Bank Silos 3 D\C	0.01	Modified
CD21.05	Middle Bank Silos 1D\C	0.01	Modified
CD21.06	Middle Bank Silos 2D\C	0.01	Modified
CD21.07	Middle Bank Silos 3D\C	0.01	Modified
CD21.08	Middle Bank Silos 4D\C	0.01	Modified
CD21.09	Middle Bank Silos 5 D\C	0.01	Modified
CD21.10	Middle Bank Vent 1 D\C	0.01	New
CD21.11	Middle Bank Vent 2 D\C	0.01	New
CD21.12	Middle Bank Vent 3 D\C	0.01	New
CD21.13	Middle Bank Vent 4 D\C	0.01	New
CD22.05	West Bank Silos #71 D\C	0.01	Modified
CD22.06	West Bank Silos #72 D\C	0.01	Modified
CD22.07	West Bank Silos #82 D\C	0.01	Modified
CD22.08	West Bank Silos #83 D\C	0.01	Modified
CD23.01	N.E Packer D\C	0.02	Existing
CD45.12	Rail Loadout 1 D\C	0.01	New
CD45.13	Rail Loadout 2 D\C	0.01	New
CD48.01	Packhouse D\C	0.01	Modified

CD45.16	Rail Transloader D\C	0.02	New
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There shall be no Group 7 fugitive sources.

Additionally, emissions from the above Point sources shall not exceed 68.41 tons per year of TSP nor 58.18 tons per year of PM<sub>10</sub> based on a 12 month rolling total.

29. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Specific Requirement A.27. 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.
30. Diesel fuel usage by the rail transloader engine shall not exceed 14,560 gallons per year.
31. Emissions from the rail transloader engine shall not exceed the following:

	lb/hr	tpy
CO	0.54	0.97
NO <sub>x</sub>	2.47	4.50
PM	0.18	0.32
PM <sub>10</sub>	0.18	0.32
PM <sub>2.5</sub>	0.18	0.32
SO <sub>2</sub>	0.17	0.30
VOC	0.20	0.36

Group - 8 Miscellaneous Sources Requirements

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

CD Identification Number	CD Description	Outlet Loading (gr/dSCF)	Existing Or New
CD31.01	Flyash Tank No. 1 D\C	0.01	Modified
CD31.02	Bypass Dust Tank D\C	0.01	Modified

CD31.03	Bypass Dust Loadout D\C	0.01	Modified
CD22.09	Dry Flyash Bin D\C	0.01	New

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)
EP0B.01	Administrative Boiler 1	0.05	0.05
EP0B.02	Administrative Boiler 2	0.05	0.05
EP0G.01	Emergency Generator	0.23	0.19
EP0X.05	Quarry waste pile	0.07	1.04
EP0X.06	New Crusher Feed Pile	1.00	0.50
EP03-01	Storage Bays - 5 Piles	0.35	0.18
EP26.05	Gypsum/synthetic gypsum storage pile (Craneway)	0.05	0.03
EP26.08	Limestone Storage Pile (Craneway)	0.05	0.03
EP15.04.03	Coal storage Pile (Craneway)	0.03	0.01
EP15.04.04	Petcoke Storage Pile (Craneway)	0.03	0.01
EP14.08	Clinker Stockpile (Craneway)	0.02	0.01
EP25.01	Quarry haul roads (New Crusher)	203.90	60.18
EP25.03	Quarry haul roads (waste)	15.10	4.46
EP25.05.01	Additive trucks (unpaved)	0.00	0.00
EP25.05.02	Additive trucks (paved)	0.42	0.08
EP25.14	Gypsum/Synthetic Gypsum Haul Road (Unpaved)	14.86	4.39
EP25.12	Gypsum/Synthetic Gypsum Haul Road (paved)	0.25	0.05
EP25.15	Alternate Fuel Trucks (paved)	0.16	0.03
EP25.16	Hauling Clinker to Primary Crusher (paved)	0.18	0.04
EP25.17	Hauling Clinker to Primary Crusher (unpaved)	6.17	1.82
EP25.18	Hauling Limestone/clinker from Quarry to Craneway (Unpaved)	12.33	3.64
EP25.19	Hauling Limestone/clinker from Quarry to Craneway (paved)	0.41	0.08
EP25.04.02	Cement Shipments (paved)	7.47	1.46
EP25.06.01	Fuel deliveries (unpaved)	0.00	0.00
EP25.06.02	Fuel deliveries (paved)	0.67	0.13

