Tarmac America, Inc.
Tarmac Pennsuco
11000 NW 121 Way
Medley, Florida 33178
Facility ID No.: 0250020
Miami-Dade County

Initial Title V Air Operation Permit **Title V FINAL Permit No.:** 0250020-002-AV

Issue Date: October 26, 2000 Expiration Date: October 25, 2005

<u>Permitting Authority:</u>

Miami-Dade County
Department of Environmental Resources Management
Air Facilities Section
33 SW 2nd Avenue, Suite 900
Telephone: (305) 372-6925

Fax: (305) 372-6954

FINAL on October 26, 2000

electronic file name: 0250020f.doc

Tarmac of America, Inc.

Pennsuco Plant

Title V FINAL Permit No.: 0250020-002-AV

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Permittee:

Mr. Hardy Johnson Vice-President, Florida Division Tarmac America, Inc. 455 Fairway Drive Deerfield Beach, Florida 33441 Title V FINAL Permit No.: 0250020-002-AV

Facility ID No.: 0250020 SIC Nos.: 3241,3271, 3273

Project: Initial Title V Air Operation Permit

This permit is for the operation of the Tarmac Pennsuco Plant. This facility is located at 11000 NW 121 Way, Medley, Miami-Dade County; UTM Coordinates: Zone 17, 562.8 km East and 2861.7 km North; Latitude: 25° 52' 30" North and Longitude: 80° 22' 30" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 24, Code of Miami-Dade County, Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-212 and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

APPENDIX A, 40 CFR 63, Subpart A, National Emissions Standards for Hazardous Air Pollutants for Source Categories: General Provisions for Subpart LLL, Portland Cement Plants

APPENDIX A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

APPENDIX A-2, 40 CFR 60, General Provisions

APPENDIX B, 40 CFR 60, Subpart F, Standards of Performance for Portland Cement Plants

APPENDIX C, 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants

APPENDIX D, 40 CFR 63, Subpart LLL, National Emission Standards for Hazardous Air Pollutants for Source Categories; Portland Cement Manufacturing Industry

APPENDIX F, Consent Agreement between Tarmac America, Inc. and Miami-Dade County DERM, signed on February 2, 1998

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Title V Permit Effective Date: October 26, 2000
Title V Permit Renewal Application Due Date: April 25, 2005
Title V Permit Expiration Date: October 25,2005

Miami-Dade County
Department of Environmental
Resources Management
Air Quality Management Division
Air Facilities Section

H. Patrick Wong, Chief, Air Quality Management Division Delegated Local Program

Section I. Facility Information.

Subsection A. Facility Description.

Tarmac America, Inc. operates the Pennsuco wet process portland cement manufacturing plant in Medley, Florida. A large portion of the facility was constructed prior to 1970. This facility consists of a coal handling system; raw feed system; kilns; coolers; finish mills; slag dryer; clinker and cement storage and handling systems; cement distribution system; concrete block plant; and ready mix plant.

Based on the Title V permit applications received June 13, 1996, this facility is a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No./Facility ID No.	Brief Description
-003	Coal Handling
-004	Kiln No. 2
-005	Cooler No. 2
-006	Kiln No. 3
-007	Cooler No. 3
-008	Clinker Handling and Storage for Kiln No. 2
-009	Clinker Handling and Storage for Kiln No. 3
-010	Finish Mill No. 1
-011	Finish Mill No. 2
-012	Finish Mill No. 3
-013	Finish Mill No. 4
-014	Cement Storage Silos. 1 through 12
-015	Cement Distribution Rail Truck Load
-016	Cement Distribution Packhouse
-020	Slag Dryer
-021	Insufflation
-022	Concrete Block Plant
-023	Ready Mix Plant

This facility also includes several insignificant emissions units. Appendix I-1, List of Insignificant Emissions Units and/or Activities is attached.

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only: Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers.

These documents are on file with the permitting authority:

Initial Title V Permit Application received June 18, 1996 Additional Information Request dated December 17, 1997 Additional Information Response received June 22, 1998 Title V Draft Permit issued November 1, 1999 Revised Title V Draft Permit issued July 17, 2000 Title V Permit Proposed Permit issued September 11, 2000

Section II. Facility-wide Conditions.

otherwise appropriate.}

The following conditions apply facility-wide:

1. APPENDIX TV-3, TITLE V CONDITIONS, is a part of this permit. {Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or

2. <u>General Pollutant Emission Limiting Standards</u>. <u>Objectionable Odor Prohibited</u>. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

[Rule 62-296.320(2), F.A.C.; and, AC27-199744]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a Particulate Matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.

[Rules 62-296.320(4)(b) 1. & 4., F.A.C.]

- 4. Prevention of Accidental Releases (Section 112(r) of CAA).
 - a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable; and,
 - b. The permittee shall submit to the permitting authority Title V certification forms or accompliance schedule in accordance with Rule 62-213.440(2), F.A.C. [40 CFR 68].
- 5. <u>Insignificant Emissions Units and/or Activities.</u> Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.

[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

6. <u>Kiln No. 1</u>.

Kiln No. 1 and Cooler No. 1 have been shut down since 1982, a period greater than 10 years. In accordance with Rule 62-210.300(2)(a)(3)(c), F.A.C., the reactivation of the units shall require an air construction permit pursuant to Rule 62-210.300(1), F.A.C., and New Source Review for the Prevention of Significant Deterioration pursuant to Rule 62-212.400(5), F.A.C.

[Rule 62-210.300(1), 62-210.300(2)(a)(3)(c) and 62-212.400(5), F.A.C.]

- 7. Compliance Plan.
 - a. NOx Emission Limit Compliance
 - 1. On the date that this compliance plan was drafted (September 7, 2000) Cement Kiln No. 2 was not operating in compliance with the federally enforceable emission nitrogen oxides (NO_X) emission limits given in Florida DEP Air Construction Permit AC 13-169901 clerked on February 27, 1991.

- 2. The applicable limits in accordance with Permit AC 13-169901 are based on a determination of Best Available Control Technology and a PSD Permit clerked on February 27, 1991. The applicable values in the permit are 113.8 pounds of NO_X per hour (lb/hr) and 4.55 pounds per ton of clinker.
- 3. A Consent Agreement between Tarmac and Miami-Dade County DERM signed on February 2, 1998 is incorporated into this compliance plan. By this agreement, the emission limit is 220 lb/hr (monthly average) and 240 lb/hr (instantaneous) while Tarmac pursues a number of options including the modernization of the facility to a lower-emitting dry process.
- 8. 4. In October 1999, Tarmac received from DERM Air Construction Permit 0250020-008-AC for the modernization project. Tarmac shall demonstrate that it will in fact complete the facility modernization by October 20, 2002, in which case Kiln 2 may continue to operate at the temporary limit of 220 lb/hr (monthly average) and 240 lb/hr (instantaneous) until October 20, 2002. Thereafter Tarmac shall comply with the applicable NOx emissions limit values set forth in Florida DEP Air Construction Permit AC 13-169901 clerked on February 27, 1991. [Rule 62-213.440(2), F.A.C.]

8. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

{Permitting note: The Department has not required or deemed anything necessary to date.} [Rule 62-296.320(1)(a), F.A.C.]

- 9. Reasonable precautions shall be taken to prevent emissions of unconfined Particulate Matter. Reasonable precautions may include, but not be limited to the following:
 - Paving and maintenance of roads, parking areas and yards
 - Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
 - Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
 - Removal of Particulate Matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
 - Landscaping or planting of vegetation.
 - Use of hoods, fans, filters, and similar equipment to contain, capture, and/or vent Particulate Matter.
 - Confirming abrasive blasting where possible
 - Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c) F.A.C.]

- 10. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440, F.A.C.]
- 11. The permittee shall submit all compliance related notifications and reports required of this permit to the DERM at the following address:

Mr. Hardy Johnson Vice President, Cement & Ready Mix Tarmac America, Inc.

Miami-Dade County
Department of Environmental Resources
Air Quality Management Division
33 SW 2nd Avenue, Suite 900
Miami, Florida 33130-1540

12. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency

Region 4

Air, Pesticides & Toxics Management Division
Air & EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155

Fax: 404/562-9163

Section III. Emissions Unit(s) and Conditions.

Tarmac America, Inc.

Subsection A. This section addresses the following emissions unit.

E.U. ID No./Facility ID No.	Brief Description	
-004	Kiln No. 2 with Dual Chamber E.S.P.	
-005	Cooler No. 2 with cyclone and Dual Chamber E.S.P.	
-006	Kiln No. 3 with dropout and dual chamber E.S.P.	
-007	Cooler No. 3 dropout box and baghouse	

Kiln No. 2 with Dual Chamber E.S.P.: This emission unit is an activity of the wet-process cement Kiln No. 2 fired by natural gas, No. 6 fuel oil and low sulfur content (2% by weight) coal. Particulate Matter emissions are controlled by an electrostatic precipitator which is manufactured by Koppers and contains 46,000 ft² of collecting plate surface in two chambers. The design gas volume is 120,000 acfm at 525°F and at this volume the specific collection area is 385 ft²/ 1000 acfm. The design superficial velocity is 4.05 ft/sec and the treatment time is 8.6 seconds. The collection plates and discharge electrodes are cleaned by high-energy electric rappers.

Cooler No. 2 with Cyclone and Dual Chamber E.S.P.: This emission unit is an activity of the clinker Cooler No. 2. Particulate Matter emissions are controlled by an electrostatic precipitator which is manufactured by Koppers and contains three fields. The unit contains 22,000 ft² of collection plate surface in two chambers. The design gas volume is 48,000 acfm at 300°F. At this volume the specific collection area is 466.6 ft²/1000 acfm. The design superficial velocity is 2.38 ft/sec.