EP25.09.01	Dry Flyash trucks (for Cement, unpaved)	0.98	0.29
EP25.09.02	Dry Flyash trucks (for Cement, paved)	0.61	0.12
EP25.09.03	Dry Flyash trucks (for Calciner, unpaved)	14.39	4.25
EP25.09.04	Dry Flyash trucks (for Calciner, paved)	0.48	0.09
EP25.10.01	Waste dust customer trucks (unpaved)	3.43	1.01
EP25.10.02	Waste dust customer trucks (paved)	0.21	0.04
EP25.08	Misc. plant vehicles (unpaved)	6.90	2.04
EP25.07	Waste Dust Trucks (unpaved)	30.63	9.04
EP42.06.01	Lime Deliveries (unpaved)	0.00	0.00
EP42.06.01	Lime Deliveries (paved)	0.35	0.07

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 324.39 tons per year of TSP nor 98.13 tons per year of PM<sub>10</sub> based on a 12 month rolling total.

33. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Specific Requirement A.29. 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.

## B. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable provisions of 45CSR5, 45 CSR7, 45CSR10, 45CSR13, 45CSR14, 45CSR16, 45CSR30, 45CSR34, 40 CFR 60 Subpart Y, 40 CFR 60 Subpart OOO, 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart LLL provided that the permittee shall comply with any more stringent requirements as may be forth under Specific Requirements, Section (A) of this permit.
2. The fuel handling portions of the permitted facility shall comply with all applicable requirements of 45CSR5 - "To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations." Pertinent sections of 45CSR5 which apply the this facility include, but are not limited to, the following:

### §45-5-3.4

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.

§45-5-6.1

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.

§45-5-6.2

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.

3. The permitted facility shall comply with all applicable requirements of 45CSR7 - "To Prevent And Control Particulate Matter Air Pollution From Manufacturing Processes And Associated Operations." Pertinent sections of 45CSR7 which apply to this facility include, but are not limited to, the following:

§45-7-3.1.

No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

§45-7-4.1.

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of this rule.

§45-7-4.2.

Mineral acids shall not be released 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 given in Table 45-7B found at the end of this rule.

§45-7-5.1.

No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

§45-7-5.2.

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

general material handling to minimize particulate matter generation and atmospheric entrainment.

5. The permitted facility shall comply with all applicable requirements of 45CSR10 - "To Prevent And Control Air Pollution From The Emission Of Sulfur Oxides." Pertinent sections of 45CSR10 which apply to this facility include, but are not limited to, the following:

§45-10-4.1

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

§45-10-4.2

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

§45-10-8.1.a

At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s), manufacturing process source(s) or combustion source(s) may be required to conduct or have conducted tests to determine the compliance of such source(s) with the emission limitations of sections 3, 4 or 5. Such tests shall be conducted in accordance with the appropriate test method set forth in 40 CFR Part 60, Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Director. The Director, or his/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.

§45-10-8.1.b

The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions other than those noted in section 3.

§45-10-8.2.c

The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) shall demonstrate compliance with sections 3, 4 and 5 of this rule by testing and /or monitoring in accordance with one or more of the following: 40 CFR Part 60, Appendix A, Method 6, Method 15, continuous emissions monitoring systems (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit.

§45-10-8.3.a

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

pursuant to subdivision 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.

#### §45-10-8.3.c

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.

#### §45-10-8.3.d

Where appropriate the owner or operator of a fuel burning unit(s), manufacturing process unit(s) or combustion source(s) may maintain such records in electronic form.

#### §45-10-9.1

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

#### §45-10-11.1

No owner or operator subject to the provisions of this rule 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.

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

#### §45-13-6.1

At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or such other tests the Secretary may specify shall be conducted to determine compliance.