Kiln No. 3 with Dropout and Dual Chamber E.S.P.: This emission unit is an activity of the wetprocess cement Kiln No. 3 fired by low sulfur content (2% by weight) coal, natural gas, and No. 6 fuel oil. Particulate Matter emissions are controlled by an electrostatic precipitator which is manufacturer by Koppers and contains 272,000 ft² of collecting plate surface in two chambers. The design gas volume is 500,000 acfm at 450 °F and at this volume the specific collection area is 544 ft²/ 1000 acfm. The design superficial velocity is 3.95 ft/sec and the treatment time is 11.4 seconds. The collection plates and discharge electrodes are cleaned by high-energy electric rappers.

Cooler No. 3 with a Dropout Box and a Baghouse: Particulate Matter emissions from the cooler are controlled by a settling chamber and a pulsejet fabric filter. The baghouse is a Fuller plenum pulse with 28 compartments in two chambers. The design gas volume is 122,000 acfm at 300 °F. The filter area is 23,326 ft² and at design gas volume, the air to cloth ratio is 5.25 acfm/ft².

{Permitting Note: This emissions unit activity is regulated under Rules 62-212.400 and 62-212.410. F.A.C., Prevention of Significant Deterioration (PSD), PSD-FL-050, PSD-FL-142, AC13-169901, AO13-238048, AC13-27742; and 40 CFR 60, Standards of Performance for New Stationary Sources, Subpart A and 40 CFR 60, Subpart F Standards of Performance for Portland Cement Plants, a Consent Order with DERM-Miami-Dade County, dated January 30, 1998, and 40 CFR 60, Subpart F, Standards of Performance for Portland Cement Plants, adopted in Rule 62-204.800, F.A.C..

General

A.0. The following Specific Conditions are in effect until midnight of June 9, 2002.

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity.

	Kiln No. 2 and Cooler No. 2	Kiln No. 3 and Cooler No. 3
Maximum Process Rate (TPH)	40.5	142
Maximum Clinker Production	25	87.5
Rate (TPH)		
Maximum annual rate of	197,100	766,500
clinker produced in tons.		

[AO 12-238048; PSD-FL-142, PSD-FL-050, AC 13-169901, Rules 62-4.160(2) and 62-210.200 (228)(PTE), F.A.C.; and, Application received June 13, 1996.]

A.2. Hours of Operation.

	Hours of Operation	Permit/Rule Applicability
Kiln No. 2	7,884	PSD-FL-142 & AC 13-169901
Cooler No. 2	8,760	Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.
Kiln No. 3	8,760	Rules 62-4.160(2) and 62-210.200(PTE),
		F.A.C., and PSD-FL-050.
Cooler No. 3	8,760	Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.

A.3. Methods of Operation - Fuels.

	Fuels	Permit/Rule Applicability
Kiln No. 2	Coal, natural gas and fuel oil. Fuel oil includes on-spec used oil.*	PSD-FL-142 & AC 13-169901
Kiln No. 3	Coal, natural gas and fuel oil. Fuel oil includes on-spec used oil.*	PSD-FL-050

Note:

* "On-specification" used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be fired.

Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	4000 ppm maximum
Flash Point	100 °F minimum

As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

Emission Limitations and Standards

A.4. Kiln No. 2 and Cooler No. 2:

Particulate Matter (PM), Particulate Matter 10 (PM10), Sulfuric Acid Mist (SAM), Carbon Monoxide (CO), Volatile Organic Compound, (VOC), Sulfur Dioxide (SO₂), and Nitrogen Oxides (NOx). Based on a maximum process rate of 40.5 tons/hr, unless otherwise noted in the table below, the allowable pollutant emissions from the Kiln No. 2 and/or clinker Cooler No. 2 are as follows:

Pollutant	Regulatory Citation		Maximum Allowable Emission Limits	
		lbs/hr	tons/yr	
PM (Kiln No. 2)	PSD-FL-142	14.4	56.76	
SAM (Kiln No. 2)	PSD-FL-142	5.86	23.06	
	(0.23 lb/ton clinker)			
CO (Kiln No.2)	PSD-FL-142	346	1,363	
VOC (Kiln No. 2)	PSD-FL-142	28.8	113.5	
PM10 (Kiln No. 2)****	PSD-FL-142	12.24	48.25	
SO2 (Kiln No. 2)***				
liquid fuel	Chapter 24-17(2)(a)(ii), Miami-Dade County	179	783	
•	Code			
	(1.1 lb/MMBtu heat input*)			
all fuels	PSD-FL-142	195	768.7	
	(7.8 lb/ton clinker)			
NOx (Kiln No.2)	Consent Order with DERM, Miami-Dade	220**	867.2	
,	County, dated January 30, 1998			
PM (Cooler No.2)	Rule 62-296.407(1), F.A.C.	26.40	115.70	
,	(Based on a maximum 25 tons/hr clinker			
	process rate. 0.1 lb/ton dry kiln feed process			
	weight applies at lesser operating rates.)			

Notes:

- ** Emissions of NO_x from Kiln No. 2 shall not exceed a 30-day rolling average of 220 pounds per hour with 240 pounds per hour being the maximum limit on an instantaneous basis. [Consent Order with DERM, Miami-Dade County, dated January 30, 1998]
- ***The coal used to fuel kiln No. 2 shall have sulfur content not to exceed 1.75 percent (30-day rolling average) and with 2.0 percent maximum; or the sulfur content, determined once by the stack test program described in specific condition A.10., consistently meets the revised sulfur dioxide emission standards, whichever sulfur content is most restrictive. [PSD-FL-142]
- ****Compliance for PM10 shall be determined by applying a factor of 0.85 to the measured Particulate Matter emissions.

^{*} Emission of SO₂ shall not exceed 1.5 lb/MMBtu heat input when solid fuel is fired, nor 1.1 lb/MMBtu heat input when liquid fuel is fired. [Section 24-17(2)(a)(ii), Miami-Dade County Code]

A.5. Kiln No. 3 and Cooler No. 3:

Particulate Matter (PM), Sulfur Dioxide (SO₂) and Nitrogen Oxides (NOx).

Based on a maximum input rate of 142 tons/hr of dry kiln feed, unless otherwise noted in the table below, the allowable pollutant emissions from the Kiln No. 3 and/or clinker Cooler No. 3 are as follows:

Pollutant	Regulatory Citation		m Allowable on Limits tons/yr
PM (Kiln No. 3)	0.3 lb/ton dry kiln feed NSPS Subpart F	42.5	186.6
NOx (Kiln No.3)	6.77 lb/ton clinker PSD-FL-050	592	2,594
SO ₂ (Kiln No. 3)*	4.6 lb/ton clinker PSD-FL-050	400	1,752
PM (Cooler No. 3)	0.1 lb/ton dry kiln feed NSPS Subpart F	14.2	62.2

Note:

A.6. Visible Emissions.

	Visible Emissions Limits
Kiln No. 2 and Cooler No. 2	20%
Kiln No. 3 and Cooler No. 3	20%

[PSD-FL-050 dated July 8, 1980, AC13-054054 dated March 22, 1985, Section 24-17(2)(a)(ii), Miami-Dade County Code, Rule 62-296.320(4)(a), PSD-FL-142 & AC 13-169901 dated February 25, 1991, Section 24-17(2)(a)(ii), Miami-Dade County Code, and a Consent Order with DERM-Miami-Dade County, dated January 30, 1998]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS, NESHAP, or Acid Rain program provision.}

- A.7. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **A.8.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

^{*} Emission of SO₂ shall not exceed 1.5 lb/MMBtu heat input when solid fuel is fired, nor 1.1 lb/MMBtu heat input when liquid fuel is fired. [Section 24-17(2)(a)(ii), Miami-Dade County Code]

A.9. Opacity Excess Emissions. For the purpose of reports under 40 CFR 60.65, periods of excess emissions that shall be reported are defined as all 6-minute periods during which the average opacity exceeds 10% opacity.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60.63(d)]

A.10. <u>Test Methods and Procedures.</u> The permittee shall annually (prior to December 31st of each year), unless otherwise indicated, conduct performance tests on all emissions units and their corresponding pollutant emissions listed below:

Emission Unit	Pollutant	Testing Methods
Kiln No. 2	Particulate Matter and	Method 5
	associated moisture content	
	SAM	Method 5 & 8
	NOx	Method 7 or 7E, CEMS
	Visible Emissions	Method 9
	Carbon Monoxide	Method 10
	VOC	Method 25 or 25A
Cooler No. 2	Particulate Matter and	Method 5
	associated moisture content	
	Visible Emissions	Method 9
Kiln No. 3	Particulate Matter and	Method 5
	associated moisture content	
	SO2	Method 6
	NOx	Method 7 or 7E
	Visible Emissions	Method 9
Cooler No. 3	Particulate Matter and	Method 5
	associated moisture content	
	Visible Emissions	Method 9

[Rules 62-204.800 & 62-297.401, F.A.C.; 40 CFR 60.64; [PSD-FL-142 & AC 13-169901 dated February 25, 1991, Section 24-17(2)(a)(ii)]

A.11. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

A.12. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

A.13. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

A.14. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of Particulate Matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of Particulate Matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

- (b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached).
- (e) <u>Allowed Modification to EPA Method 5</u>. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- **A.15.** Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

A.16. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

- 1. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
- 2. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; or 100 tons per year or more of any other regulated air pollutant; and,
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
- 3. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for Particulate Matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, AC27-118674]

A.17. Fuel Analysis for On-specification Used Oil. Fuel analysis shall be in accordance with 40 CFR 266.43(b)(1) & (6). A sample shall be taken from the outlet of the blend tank on the first working day (i.e., Monday - Friday; exceptions: holidays) of each month, if any used oil was placed in the blend tank the previous month; or, the sample can be taken directly from the used oil mobile collection tank after final collection and prior to the time of initial transfer; but, that sampling frequency shall be no less than quarterly and the sampling methodology shall have been established with the DERM, -Miami-Dade County prior to sampling. Upon taking a sample, the sample shall be analyzed for the following constituent/property and associated unit and using the following test methods (or their latest version):

Constituent/Property*	Unit	Test Method
Arsenic	ppm	EPA SW-846 (3040-7130)
Cadmium	ppm	EPA SW-846 (3040-7130)
Chromium	ppm	EPA SW-846 (3040-7130)
Lead	ppm	EPA SW-846 (3040-7130)
Total Halogens	ppm	ASTM E442
Sulfur	% by weight	ASTM D2622-92, ASTM D4294-90, or both ASTM
		D4057-88 & ASTM D129-91
Flash Point	°F	ASTM D93
Heat of Combustion	Btu/gal	ASTM D240-76
Density	lbs/gal	ASTM D1298-80

Note: Other test methods may be used only after receiving written approval from the Department. [40 CFR 279.11, which is adopted by reference in Rule 62-710.210(2), F.A.C.]

Monitoring of Operations

A.18. Continuous Emission Monitoring of NOx.

The owner or operator shall demonstrate compliance with the NOx emission limit for Kiln No. 2 by operating a continuous emission monitor (CEM).

[Consent Order with DERM, Miami-Dade County, dated January 30, 1998]

A.19. Continuous Opacity Monitoring System.

The owner or operator shall install, calibrate, maintain, and operate in accordance with 40 CFR 60.13, a continuous opacity monitoring system (COMS) to measure the opacity of emissions discharged into the atmosphere from any kiln or clinker cooler that is subject to the provisions of 40 CFR Subpart F, Standards of Performance for Portland Cement Plants.

[40 CFR 60.63]

A.20. Determination of Process Variables.

(a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

Recordkeeping and Reporting Requirements

- **A.21.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the DERM, Air Facilities Section in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- **A.22.** The records of fuel usage with the fuel analysis and the daily production rates (including clinker production rate) and kiln feed rates shall be recorded. Such records shall be made available to the DERM upon request.

 [40 CFR 60.63(a)]

A,23. Continuous Emission Monitoring of NOx.

The owner of operator shall submit to DERM a written NOx emission monitoring report including the monthly NOx emissions chart from Kiln No. 2. This report shall be due by the fifteenth of the month and shall contain the information obtained from the preceding month. Report submittals shall continue until the expiration of the Consent Order with Miami-Dade County, dated January 30, 1998.

[Consent Order with DERM, Miami-Dade County, dated January 30, 1998]

A.24. Continuous Opacity Monitoring System.

The owner or operator required to install a continuous opacity monitoring system under 60.63(b) shall submit reports of excess emissions as defined in 60.63(d). The content of these reports must comply with 60.7(c). Not withstanding the provisions of 60.7(c), such reports shall be submitted semiannually.

[40 CFR 60.65]

A.25. On-specification Used Oil.

- a. The results of each sample analysis shall be submitted to the DERM, Air Facilities Section offices within 30-days after the sample is taken.
- b. The dates and quantities of both on-specification used oil and purchased fuel oil transferred to the cement kiln's storage tank shall be reported quarterly (i.e., Jan.-Mar., April-June, July-Sept., and Oct.-Dec.) to the DERM, Air Facilities Section and due during the month following the ending quarter.

[40 CFR 279.11, which is adopted by reference in Rule 62-710.210(2), F.A.C.]

A.26. Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission-limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.
 - 15. Data on the types and amounts of any chemical solutions used.
 - 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
 - 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
 - 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
 - 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
 - 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
 - 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213,440 and 62-297,310(8), F.A.C.]

Subsection B. This section addresses the following emissions units.

E.U. ID No./Facility ID No.	Brief Description	
-004	Kiln No. 2 with Dual Chamber E.S.P.	
-005	Cooler No. 2 with cyclone and Dual Chamber E.S.P.	
-006	Kiln No. 3 with dropout and dual chamber E.S.P.	
-007	Cooler No. 3 dropout box and baghouse	

Kiln No. 2 with Dual Chamber E.S.P.: This emission unit is an activity of the wet-process cement Kiln No. 2 fired by natural gas, No. 6 fuel oil and low sulfur content (2% by weight) coal. Particulate Matter emissions are controlled by an electrostatic precipitator manufactured by Koppers and which contains 46,000 ft² of collecting plate surface in two chambers. The design gas volume is 120,000 acfm at 525°F and at this volume the specific collection area is 385 ft²/ 1000 acfm. The design superficial velocity is 4.05 ft/sec and the treatment time is 8.6 seconds. The collection plates and discharge electrodes are cleaned by high-energy electric rappers.

Cooler No. 2 with cyclone and Dual Chamber E.S.P. This emission unit is an activity of the clinker Cooler No. 2. Particulate Matter emissions are controlled by an electrostatic precipitator manufactured by Koppers and which contains three fields. The unit contains 22,000 ft² of collection plate surface in two chambers. The design gas volume is 48,000 acfm at 300°F. At this volume the specific collection area is 466.6 ft²/ 1000 acfm. The design superficial velocity is 2.38 ft/sec.

Kiln No. 3 with dropout and dual chamber E.S.P. This emission unit is an activity of the wet-process cement Kiln No. 3 fired by low sulfur content (2% by weight) coal, natural gas, and No. 6 fuel oil. Particulate Matter emissions are controlled by an electrostatic precipitator manufacturer by Koppers and contains 272,000 ft² of collecting plate surface in two chambers. The design gas volume is 500,000 acfm at 450 °F and at this volume the specific collection area is 544 ft²/ 1000 acfm. The design superficial velocity is 3.95 ft/sec and the treatment time is 11.4 seconds. The collection plates and discharge electrodes are cleaned by high-energy electric rappers.

Cooler No. 3 with a dropout box and a baghouse: Particulate Matter emissions from the cooler are controlled by a settling chamber and a pulsejet fabric filter. The baghouse is a Fuller plenum pulse with 28 compartments in two chambers. The design gas volume is 122,000 acfm at 300 °F. The filter area is 23,326 ft² and at design gas volume, the air to cloth ratio is 5.25 acfm/ft².

{Permitting Note: This emissions unit activity is regulated under Rules 62-212.400 and 62-212.410, F.A.C., Prevention of Significant Deterioration (PSD), PSD-FL-050, PSD-FL-142, AC 13-169901, AO 13-238048, AC13-27742; and 40 CFR 60, Standards of Performance for New Stationary Sources, Subpart A and 40 CFR 60 and Subpart Y- Standards of Performance for Coal Preparation Plants, a Consent Order with DERM-Miami Dade County, dated January 30, 1998, and, 40 CFR 63, Subpart LLL, National Emissions Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry, adopted in Rule 62-204.800, F.A.C., by June 10, 2002.}

General

B.0. The following Specific Conditions are in effect beginning at 12:01 a.m. of June 10, 2002.[Rule 62-204.800, F.A.C.; and, 40 CFR 63, Subpart LLL]

B.1. Exemption from New Source Performance Standards. Except as provided in paragraphs 40 CFR 63.1356(a)(1) and (a)(2), any affected source subject to the provisions of 40 CFR 63, Subpart LLL is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart F.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1356]

B.2. Attachment "40 CFR 63, Subpart A" is incorporated by reference.

Essential Potential to Emit (PTE) Parameters

B.3. Permitted Capacity.

	Kiln No. 2 and	Kiln No. 3 and
	Cooler No. 2	Cooler No. 3
Maximum Process Rate (TPH)	40.5	142
Maximum Clinker Production	25	87.5
Rate (TPH)		
Maximum annual rate clinker	197,100	766,500
produced in tons.		

[AO 12-238048; PSD-FL-42, PSD-FL-050, AC 13-169901, Rules 62-4.160(2) and 62-210.200 (228)(PTE), F.A.C.; and, Application received June 13, 1996.]

B.4. Hours of Operation.

	Hours of Operation Permit/Rule Applicability		
Kiln No. 2	7,884	PSD-FL-142 & AC 13-169901	
Cooler No. 2	8,760 Rules 62-4.160(2) and 210.200(PTE), F.A.C.		
Kiln No. 3	8,760	Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., and PSD-FL-050.	
Cooler No. 3	8,760	Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.	

B.5. Methods of Operation - Fuels.

	Fuels	Permit/Rule Applicability
Kiln No. 2	Coal, natural gas and fuel oil. Fuel oil includes on-spec used oil.*	PSD-FL-142 & AC 13-169901
Kiln No. 3	Coal, natural gas and fuel oil. Fuel oil includes on-spec used oil.*	PSD-FL-050

Note:

* "On-specification" used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be fired.

Constituent/Property	<u>Allowable Level</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	4000 ppm maximum
Flash Point	100 °F minimum

As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

Emission Standards and Operating Limitations

B.6. Kiln No. 2 and Cooler No. 2.

Particulate Matter (PM), Sulfuric Acid Mist (SAM), Carbon Monoxide (CO), Volatile Organic Compound (VOC), Sulfur Dioxide (SO₂), Nitrogen Oxides (NOx), PM10 and Dioxin/Furans. Based on a maximum process input rate of 40.5 tons/hr dry kiln feed, unless otherwise noted in the table below, the allowable pollutant emissions from the Kiln No. 2 and/or clinker Cooler No. 2 are as follows:

Pollutant	Regulatory Citation	Maximum Allowable Emission Limits	
PM (Kiln No. 2)	40 CFR 63.1343(b)(1)	12.15 lbs/hr	53.2 tons/yr
	(0.30 lb/ton dry kiln feed)		
SAM (Kiln No. 2)	PSD-FL-142	5.86 lbs/hr	23.06 tons/yr
	(0.23 lb/ton clinker)		
CO (Kiln No. 2)	PSD-FL-142	346 lbs/hr	1,363 tons/yr
VOC (Kiln No. 2)	PSD-FL-142	28.8 lbs/hr	113.5 tons/yr
PM10 (Kiln No. 2)	PSD-FL-142	12.24 lbs/hr	48.25 tons/yr
SO ₂ (Kiln No. 2)***			
Liquid fuel:	Section 24-17(2)(a)(ii), Miami-Dade County Code (1.1 lb/MMBtu heat input*)	179 lbs/hr	783 tons/yr
All fuels:	PSD-FL-142 (7.8 lb/ton clinker)	195.0 lbs/hr	768.7 tons/yr
NO _x (Kiln No. 2) through October 20, 2002	Consent Agreement with DERM-Miami Dade County, dated January 30, 1998	220 lbs/hr**	867.2 tons/yr
NO _x (Kiln No. 2) after October 20, 2002 [pursuant to the compliance plan in Section II, Facility Wide Condition #7 of this permit]	FDEP AC 13-169901 clerked on February 27, 1991 (4.55 lb/ton of clinker)	113.8 lbs/hr	448.6 tons/yr
PM (Cooler No. 2)	40 CFR 63.1345(a)(1) (0.10 lb/ton dry kiln feed)	4.05 lbs/hr	17.7 tons/yr
Dioxin/Furans (Kiln No. 2)	40 CFR 63.1343(b)(3)	0.20 ng/dscm or	0.40 ng/dscm****