#### §45-13-10.2

The Secretary may suspend or revoke a permit if, after six (6) months from the date of issuance, the holder of the permit cannot provide the Secretary, at the Secretary's request, with written proof of a good faith effort that construction, modification, or relocation, if applicable, has commenced. Such proof shall be provided not later than thirty (30) days after the Secretary's request. If construction or modification of a stationary source is discontinued for a period of eighteen (18) months or longer, the Secretary may suspend or revoke the

permit.

§45-13-10.3

The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based or the conditions established in the permit are not adhered to. Upon notice of the Secretary's intent to suspend, modify or revoke a permit, the permit holder may request a conference with the Secretary in accordance with the provisions of W.Va Code § 22-5-5 to show cause why the permit should not be suspended, modified or revoked.

7. The pertinent sections of 45CSR14 applicable to this facility include, but are not limited to, the following:

§45-14-8.1

Any person proposing to construct, or relocate a major stationary source or major modification shall meet each applicable emissions limitation promulgated by the Secretary and any applicable emissions standard or standard of performance under 40 CFR 60, 61, and 63.

§45-14-8.3

Any person proposing a major modification of a stationary source shall apply best available control technology for each regulated pollutant for which such proposed major modification would cause a significant net emissions increase from such source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

§45-14-19.1.

A permittee may petition the Secretary for a transfer of a permit previously issued in accordance with this rule. The Secretary shall approve such permit transfer provided the following conditions are met:

§45-14-19.1(a)

The permittee, in the petition, describes the reasons for the requested permit transfer and certifies that the subject source is in compliance with all the provisions and requirements of its permit, and

§45-14-19.1(b)

The transferee provides written acknowledgment that it accepts and will comply with all the requirements, terms, and conditions as contained in the subject permit.

§45-14-19.2.

The Secretary shall suspend or revoke a permit if, after eighteen (18) months from the date of issuance the holder of the permit cannot provide the Secretary, at the Secretary's request, with written proof of a good faith effort that such construction, modification, or relocation has commenced and remains ongoing. Such proof shall be provided not later than thirty (30) days after the Secretary's request.

§45-14-19.3.

The Director may suspend, modify, or revoke the permit if the plans and

specifications upon which the approval was based or the conditions established in the permit are not adhered to.

8. The pertinent sections of 40 CFR 60 applicable to this facility include, but are not limited to, the following:

§40 CFR 60.7(a)

Any owner or operator subject to the provisions of this part shall furnish written notification as follows :

§40 CFR 60.7.a.(1)

A notification of the date construction is commenced postmarked no later than 30 days after such date.

§40 CFR 60.7.a.(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.

§40 CFR 60.7(a)(3)

A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

§40 CFR 60.8(a)

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).

§40 CFR 60.11(b)

Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 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).

§40 CFR 60.11(d)

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.

§40 CFR 60.252(c)

On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart 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.

§40 CFR 60.254(b)

The owner or operator shall determine compliance with the particulate matter standards in §60.252 as follows:

§40 CFR 60.254(b)(1)

Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin.

§40 CFR 60.254(b)(2)

Method 9 and the procedures in §60.11 shall be used to determine opacity

§60.672(a)

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

§60.672(b)

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

§60.675(c)(1)

In determining compliance with the particulate matter standards in §60.672 (b) and (c), the owner or operator shall use Method 9 and the procedures in §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.

§60.675(c)(3)

When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) or §60.672(e)(1) of this subpart, the duration of the Method 9 observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of this subpart must be based on the average of five 6-minute averages.

§60.676(f)

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 §60.672 of this subpart, including reports of opacity observations made using Method 9 to demonstrate compliance with §60.672(b), (e), and (f).

9. All notifications and reports required pursuant to 40 CFR 60 under §60.7 shall be forwarded to:

Director  
WVDEP  
Division of Air Quality  
601 57<sup>th</sup> St.  
Charleston, WV 25304

and

Associate Director  
Office of Air Enforcement and  
Compliance Assistance (3AP20)  
USEPA  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

10. The operation of this facility is subject to the requirements of 40 CFR 63, Subpart LLL "National Emission Standard for Hazardous Air Pollutants From The Portland Cement Manufacturing Industry". Pertinent sections applying to this operation include, but are not limited to:

§40 CFR 63.1340(a)

The provisions of this subpart apply to each new and existing portland cement plant which is a major source or an area source as defined in §63.2.