Notes:

- * Emission of SO₂ shall not exceed 1.5 lb/MMBtu heat input when solid fuel is fired, nor 1.1 lb/MMBtu heat input when liquid fuel is fired. [Section 24-17(2)(a)(ii), Miami-Dade County Code]
- ** Emissions of NO_x from Kiln No. 2 shall not exceed a 30-day rolling average emission limit of 220 pounds per hour with 240 pounds per hour being the maximum limit on an instantaneous basis. [Consent Order with DERM, Miami-Dade County, dated January 30, 1998]

- ***The coal used to fuel kiln No. 2 shall have sulfur content not to exceed 1.75 percent by weight (30-day rolling average) and a 2.0 percent maximum; or the sulfur content, determined once by the stack test program described in specific condition B.12., consistently meets the revised sulfur dioxide emission standards, whichever sulfur content is most restrictive.

 [PSD-FL-142 & AC 13-169901 dated February 25, 1991]
- **** Dioxins/Furans. No owner or operator of an existing kiln shall cause to be discharged into the atmosphere from these affected emissions units, any gases which contain dioxins/furans in excess of 0.20 ng/dscm (8.7 x 10⁻¹⁰ gr/dscf) (TEQ) corrected to seven percent oxygen; or 0.40 ng/dscm (1.7 x 10⁻¹⁰ gr/dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate control device is 204° C (400° F) or less. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1343(a) and (b)(3)(i)and (ii)]
- **B.7.** Kiln No. 3 and Cooler No. 3: Particulate Matter (PM), Sulfur Dioxide (SO₂) and Nitrogen Oxides (NOx, and Dioxin/Furans). Based on a maximum process input rate of 142 tons/hr dry kiln feed and a maximum production rate of 87.5 tons/hr clinker, unless otherwise noted in the table below, the allowable pollutant emissions from the Kiln No. 3 and/or clinker Cooler No. 3 are as follows:

Pollutant	Regulatory Citation	Maximum Allowable Emission Limits	
PM (Kiln No. 3)	0.3 lb/ton dry kiln feed 42.5 lbs/hr 1 40 CFR 63.1343(b)(1)		186.6 tons/yr
NOx (Kiln No.3)	6.77 lb/ton clinker PSD-FL-050	r 592 lbs/hr 2,594 tons/yr	
SO ₂ (Kiln No. 3)*	4.6 lb/ton clinker PSD-FL-050	400 lbs/hr 1,752 tons/yr	
PM (Cooler No. 3)	0.1 lb/ton dry kiln feed 40 CFR 63.1345(a)(1)		
Dioxins/Furans (Kiln No. 3)	40 CFR 63.1343(b)(3)	0.20 ng/dscm or 0.40 ng/dscm**	

Notes:

- * Emission of SO₂ shall not exceed 1.5 lb/MMBtu heat input when solid fuel is fired, nor 1.1 lb/MMBtu heat input when liquid fuel is fired. [Section 24-17(2)(a)(ii), Miami-Dade County Code]
- ** Dioxins/Furans. No owner or operator of an existing kiln shall cause to be discharged into the atmosphere from these affected emissions units, any gases which contain dioxins/furans in excess of 0.20 ng/dscm (8.7 x 10⁻¹¹ gr/dscf) (TEQ) corrected to seven percent oxygen; or 0.40 ng/dscm (1.7 x 10⁻¹⁰ gr/dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate control device is 204° C (400° F) or less. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1343(a) and (b)(3)(i)and (ii)]

B.8. Visible Emissions.

	Visible Emissions Limits		Visible Emissions Limits
Kiln No. 2	20%	Cooler No. 2	10%
Kiln No. 3	20%	Cooler No. 3	10%

[40 CFR 63 Subpart LLL]

B.9. Operating Limits for Kilns.

- (a) The owner or operator of a kiln subject to a D/F emission limitation under 40 CFR 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 the following paragraph.
- (b) The temperature limit for affected sources meeting the limits above is determined in accordance with the following: the run average temperature must be calculated for each run, and the average of the run average temperature must be determined and included in the performance test report and will determine the applicable temperature limit.

 [40 CFR 63.1344(a) (b)]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS, NESHAP, or Acid Rain program provision.}

- **B.10.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **B.11.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

B.12. Test Methods and Procedures. The permittee shall annually (prior to December 31st of each year), unless otherwise indicated, conduct performance tests on all emissions units and their corresponding pollutant emissions listed below:

Emission Unit	Pollutant	EPA Testing Method
Kiln No. 2 ⁽¹⁾	Particulate Matter and	Method 5
	associated moisture	
	content	
	SAM	Method 5 & 8
	NOx	Method 7 or 7E, CEMS
·	Visible Emissions	Method 9
	Carbon Monoxide	Method 10
	VOC	Method 25 or 25A
	Dioxins/Furans	Method 23
Cooler No. 2	Particulate Matter and	Method 5
	associated moisture	·
	content	
	Visible Emissions	Method 9
Kiln No. 3 ⁽¹⁾	Particulate Matter and	Method 5
	associated moisture	
	content	
	SO2	Method 6
	NOx	Method 7 or 7E
	Visible Emissions	Method 9
	Dioxins/Furans ⁽²⁾	Method 23
Cooler No. 3	Particulate Matter and	Method 5
	associated moisture	
	content	
	Visible Emissions	Method 9

[Rules 62-204.800 & 62-297.401, F.A.C.; 40 CFR 60.64; [PSD-FL-142 & AC 13-169901 dated February 25, 1991, Section 24-17(2)(a)(ii)]

Notes:

- (1) The owner or operator is required to repeat the performance tests for kilns within 90 days of initiating any significant change in the feed or fuel from that used in the previous performance test.
- (2) In addition to the initial performance test, a Method 23 test shall be performed every 30 months.

B.13. Initial and Subsequent Performance Testing.

(a) The owner or operator of an affected emissions unit subject to 40 CFR 63, Subpart LLL, shall demonstrate initial compliance with the emission limits of 40 CFR 63.1343 and 63 CFR 63.1345 (See Specific Conditions B.6. and B.7.) using the test methods and procedures in paragraph 40 CFR 63.1349(b) (see Specific condition B.13.b) and 40 CFR 63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs 40 CFR 63.1349(a)(1) through (a)(10), as described below, 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.
- (b) Performance tests to demonstrate initial compliance with 40 CFR 63, Subpart LLL, shall be conducted as specified as follows: [40 CFR 63.1349(b)(1) through (b)(3)].
 - (1) The owner or operator of a kiln subject to limitations on Particulate Matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs 40 CFR 63.1349(b)(1)(i) through (b)(1)(iii). 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 paragraphs (b)(1)(i) through (b)(1)(iii). The opacity exhibited during the period of the Method 5 of Appendix A, 40 CFR Part 60 performance tests required by paragraph (b)(1)(i) shall be determined as required in paragraph (b)(1)(v).
 - (i) EPA Method 5 of Appendix A, 40 CFR Part 60, 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 highest load or capacity level reasonably expected to occur (See Specific Condition B.15.). Each run shall be conducted for at least one 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 Particulate Matter 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 CFR 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 feed rate, except for fuels, for each run.
 - (iii) The emission rate, E, of PM shall be computed for each run using Equation 1:

$$E = (c_s Q_{sd}) / P$$
 (Equation 1)

Where: E = emission rate of Particulate Matter, kg/Mg (lb/ton) of kiln feed.

 $c_s = \text{concentration of PM, kg/dscm (g/dscf)}$.

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

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

(v) Except as provided in paragraph 40 CFR 63.1349(b)(1)(vi) the opacity exhibited during the period of the Method 5 performance tests required by paragraph 40 CFR 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 40 CFR 63.1343(b)(2) or 40 CFR 63.1345(a)(2). See Specific Conditions B.8. and B.13.

- (2) The owner or operator of any affected source subject to limitations on opacity under 40 CFR 63, Subpart LLL, that is not subject to (b)(1) of this section shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of Appendix A, 40 CFR Part 60. The performance test shall be conducted under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition **B.23**.). The maximum six-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 paragraphs (b)(2)(i) through (ii) of the section 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. See Specific Conditions **B.11**. and **B.19**.
- (3) The owner or operator of an affected source subject to limitations on D/F emissions shall demonstrate initial compliance with the D/F emission limit by conducting a performance test using Method 23 of Appendix A, 40 CFR Part 60. (See Specific Condition **B.15**.).
 - (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 highest load or capacity level reasonably expected to occur (See Specific Condition **B.14. and B.15**.). The duration of each run shall be at least three 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 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, 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 Specific Condition **B.9.b**.
- (c) Except as provided in paragraph 40 CFR 63.1349(e), performance tests required under paragraphs 40 CFR 63.1349(b)(1) and (b)(2) shall be repeated annually. See Specific Conditions **B.12.** and **B.19**.
- (d) Performance tests required under paragraph 40 CFR 63.1349(b)(3) shall be repeated every 30 months.
- (e) The owner or operator is required to repeat the performance tests for kilns as specified in paragraphs 40 CFR 63.1349(b)(1) and (b)(3) within 90 days of initiating any significant change in the feed or fuel from that used in the previous performance test.

[Rules 62-204.800 and 62-297.310(7)(a)4., F.A.C.; and, 40 CFR 63.1349(a); (b)(1)(i), (ii), (iii) & (v); (b)(2); (b)(3)(i), (ii), (iii) & (iv); (c); (d); and, (e)]

B.14. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

B.15. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

B.16. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

B.17. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of Particulate Matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of Particulate Matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

- (b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached).
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- **B.18.** Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

 [Rule 62-297.310(6), F.A.C.]
- **B.19.** Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
 - 1. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
 - 2. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; or 100 tons per year or more of any other regulated air pollutant; and,
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
 - 3. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to

conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for Particulate Matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; 40 CFR 63.1349(c); and, AC27-118674]

B.20. Fuel Analysis for On-specification Used Oil. Fuel analysis shall be in accordance with 40 CFR 266.43(b)(1) & (6). A sample shall be taken from the outlet of the blend tank on the first working day (i.e., Monday - Friday; exceptions: holidays) of each month, if any used oil was placed in the blend tank the previous month; or, the sample can be taken directly from the used oil mobile collection tank after final collection and prior to the time of initial transfer; but, that sampling frequency shall be no less than quarterly and the sampling methodology shall have been established with the DERM, Miami-Miami-Dade County prior to sampling. Upon taking a sample, the sample shall be analyzed for the following constituent/property and associated unit and using the following test methods (or their latest version):

Constituent/Property*	Unit	Test Method
Arsenic	ppm	EPA SW-846 (3040-7130)
Cadmium	ppm ·	EPA SW-846 (3040-7130)
Chromium	ppm	EPA SW-846 (3040-7130)
Lead	ppm	EPA SW-846 (3040-7130)
Total Halogens	ppm	ASTM E442
Sulfur	% by weight	ASTM D2622-92, ASTM D4294-90, or both ASTM
		D4057-88 & ASTM D129-91
Flash Point	°F	ASTM D93
Heat of Combustion	Btu/gal	ASTM D240-76
Density	lbs/gal	ASTM D1298-80

Note: Other test methods may be used only after receiving written approval from the Department. [40 CFR 279.11, which is adopted by reference in Rule 62-710.210(2), F.A.C.]

Monitoring of Operations

B.21. Continuous Emission Monitoring of NOx.

The owner or operator shall demonstrate compliance with the NOx emission limit for Kiln No. 2 by operating a continuous emission monitor (CEM).

[Consent Order with DERM, Miami-Dade County, dated January 30, 1998]

B.22. Determination of Process Variables.

- (a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

- **B.23.** (a) The owner or operator of each Portland cement plant shall prepare for each affected emissions unit subject to the provisions of 40 CFR 63, Subpart LLL, a written operations and maintenance plan. The plan shall be submitted to the Administrator for review and approval as part of the application for a 40 CFR Part 70 permit and shall include the following information:
 - (1) Procedures for proper operation and maintenance of the affected emissions unit and air pollution control devices in order to meet the emission limits and operating limits of 40 CFR 63.1343 through 40 CFR 63.1348;
 - (2) Corrective actions to be taken when required by paragraph 40 CFR 63.1350(e);
 - (3) Procedures to be used during an inspection of the components of the combustion system of each kiln located at the facility at least once per year; and
- (b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with paragraph 40 CFR 63.1350(a) shall be a violation of the standard.
- (c) The owner or operator of a kiln shall monitor opacity at each point where emissions are vented from these affected sources in accordance with paragraphs 40 CFR 63.1350(c)(1) and (c)(3).
 - (1) 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 Subpart A, general provisions of this 40 CFR Part 63, and according to PS-1 of Appendix B, 40 CFR Part 60.
 - (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.
- (d) 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 paragraphs 40 CFR 63.1350(d)(1) and (d)(3).
 - (1) 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 Subpart A, general provisions of 40 CFR Part 63, and according to PS-1 of Appendix B, 40 CFR Part 60.
 - (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 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard.
- (e) The owner or operator of an affected source subject to a limitation on D/F emissions shall monitor D/F emissions in accordance with paragraphs 40 CFR 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 at the inlet to, or upstream of, the kiln 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 40 CFR 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 at the inlet to the kiln 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.
- (6) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.
- (f) The owner or operator of any kiln subject to a D/F emission limit under this subpart shall conduct an inspection of the components of the combustion system of each kiln at least once per year.
- (g) The owner or operator of an affected source subject to a Particulate Matter standard under 40 CFR 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. The compliance deadline for installing the PM CEMS and all requirements relating to performance of the PM CEMS and implementation of the PM CEMS requirement is deferred pending further rulemaking.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1350(a)(1), (2) & (3); (b); (c)(1) & (3); (d)(1) & (3); (f); (i); and, (k)]

Notification, Recordkeeping and Reporting Requirements

B.24. Continuous Emission Monitoring of NOx.

The owner of operator shall submit to DERM a written NOx emission monitoring report including the monthly NOx emissions chart from Kiln No. 2. This report shall be due by the fifteenth of the month and shall contain the information obtained from the preceding month. Report submittals shall continue until the expiration of the Consent Order with Miami-Dade County, dated January 30, 1998.

[Consent Order with DERM, Miami-Dade County, dated January 30, 1998]

B.25. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

B.26 On-specification Used Oil.

- (a) The results of each sample analysis shall be submitted to the DERM within 30-days after the sample is taken.
- (b) The dates and quantities of both on-specification used oil and purchased fuel oil transferred to the cement kiln's storage tank shall be reported quarterly (i.e., Jan.-Mar., April-June, July-Sept., and Oct.-Dec.) to the DERM and due during the month following the ending quarter.

[40 CFR 279.11, which is adopted by reference in Rule 62-710.210(2), F.A.C.]

B.27. Notification requirements.

- (a) The notification provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a notice that contains all of the information required in a notification listed in 40 CFR 63.1353, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of 40 CFR 63.1353 for that notification.
- (b) Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9 as follows:
 - (1) Initial notifications as required by 40 CFR 63.9(b) through (d). For the purposes of 40 CFR 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 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under 40 CFR Part 70 of this chapter 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 CFR 63.7 and 63.9(e).
 - (3) Notification of opacity and visible emission observations required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 63.9(f).
 - (4) Notification, as required by 40 CFR 63.9(g), of the date that the continuous emission monitor performance evaluation required by 40 CFR 63.8(e) of this part is scheduled to begin.
- (5) Notification of compliance status, as required by 40 CFR 63.9(h). [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1353]

B.28. Reporting requirements.

- (a) The reporting provisions of 40 CFR 63, Subpart A, are contained in <u>Appendix 40 CFR 63</u>, <u>Subpart A</u>, and are applicable. If any State requires a report that contains all of the information required in a report listed in 40 CFR 63.1354, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of 40 CFR 63.1354 for that report.
- (b) The owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of 40 CFR Part 63, Subpart A, as follows:
 - (1) As required by 40 CFR 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 CFR 63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by 40 CFR 63.1349.
 - (3) As required by 40 CFR 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 CFR 63.6(i) shall submit such reports by the dates specified in the written extension of compliance.

- (4) As required by 40 CFR 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 CFR 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 CFR 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 CFR 63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.
- (7) As required by 40 CFR 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 CFR 63.7 and described in 40 CFR 63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under 40 CFR 63.8(e).
- (8) As required by 40 CFR 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 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:
 - (i) All exceedances of maximum control device inlet gas temperature limits specified in 40 CFR 63.1344(a) and (b);
 - (ii) All failures to calibrate thermocouples and other temperature sensors as required under 40 CFR 63.1350(f)(7) of 40 CFR 63, Subpart LLL; and
 - (iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under 40 CFR 63.1344(c).
 - (iv) The results of any combustion system component inspections conducted within the reporting period as required under 40 CFR 63.1350(i).
 - (v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 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.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1354(a) and (b)(1) through (10)]

B.29. Recordkeeping Requirements.

- (a) The owner or operator shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 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.
- (b) The owner or operator shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3); and
 - (1) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 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 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.

[Rules 62-204.800 and 62-213.440, F.A.C.; and, 40 CFR 63.1355(a) and (b)]

B.30. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.

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- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

Miscellaneous

B.31. Delegation of Authority.

- (a) In delegating implementation and enforcement authority to a State under Subpart E of 40 CFR Part 63, the authorities contained in paragraph 40 CFR 63.1358(b) shall be retained by the Administrator and not transferred to a State.
- (b) Authority which will not be delegated to States:
 - (1) Approval of alternative non-opacity emission standards under 40 CFR 63.6(g).
 - (2) Approval of alternative opacity standards under 40 CFR 63.6(h)(9).
 - (3) Approval of major changes to test methods under 40 CFR 63.7(e)(2)(ii) and 63.7(f). A major change to a test method is a modification to a federally enforceable test method that uses unproven technology or procedures or is an entirely new method (sometimes necessary when the required test method is unsuitable).
 - (4) Approval of major changes to monitoring under 40 CFR 63.8(f). A major change to monitoring is a modification to federally enforceable monitoring that uses unproven technology or procedures, is an entirely new method (sometimes necessary when the required monitoring is unsuitable), or is a change in the averaging period.
- (5) Waiver of recordkeeping under 40 CFR 63.10(f) [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1358(a) and (b)]

Subsection C. This section addresses the following emissions units.