§40 CFR 63.1340(b)

The affected sources subject to this subpart are:

§40 CFR 63.1340(b)(1)

Each kiln including alkali bypasses and inline coal mills, except for kilns that burn hazardous waste and are subject to and regulated under subpart EEE of this part;

§40 CFR 63.1340(b)(2)

Each clinker cooler at any portland cement plant;

§40 CFR 63.1340(b)(3)

Each raw mill at any portland cement plant;

§40 CFR 63.1340(b)(4)

Each finish mill at any portland cement plant;

§40 CFR 63.1340(b)(5)

Each raw material dryer at any portland cement plant;

§40 CFR 63.1340(b)(6)

Each raw material, clinker, or finished product storage bin at any portland cement plant that is a major source;

§40 CFR 63.1340(b)(7)

Each conveying system transfer point including those associated with coal preparation used to convey coal from the mill to the kiln at any portland cement plant which is a major source;

§40 CFR 63.1340(b)(8)

Each bagging and bulk loading and unloading system at any portland cement plant that is a major source; and

§40 CFR 63.1340(b)(9)

Each open clinker storage pile at any portland cement plant

§40 CFR 63.1340(c)

Onsite sources that are subject to standards for nonmetallic mineral processing plants in subpart OOO, part 60 of this chapter are not subject to this subpart. Crushers are not covered by this subpart regardless of their location.

§40 CFR 63.1340(d)

If you are subject to any of the provisions of this subpart you are also subject to title V permitting requirements.

§40 CFR 63.1342

Table 1 to this subpart provides cross references to the 40 CFR part 63, subpart A, general provisions, indicating the applicability of the general provisions requirements to subpart LLL.

§40 CFR 63.1343(a)

General. The provisions in this section apply to each kiln and any alkali bypass associated with that kiln, clinker cooler, raw material dryer, and open clinker storage pile. All D/F, HCl, and total hydrocarbon (THC) emissions limit are on a dry basis. The D/F, HCl, and THC limits for kilns are corrected to 7 percent oxygen. All THC emissions limits are measured as propane. Standards for mercury and THC are based on a rolling 30-day average. If using a CEMS to determine compliance with the HCl standard, this standard is based on a rolling 30-day average. You must ensure appropriate corrections for moisture are made when measuring flow rates used to calculate mercury emissions. The 30-day period means 30 consecutive kiln operating days excluding periods of startup

and shutdown. All emissions limits for kilns, clinker coolers, and raw material dryers currently in effect that are superseded by the limits below continue to apply until the compliance date of the limits below, or until the source certifies compliance with the limits below, whichever is earlier.

§40 CFR 63.1343(b)

Kilns, clinker coolers, raw material dryers, raw mills, and finish mills.

§40 CFR 63.1343(b)(1)

The emissions limits for these sources are shown in Table 1 below. PM limits for existing kilns also apply to kilns that have undergone a modification as defined in subpart A of part 60 of title 40.

§40 CFR 63.1343(b)(2)

When there is an alkali bypass and/or an inline coal mill with a separate stack associated with a kiln, the combined PM emissions from the kiln and the alkali bypass stack and/or the inline coal mill stack are subject to the PM emissions limit. Existing kilns that combine the clinker cooler exhaust and/or coal mill exhaust with the kiln exhaust and send the combined exhaust to the PM control device as a single stream may meet an alternative PM emissions limit. This limit is calculated using Equation 1 of this section:

§40 CFR 63.1343(d)

Emission limits in effect prior to September 9, 2010. Any source defined as an existing source in §63.1351, and that was subject to a PM, mercury, THC, D/F, or opacity emissions limit prior to September 9, 2010, must continue to meet the limits shown in Table 2 to this section until September 9, 2015.

§40 CFR 63.1345

Emissions limits for affected sources other than kilns; clinker coolers; new and reconstructed raw material dryers. .

The owner or operator of each new or existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; bulk loading or unloading system; raw and finish mills; and each existing raw material dryer, at a facility which is a major source subject to the provisions of this subpart must not cause to be discharged any gases from these affected sources which exhibit opacity in excess of 10 percent.

§40 CFR 63.1346

Operating limits for kilns.