E.U. ID No./Facility ID No.	Brief Description
-003	Coal Handling
-008	Clinker Handling and Storage for Kiln No. 2
-009	Clinker Handling and Storage for Kiln No. 3
-010	Finish Mill No. 1
-011	Finish Mill No. 2
-012	Finish Mill No. 3
-013	Finish Mill No. 4
-014	Cement Storage Silos. 1 through 12
-015	Cement Distribution Rail Truck Load
-016	Cement Distribution Packhouse
-020	Slag Dryer
-021	Insufflation
-022	Concrete Block Plant
-023	Ready Mix Plant

Coal Handling:

This emissions unit consists of the Coal Handling System for the unloading and processing of coal. Coal is bottom dumped from rail cars from an elevated trestle onto a storage pile. The coal is reclaimed from the storage pile by a front-end loader. The coal is then placed into a dump hopper, onto a conveyor belt, sent though a screening tower, and conveyed into the coal mill feed bin. The dump hopper, screening tower and coal feed bin each have a baghouse for PM control. From the feed bin, the coal is transferred directly into two coal mills for grinding, drying and pneumatic conveying to the kilns. The Kiln No. 2 coal mill is of 15 TPH capacity. The Kiln No. 3 coal mill is of 23 TPH capacity. Coal from the Kiln No. 2 coal mill is transferred directly to Kiln No. 2. Coal from the Kiln No. 3 coal mill is transferred to a coal bin and then to Kiln No. 3. The coal bin has a baghouse for PM control.

The Coal Handling System consists of the following sources:

Source	Baghouse ID	Manufacturer	Model No.
Coal Storage Pile	N/A	N/A	N/A
Undercar Rail	N/A	N/A	N/A
Unloading			
Front End Loader	N/A	N/A	N/A
Transfer			
Dump Hopper	G-509	Mikropul	64S-10-20TR
Screening Tower	G-521	Mikropul	81S-10-20TR
Coal Mill Feed Bin	G-527	Mikropul	64S-10-20TR
K3 Coal Bin	G-576 /578/580/582	Mikropul	221-10-100TR

{Permitting note: The emission units are regulated under Prevention of Significant Deterioration (PSD) PSD-FL-50, PSD -FL-142, 40 CFR 60, Subpart Y, NSPS for Coal Preparation Plants}

Clinker Handling and Storage for Kiln No. 2 and No. 3

The baghouses for the clinker handling and storage system for these emission units have the following design specifications:

Source	Baghouse	Manufacturer	Model No.	Flow	Cloth	Air to
	ID			Rate	Area	Cloth
				(acfm)	(ft ²)	Ratio
Handling Line 1	K-247	Norblo	120 AMST	3,000	1,650	1.8
Handling Line 2	K-147	Norblo	120 AMST	3,000	1,650	1.8
Handling Line 3	K-347	Norblo	11-BE-88	5,000	1,100	4.5
Handling Line 3	K-447	Norblo	11-BE-88	5,000	500	10.0
Clinker Silo 4, 18	K-521	Norblo	HE-2-6	1,500	500	3.0
Clinker Silo	K-522	Norblo	HE-2-6	1,500	1,100	1.4
11,19,20						
Clinker Silo 21-23,	K-633	Norblo	HE-66	1,500	1,040	1.4
26-28						

{Permitting note: The emission units are regulated under Prevention of Significant Deterioration (PSD) PSD-FL-236 dated July 1, 1998, 40 CFR 52.21; 40 CFR 60, Subpart F, NSPS for Portland Cement Plants}

Finish Mills No. 1, No. 2, No. 3 and No. 4

These emissions units consist of the following: finish mills, air particulate separators, cement pumps, dust collectors and associated material handling equipment. The Particulate Matter emissions are controlled by associated baghouses for each finish mill. Design specifications are shown in the following table.

Finish	Baghouse	Manufacturer	Model No.	Flow	Cloth Area	Air to
Mill	ID			Rate	(ft^2)	Cloth Ratio
				(acfm)		
No. 1	F-130	Norblo	468 AMT	12,000	1,977	6.1
No. 1	F-113	Mikropul	16FF-10-20	11,800	2,100	5.6
No. 2	F-230	Norblo	468-AMT	12,000	6,450	1.9
No. 2	F-213	Mikropul	16FF-10-20	11,800	2,100	5.6
No. 3	F-330	Norblo	702 AMT	20,000	9,477	2.1
No. 3	F-332	Norblo	390 AMT	13,500	5,465	2.5
No. 3	F-313	Mikropul	196S-10-20	8,000	2,300	3.5
No. 4	F-432	Fuller	5 zone #48	17,000	2,510	6.8
No. 4	F-605	Mikropul	645-10-30	4,000	753	5.3
No. 4	F-603	Mikropul	121S-10-20	8,000	1,424	5.6
No. 4	F-430	Fuller	6 zone #96	30,000	6,028	5.0
No. 4	F-604	Mikropul	121S-10-20	8,000	1,424	5.6

{Permitting note: Finish Mill No. 4 is subject to the following: 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality; 40 CFR 60, Subpart F, Standards of Performance for Portland Cement Plants}.

Cement Silos Storage/Bulk Loadout/Packhouse

The Particulate Matter emissions from cement silo storage/bulk loadout/ packhouse are controlled by baghouses with the following design specification:

Source	Baghouse	Manufacturer	Model No.	Flow	Cloth	Air to
	ID			Rate ·	Area	Cloth
				(acfm)	(ft^2)	Ratio
Cement Silos 1-6	F-511	Fuller	2 zone #78	18,000	1,625	11.1
Cement Silos 7-9	F-512	Norblo	156 AMT	10,000	2,142	4.7
Cement Silo 10	F-513	Mikropul	121S-10-20B	5,000	1,424	3.5
Cement Silo 11	F-514	Mikropul	121S-10-20B	5,000	1,424	3.5
Cement Silo 12	F-515	Mikropul	121S-10-20B	5,000	1,424	3.5
Bulk Loadout Unit 1	B-110	Norblo	120 AMT	3,000	1,650	1.8
(Rail/Truck)						
Bulk Loadout Unit 2	B-210	Norblo	120 AMT	3,000	1,650	1.8
(Truck)						
Bulk Loadout Unit 3	B-372	Mikropul	36S-8-30-C	2,000	340	5.9
Line 1						
Bulk Loadout Unit 3	B-374	Mikropul	36S-8-30-C	2,000	340	5.9
Line 2						
Bulk Loadout Unit 3	B-382	Mikropul	121S-10-20B	5,000	1,424	3.5
Airside						
Packhouse	B-621	Fuller	2 zone #78	12,000	1,632	7.4

{Permitting note: Cement Silo 7-9 and Bulk Cement Loadout Units 1 and 2 are subject to the following: 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality; 40 CFR 60, Subpart F, Standards of Performance for Portland Cement Plant.}

Slag Dryer

The major components of the slag dryer processing operation are a 125 TPH dryer with a baghouse, and a dry slag conveyor with baghouse. The slag processing operation will use the portland cement plant's existing Clinker Silos Nos. 21, 22, 23, 26, 27 and 28 for storage, Cement Silos Nos. 7, 8, and 9 for the ground slag cement storage, No. 4 Finish Mill, and Bulk Cement Loadout Units Nos. 1 and 2.

The Slag Dryer's air emissions are controlled by a baghouse: Manufacturer Flex-Kleen, Model 84UDLM288M216XLA, design air flow rate: 22,000 acfm, design exit temperature: 450 °F maximum, cloth area: 3,391 ft², air to cloth ratio: 6.5, cloth type: 4 oz. Nomex felt, cleaning method: Pulse Jet

{Permitting note(s): The emission unit is regulated under 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality, and 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry}

Insufflation Systems:

Kiln System 2 contains a dust insufflation system, which can return captured particulate to the kiln firing hood. The dust handling equipment for the insufflation system includes a surge bin and a dust bin controlled by baghouse (K-181) emitting particulate 103 feet Above Ground Level (A.G.L.).

Kiln System 3 contains a dust insufflation system which can return captured particulate to the kiln firing hood. The dust handling equipment for the insufflation system includes a scoop bin and a dust bin for the kiln precipitator controlled by baghouses (K-383 and K-396 respectively) emitting particulate 100 feet A.G.L. The baghouses have the following design specifications:

Source	Baghouse ID	Manufacturer	Model No.	Flow Rate (acfm)	Cloth Area (ft²)	Air to Cloth Ratio
Kiln No. 2 Waste Bin	K-181	Mikropul	168-F8- 20H	3,000	2,375	1.3
Scoop Bin	K-383	Norblo	11-BE-88	5,000	1,100	4.5
Kiln No. 3 Waste Bin	K-396	Norblo	HE-6-6	5,000	1,035	4.8

{Permitting note(s): The emission unit is regulated under 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality}

Concrete block plants:

- a. Plant # 1: Concrete block plant with a design capacity of 2,000 blocks per hour or approximately 35 tons per hour of concrete- emissions from the cement storage silo and cement weigh hopper controlled by separate baghouses.
- b. Plant # 2: Concrete block plant with a design capacity of 1,000 blocks per hour or approximately 17.5 tons per hour of concrete emissions from the cement storage silo and cement weigh hopper controlled by separate baghouses.

The baghouses have the following design specifications:

Source	Manufacturer	Model No.	Flow Rate (acfm)	Cloth Area (ft²)	Air to Cloth Ratio
Cement Silo Unit #1	Merts	250 SF	1,250	250	5.0
Weigh Hopper Unit #1	Merts	156 SF	780	156	5.0
Cement Silo Unit #2	Griffin Environmental	36-J	920	125	7.4
Weigh Hopper Unit #2	Griffin Environmental	18-VD	200	18	11.1

Ready Mix Plant:

This emission unit consists of a 130 cubic yard/hour ready mix concrete batch plant (243.75 ton/yr). The facility has three cement storage silos with emissions controlled by dust collectors. The weigh hopper's emissions are controlled by a separate dust collector. The baghouses have the following design specifications:

Source	Manufacturer	Model No.	Flow Rate	Cloth Area	Air to Cloth
			(acfm)	(ft^2)	Ratio
Cement/Flyash	Griffin	JA-80-SA	3,000	720	4.2
Silo #1	Environmental				
Cement/Flyash	MTW	SV-170	650	170	3.8
Silo #2					
Cement/Flyash	MTW	SV-170	650	170	3.8
Silo #3					
Weigh Hopper	MTW	BFV-15	90	15	6.0

Standards of Performance for Portland Cement Plants, adopted in Rule 62-204.800, F.A.C.

General

- C.0. The following Specific Conditions are in effect until midnight of June 9, 2002.
- C.1. Attachment "40 CFR 60, Subpart A" is incorporated by reference.

Essential Potential to Emit (PTE) Parameters

C.2. <u>Permitted Capacity.</u> The maximum process/transfer/throughput rates are:

<u>Permitted Capacity for Coal Handling System:</u> The maximum hourly rate is 38 tons/hr of coal throughput.

[AC13-27742 dated May 28, 1980; and PSD-FL-050 dated July 8, 1980]

Permitted Capacity for the Clinker Handling System for Kiln No. 2 and No.3 and the slag dryer transfer. The maximum throughput rates are shown in the following table:

Source Description	Throughput Ma (TPH) (TPY)	ximum	
Clinker Handling System Kiln No. 2	25	219,000	Limited by Cooler No.2
Clinker Handling System Kiln No. 3	87.5	766,500	Limited by Cooler No. 3
Slag Dryer Transfer	125	300,000	Limited by Slag Dryer
Total	262.5	1,504,500*	

Note:

<u>Permitted Capacity for Finish Mill No. 1, No. 2, No. 3 and No. 4:</u> The maximum process rate of cement is 258.5 TPH. Refer to individual capacities shown in the following table.

Finish Mill	Baghouse	Maximum Process Rate
		(TPH)
No. 1	F-130/F-113	25
No. 2	F-230/F-213	25
No. 3	F-313/F-330/F-332	83.5
No. 4	F-430/F-432/F-603/F-604/F-605	125
Total		258.5

^{*} reflects transfer of clinker and/or slag, not cement.

Permitted Capacity for Cement Silo Storage/Loadout/Packhouse

Permitted Capacity for Cement Storage Silos No. 1 through 12:

The maximum process input rate to each cement silo is 500 tons per hour. Particulate Matter emissions from silo filling and distribution are controlled by individual baghouses each emitting a total of 7.9 tons per year.

Permitted Capacity for Cement Distribution Rail Truck Loadouts:

The maximum process input rate to the rail loadout and two truck loadout operations is a total of 500 tons per hour. Particulate Matter emissions are controlled by individual baghouses.

Permitted Capacity for the Cement Distribution Packhouse:

The maximum production rate of the Packhouse is 85 tons per hour of cement. Particulate Matter emissions are controlled by individual baghouses.

[AC 13-21098 dated November 2, 1979]

Permitted Capacity for the Slag Dryer:

The maximum wet blast furnace slag input rate to the dryer shall not exceed 125 TPH. The facility shall not exceed more than 300,000 tons of blast furnace slag during any calendar year. [02500020-001-AC, PSD-FL-236]

Only natural gas and low sulfur No. 2 fuel oil shall be burned in the blast furnace slag drier. The sulfur content of the fuel shall not exceed 0.2 percent by weight. The maximum heat input to the dryer shall not exceed 57.5 MMBtu/hr (approximately 410.6 gal/hr of oil or 57,000 cubic feet/hour of gas). The maximum fuel consumption shall not exceed 1,281,000 gal/yr of oil or 178 MM cubic feet/year of gas.

Permitted Capacity for Insufflation System:

The maximum throughout rate is 50 TPH of Cement Kiln Dust into the system. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Permitted Capacity for Concrete Block Plants.

The maximum hourly production for:

- a. Plant #1 is 35 tons per hour and
- b. Plant #2 is 17.5 tons per hour.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Permitted Capacity for Ready Mix Plant:

The maximum hourly production of concrete is 243.75 tons per hour for the ready mix plant. [AC 13-158138 dated February 28, 1990]

C.3. Hours of Operation.

	Hours of Operation	Permit/Rule Applicability
Coal Handling	8,760	Rules 62-4.160(2) and 62-
_		210.200(PTE), F.A.C.
Clinker Handling and Storage for	8,760	Rules 62-4.160(2) and 62-
Kiln No. 2		210.200(PTE), F.A.C.
Clinker Handling and Storage for	8,760	PSD-FL-142 & AC 13-169901
Kiln No. 3		·
Finish Mill No.1, 2, 3, and 4	8,760	Rules 62-4.160(2) and 62-
		210.200(PTE), F.A.C.
Cement Storage Silos 1 through	8,760	Rules 62-4.160(2) and 62-
12		210.200(PTE), F.A.C.
Cement Distribution Rail Truck	8,760	Rules 62-4.160(2) and 62-
Load		210.200(PTE), F.A.C.
Cement Distribution Packhouse	8,760	Rules 62-4.160(2) and 62-
		210.200(PTE), F.A.C.
Slag Dryer	3,120	0250020-001-AC, PSD-FL 236
Insufflation	8,760	Rules 62-4.160(2) and 62-
		210.200(PTE), F.A.C.
Concrete Block Plant	4,992	Rules 62-4.160(2) and 62-
		210.200(PTE), F.A.C.
Ready Mix Plant	8,760	Rules 62-4.160(2) and 62-
-		210.200(PTE), F.A.C.

C.4. Emissions Unit Operating Rate Limitation During Testing. See Specific Condition **C.12**. [Rule 62-297.310(2), F.A.C.]

Emission Limitations

C.5. Particulate Matter. The maximum allowable Particulate Matter emissions are:

Coal Handling System consisting of the following:

Source	Baghouse	Grain Loading	Flow Rate	Potential	PM
	ID	(gr/acf)	ACFM	Emission (lb/hr)	s (TPY)
Dump Hopper	G-509	0.01	4,000	0.3	1.4
Screening Tower	G-521	0.01	6,000	0.5	2.0
Coal Mill Feed Bin	G-527	0.01	4,000	0.3	1.4
K3 Coal Bin*	G-576/578/ 580/582	0.01	36,000	2.8	12.3
Total				3.9	17.1

Note:

Emissions of Particulate Matter from each of the baghouses on the coal handling system (G-509, G-521, G-576, G-578, G-580, and G-582) shall not exceed 0.01 grains per actual cubic foot (gr/ACF). [AC13-27742 dated May 28, 1980; and PSD-FL-050 BACT dated April 8, 1980]

Slag Dryer

Emissions of Particulate Matter (total PM and PM10) from the baghouse serving the slag dryer shall not exceed any of the following: 0.02 gr/dscf, 4.8 lbs/hr, 7.44 TPY. This standard may be modified if compliance tests show that the baghouse has an air to cloth ratio of 4.5:1 or larger and the filtering area is unable to meet a standard of 0.02 gr/dscf. [0250020-001-AC, PSD-FL-236]

^{*}System includes a cyclone used for coal transfer to the pulverizer

Clinker Handling System:

Particulate Matter emissions shall not exceed the amounts shown in the following table:

Emission Unit	Baghouse ID.	PM/PM10 Emission Limit	PM/PM10	Emissions (total)
			lb/hr	(TPY)
Clinker Handling System	K-147, K,-247, K-347, K-447, K-521, K-522 and K-633	0.01	1.76	7.7

Finish Mill No. 1, No. 2, No. 3 and No. 4:

Particulate Matter emissions from Finish Mill No. 1, No. 2 and No. 3 shall not exceed that allowed by the process weight table.

[Rule 62-296.310(2)(a)]

Finish Mill	Allowable Emission	by Process Weight		
	(lb/hr)(a) (TPY)			
No. 1	26.4	115.7		
No. 2	26.4	115.7		
No. 3	35.1	153.9		

Notes:

(a) The process weight standards formulas applied are as follow:

For Finish Mills 1, 2 (TPH < 30) lb/hr= 3.59 x Process Rate (TPH) $^0.62 \text{ For Finish Mills 3 (TPH > 30)}$ lb/hr = 17.31 x Process Rate (TPH) $^0.16 \text{ m}$

Particulate Matter emissions (total PM and PM10) from Finish Mill No. 4 shall not exceed any of the following limits listed on table below:

Finish Mill No. 4	Baghouse	Maximum	PM/PM10	PM/PM10	Emissions
	ID	Process Rate	Emission		
			Limit		
				(lb/hr)	
				(TPY)	
Ball Mill/Mill sweep	F-430	125	0.01 gr/acf	2.57	11.26
Belt conveyor/ separator/	F-432	125	0.01 gr/acf	1.46	6.38
cement					
Clinker/gypsum conveyors	F-603	125	0.01 gr/acf	0.69	3.0
Clinker/gypsum conveyors	F-604	125	0.01 gr/acf	0.69	3.0
Clinker/gypsum conveyors	F-605	125	0.01 gr/acf	0.34	1.50

[PSD-FL-236 dated July 1, 1998]

Note:

Emissions are based on 0.01 gr/acf; lb/hr; limits by permit PSD-FL-236 dated July 1, 1998]

)

Cement Silo Storage/ Bulk loadout/ Packhouse:

Particulate Matter emissions (total PM and PM10) from the Cement Storage, Packhouse and Loadout shall not exceed the following:

Source	Baghouse ID	Grain Loading (gr/acf)	PM/PM10 Emissions	
			(lb/hr)	(TPY)
Cement Silos 1-6	F-511	0.01	1.54	6.76
Cement Silos 7-9	F-512	0.01	0.86	3.75
Cement Silo 10	F-513	0.01	0.43	1.88
Cement Silo 11	F-514	0.01	0.43	1.88
Cement Silo 12	F-515	0.01	0.43	1.88
Bulk Loadout Unit 1	B-110	0.01	0.26	1.13
Bulk Loadout Unit 2	B-210	0.01	0.26	1.13
Bulk Loadout Unit 3 Line 1	B-372	0.01	0.17	0.75
Bulk Loadout Unit 3 Line 2	B-374	0.01	0.17	0.75
Bulk Loadout Unit 3 Airside	B-382	0.01	0.43	1.88
Packhouse (a)	B-621	0.01	1.19	5.20
Total			6.2	27.0

Note: (a) Emissions reflect permit limits established in PSD-FL-028 dated March 19, 1980 [PSD-FL-028 dated March 19, 1980]

C.6. Visible Emissions.