§40 CFR 63.1346(a)

The owner or operator of a kiln subject to a D/F emission limitation under §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 paragraph (b) of this section. The owner or operator of an in-line kiln/raw mill subject to a D/F emission limitation under §63.1343 must operate the in-line kiln/raw mill, such that:

§40 CFR 63.1346(a)(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 paragraph (b) of this section and established during the performance test when the raw mill was operating, is not exceeded except during periods of startup and shutdown when the temperature limit may be exceeded by no more than 10 percent.

§40 CFR 63.1346(a)(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 paragraph (b) of this section and established during the performance test when the raw mill was not operating is not exceeded, except during periods of startup and shutdown when the temperature limit may be exceeded by no more than 10 percent.

§40 CFR 63.1346(a)(3)

If the in-line kiln/raw mill is equipped with an alkali bypass, the applicable temperature limit for the alkali bypass specified in paragraph (b) of this section and established during the performance test, with or without the raw mill operating, is not exceeded, except during periods of startup and shutdown when the temperature limit may be exceeded by no more than 10 percent.

§40 CFR 63.1346(b)

The temperature limit for affected sources meeting the limits of paragraph (a) of this section or paragraphs (a)(1) through (a)(3) of this section is determined in accordance with §63.1349(b)(3)(iv).

§40 CFR 63.1347(a)

You must prepare, for each affected source subject to the provisions of this subpart, a written operations and maintenance plan. The plan must be submitted to the Administrator for review and approval as part of the application for a part 70 permit and must include the following information:

§40 CFR 63.1347(a)(1)

Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits, including fugitive dust control measures for open clinker piles, of §§63.1343 through 63.1348. Your operations and maintenance plan must address periods of startup and shutdown;

§40 CFR 63.1347(a)(2)

Corrective actions to be taken when required by paragraph §63.1350(f)(3);

§40 CFR 63.1347(a)(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.

§40 CFR 63.1347(b)

Failure to comply with any provision of the operations and maintenance plan

developed in accordance with this section is a violation of the standard.

**§40 CFR 63.1348(a)**

**Initial Performance Test Requirements.** For an affected source subject to this subpart, you must demonstrate compliance with the emissions standards and operating limits by using the test methods and procedures in §§63.1349 and 63.7. Any cement kiln that has been subject to the requirements of subpart CCCC or subpart DDDD of 40 CFR Part 60, and is now electing to cease burning nonhazardous solid waste and become subject to this subpart, must meet all the initial compliance testing requirements each time it becomes subject to this subpart, even if it was previously subject to this subpart.

**§40 CFR 63.1348(b)**

**Continuous Monitoring Requirements.** You must demonstrate compliance with the emissions standards and operating limits by using the performance test methods and procedures in §§63.1350 and 63.8 for each affected source.

**§40 CFR 63.1349(a)**

You must document performance test results in complete test reports that contain the information required by paragraphs (a)(1) through (10) of this section, as well as all other relevant information. As described in §63.7(c)(2)(i), you must make available to the Administrator prior to testing, if requested, the site-specific test plan to be followed during performance testing. For purposes of determining exhaust gas flow rate to the atmosphere from an alkali bypass stack or a coal mill stack, you must either install, operate, calibrate and maintain an instrument for continuously measuring and recording the exhaust gas flow rate according to the requirements in paragraphs §63.1350(n)(1) through (10) of this subpart or use the maximum design exhaust gas flow rate. For purposes of determining the combined emissions from kilns equipped with an alkali bypass or that exhaust kiln gases to a coal mill that exhausts through a separate stack, instead of installing a CEMS on the alkali bypass stack or coal mill stack, you may use the results of the initial and subsequent performance test to demonstrate compliance with the relevant emissions limit.

**§40 CFR 63.1349(b)(1)**

**PM emissions tests.** The owner or operator of a kiln subject to limitations on PM emissions shall demonstrate initial compliance by conducting a performance test using Method 5 or Method 5I at appendix A-3 to part 60 of this chapter. You must also monitor continuous performance through use of a PM continuous parametric monitoring system (PM CPMS).

**§40 CFR 63.1349(c)**

**Performance Test Frequency.** Except as provided in §63.1348(b), performance tests are required at regular intervals for affected sources that are subject to a dioxin, organic HAP or HCl emissions limit and must be repeated every 30 months except for pollutants where that specific pollutant is monitored using CEMS. Tests for PM are repeated every 12 months.

**§40 CFR 63.1350(f)**

**Opacity monitoring requirements.** If you are subject to a limitation on opacity under §63.1345, you must conduct required opacity monitoring in accordance

with the provisions of paragraphs (f)(1)(i) through (vii) of this section and in accordance with your monitoring plan developed under §63.1350(p). You must also develop an opacity monitoring plan in accordance with paragraphs (p)(1) through (4) and paragraph (o)(5), if applicable, of this section.

§40 CFR 63.1350(g)

If you are subject to an emissions limitation on D/F emissions, you must comply with the monitoring requirements of paragraphs (g)(1) through (g)(6) and paragraphs (m)(1) through (m)(4) of this section to demonstrate continuous compliance with the D/F emissions standard. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.

§40 CFR 63.1350(i)

THC Monitoring Requirements. If you are subject to an emissions limitation on THC emissions, you must comply with the monitoring requirements of paragraphs (i)(1) and (i)(2) and (m)(1) through (m)(4) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.

11. 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>, THC 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>), Performance Specification 8A (THC) and Performance Specification 4, 4a or 4b (CO) as appropriate.
12. The permittee shall maintain daily and monthly records of the amount of clinker transferred to the outdoor clinker storage piles. 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.
13. In order to determine compliance with the hourly VOC and PM emissions limits set forth in section A.15 of this permit and the particulate loading limit set forth in section A.16 of this permit, 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 A.15 of this permit.

Test	Test Results	Testing Frequency
Initial	≤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	≥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

14. In order to determine compliance with the D/F limits set forth in 40 CFR 63 Subpart LLL, the permittee shall perform an EPA approved stack test on the new preheater-precalciner kiln. The compliance test for the new preheater-precalciner kiln must be performed within 180 days of startup of the kiln.
15. For the purpose of determining compliance with production limits set forth in Specific Requirements A.1, and A.15 of this permit, the permittee shall maintain daily and monthly records of the amount of clinker produced in the new preheater-precalciner 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.
16. 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.
17. 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.
18. In order to determine compliance with conditions A.30 and A.31 of this permit, the permittee shall maintain monthly records of the amount of fuel used by the rail transloader engine.
19. The permittee shall maintain daily and monthly records of the amount of limestone delivered to pile EP37.06. 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.

## C. GENERAL REQUIREMENTS

1. In accordance with 45CSR30 - "Operating Permit Program", the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first filing a Certified Emissions Statement (CES) and paying the appropriate fee. Such Certified Emissions Statement (CES) shall be filed and the appropriate fee paid annually. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.
2. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.
3. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R14-0026, R14-0026A, R14-0026B, R14-0026C, R14-0026D, R14-0026E, R14-0026F, R14-0026G, R14-0026H, R14-0026I, R14-0026J, R14-0026K, R14-0026L and R14-0026M 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.
4. At such reasonable time(s) as the Secretary may designate, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations established in the permit application and/or applicable regulations. Test(s) shall be conducted in such a manner as the Secretary may specify or approve and shall be filed in a manner acceptable to the Secretary. The Secretary, or his/her duly authorized representative, may at his option witness or conduct such test. Should the Secretary exercise his option to conduct such test(s), the permittee shall provide all the 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. For any tests to be conducted by the permittee, a test protocol shall be submitted to the DAQ by the permittee at least thirty (30) days prior to the test and shall be approved by the Secretary. The Secretary shall be notified at least fifteen (15) days in advance of the actual dates and times during which the test will be conducted.
5. In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations, either in whole or in part, authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.
6. The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.
7. The permittee shall notify the Secretary, in writing, within fifteen (15) calendar

days of the commencement of the construction, modification, or relocation activities authorized under this permit.

8. The permittee shall notify the Secretary, in writing, at least fifteen (15) calendar days prior to actual startup of the operations authorized under this permit.
9. This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13.
10. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7.
11. At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous calendar year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a submittal frequency other than on an annual basis.

ISSUED BY:



WILLIAM F. DURHAM, DIRECTOR  
WV DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF AIR QUALITY

DATE SIGNED:

4-08-2016