	Baghouse Id. No.	Visible Emissions	Permit/Rule Applicability
Coal Handling	G-509	5%	PSD-FL-050
Coal Handling	G-521	5%	PSD-FL-050
Coal Handling	G-527	5%	PSD-FL-050
Coal Handling	G-576/578/ 580/582	5%	PSD-FL-050
Clinker Handling	K-247	20%	Rule 62-296.320(4)(b)
Line 1		`	
Clinker Handling Line 2	K-147	20%	Rule 62-296.320(4)(b)
Clinker Handling	K-347	10%	PSD-FL-236
Line 3 Clinker Handling Line 3	K-447	10%	PSD-FL-236
Clinker Silo 4 and 18	K-521	20%	Rule 62-296.320(4)(b)
	K-521 K-522	20%	
Clinker Silo 11,19,20			Rule 62-296.320(4)(b) PSD-FL-236
Clinker Silo 21-23, 26-28	K-633	5%	PSD-FL-236
Finish Mill No. 1	F-130/F-113	20%	Rule 62-296.320(4)(b)
Finish Mill No. 2	F-230/F-213	20%	Rule 62-296.320(4)(b)
Finish Mill No. 3	F-313/F-330/F- 332	20%	Rule 62-296.320(4)(b)
Finish Mill No. 4	F-430/F-432/F- 603/ F-604/F-605	5%	PSD-FL-236
Cement Silos 1-6	F-511	20%	Rule 62-296.320(4)(b)
Cement Silos 7-9	F-512	5%	PSD-FL-236
Cement Silos 10,11,	F-513/F-514/F- 515	5%	AC13-21098
Bulk Loadout Unit 1	B-110	10%	PSD-FL-236
Bulk Loadout Unit 2	B-210	10%	PSD-FL-236
Bulk Loadout Unit 3 Line 1	B-372	5%	AC13-21098
Bulk Loadout Unit 3 Line 2	B-374	5%	AC13-21098
Bulk Loadout Unit 3 Airside	B-382	5%	AC13-21098
Packhouse	B-621	5%	PSD-FL-028

Insufflation	K-181/K-383/K- 396	20%	Rule 62-296.320(4)(b)
Slag Dryer	Slag Dryer Baghouse	10%	PSD-FL-236
Concrete Block Plant	4 Baghouses	5%	Rule 62-296.414
Concrete Ready Mix	4 Baghouse	5%	Rule 62-296.414

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS, NESHAP, or Acid Rain program provision.}

- C.7. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **C.8.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

- C.9. <u>Particulate Matter</u>. Particulate Matter emissions compliance testing shall be demonstrated <u>annually</u> for the following emissions unit, using EPA Method 5 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C.
- (1) Slag Dryer [Rules 62-204.800 and 62-297.401, F.A.C.]
- C.10. <u>Visible Emissions</u>. Visible emissions compliance testing shall be demonstrated <u>annually</u> using EPA Method 9 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C. See Specific Conditions C.12. C.14.and C.16.

[Rules 62-204.800 and 62-297.401, F.A.C.; and, 40 CFR 60..64(b)(4)]

C.11. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test

runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

C.12. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

C.13. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

C.14. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of Particulate Matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of Particulate Matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
- (a) The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached).

- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- C.15. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit. [Rule 62-297.310(6), F.A.C.]
- **C.16.** Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
 - 1. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate.
 - 2. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; or, 100 tons per year or more of any other regulated air pollutant; and,
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
 - 3. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for Particulate Matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the

alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.]

Monitoring of Operations

C.17. Determination of Process Variables.

- (a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

Recordkeeping and Reporting Requirements

- **C.18.** The permittee shall maintain a daily log of the actual hours of dryer operation, quantity of slag processed, and fuel consumed by the slag dryer.

 [PSD-FL-236]
- **C.19.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

C.20. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.

- 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
- 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

Subsection D. This section addresses the following emissions units.

E.U. ID No./Facility ID No.	Brief Description
-003	Coal Handling
-008	Clinker Handling and Storage for Kiln No. 2
-009	Clinker Handling and Storage for Kiln No. 3
-010	Finish Mill No. 1
-011	Finish Mill No. 2
-012	Finish Mill No. 3
-013	Finish Mill No. 4
-014	Cement Storage Silos. 1 through 12
-015	Cement Distribution Rail Truck Load
-016	Cement Distribution Packhouse
-018	Feed Bin and Elevator for 23 TPH Coal Handling
-019	Hopper and Weight feeder for 23 TPH Coal Handling
-020	Slag Dryer
-021	Insufflation
-022	Concrete Block Plant
-023	Ready Mix Plant

Coal Handling:

This emissions unit consists of the Coal Handling System for the unloading and processing of coal. Coal is bottom dumped from rail cars from an elevated trestle onto a storage pile. The coal is reclaimed from the storage pile by a front-end loader. The coal is then placed into a dump hopper, onto a conveyor belt, sent though a screening tower, and conveyed into the coal mill feed bin. The dump hopper, screening tower and coal feed bin each have a baghouse for PM control. From the feed bin, the coal is transferred directly into two coal mills for grinding, drying and pneumatic conveying to the kilns. The Kiln No. 2 coal mill is of 15 TPH capacity. The Kiln No. 3 coal mill is of 23 TPH capacity. Coal from the Kiln No. 2 coal mill is transferred directly to Kiln No. 2. Coal from the Kiln No. 3 coal mill is transferred to a coal bin and then to Kiln No. 3. The coal bin has a baghouse for PM control.

The Coal Handling System consists of the following sources:

Source	Baghouse ID	Manufacturer	Model No.
Coal Storage Pile	N/A	N/A	N/A
Undercar Rail	N/A	N/A	N/A
Unloading			
Front End Loader	N/A	N/A	N/A
Transfer			
Dump Hopper	G-509	Mikropul	64S-10-20TR
Screening Tower	G-521	Mikropul	81S-10-20TR
Coal Mill Feed Bin	G-527	Mikropul	64S-10-20TR
K3 Coal Bin	G-576	Mikropul	221-10-100TR
	/578/580/582		

{Permitting note: The emission units are regulated under Prevention of Significant Deterioration (PSD) PSD-FL-50, PSD -FL-142, 40 CFR 60, Subpart Y, NSPS for Coal Preparation Plants}

Clinker Handling and Storage for No. 2 and No. 3

The baghouses for the clinker handling and storage system for this emissions unit have the following design specifications:

Source	Baghouse	Manufacturer	Model No.	Flow Rate	Cloth Area	Air to
	ID			(acfm)	(ft^2)	Cloth Ratio
Handling	K-247	Norblo	120 AMST	3,000	1,650	1.8
Line 1						
Handling	K-147	Norblo	120 AMST	3,000	1,650	1.8
Line 2						
Handling	K-347	Norblo	11-BE-88	5,000	1,100	4.5
Line 3						
Handling	K-447	Norblo	11-BE-88	5,000	500	10.0
Line 3						
Clinker	K-521	Norblo	HE-2-6	1,500	500	3.0
Silo 4, 18						
Clinker	K-522	Norblo	HE-2-6	1,500	1,100	1.4
Silo						
11,19,20						
Clinker	K-633	Norblo	HE-66	1,500	1,040	1.4
Silo 21-						
23, 26-28						

{Permitting note: The emission units are regulated under Prevention of Significant Deterioration (PSD) PSD-FL-236 dated July 1, 1998, 40 CFR 52.21; and 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry.}

Finish Mills No. 1, No. 2, No. 3 and No. 4

These emissions units consist of the following: finish mills, air particulate separators, cement pumps, dust collectors and associated material handling equipment. The Particulate Matter emissions are controlled by associated baghouses for each finish mill. Design specifications are shown in the following table.

Finish	Baghouse	Manufacturer	Model No.	Flow	Cloth Area	Air to
Mill	ID			Rate	(ft ²)	Cloth Ratio
				(acfm)		
No. 1	F-130	Norblo	468 AMT	12,000	1,977	6.1
No. 1	F-113	Mikropul	16FF-10-20	11,800	2,100	5.6
No. 2	F-230	Norblo	468-AMT	12,000	6,450	1.9
No. 2	F-213	Mikropul	16FF-10-20	11,800	2,100	5.6
No. 3	F-330	Norblo	702 AMT	20,000	9,477	2.1
No. 3	F-332	Norblo	390 AMT	13,500	5,465	2.5
No. 3	F-313	Mikropul	196S-10-20	8,000	2,300	3.5
No. 4	F-432	Fuller	5 zone #48	17,000	2,510	6.8
No. 4	F-605	Mikropul	645-10-30	4,000	753	5.3
No. 4	F-603	Mikropul	121S-10-20	8,000	1,424	5.6
No. 4	F-430	Fuller	6 zone #96	30,000	6,028	5.0
No. 4	F-604	Mikropul	121S-10-20	8,000	1,424	5.6

{Permitting note: Finish Mill No. 4 is subject to the following: 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality; and 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry}.

Cement Silo Storage/Bulk loadout/ Packhouse:

The Particulate Matter emissions from cement storage/ bulk loadout/ packhouse are controlled by baghouses with the following design specifications:

Source	Baghouse	Manufacturer	Model No.	Flow	Cloth	Air to
	ID			Rate	Area	Cloth
				(acfm)	(ft^2)	Ratio
Cement Silos 1-6	F-511	Fuller	2 zone #78	18,000	1,625	11.1
Cement Silos 7-9	F-512	Norblo	156 AMT	10,000	2,142	4.7
Cement Silo 10	F-513	Mikropul	121S-10-20B	5,000	1,424	3.5
Cement Silo 11	F-514	Mikropul	121S-10-20B	5,000	1,424	3.5
Cement Silo 12	F-515	Mikropul	121S-10-20B	5,000	1,424	3.5
Bulk Loadout Unit 1	B-110	Norblo	120 AMT	3,000	1,650	1.8
(Rail/Truck)						
Bulk Loadout Unit 2	B-210	Norblo	120 AMT	3,000	1,650	1.8
(Truck)						
Bulk Loadout Unit 3	B-372	Mikropul	36S-8-30-C	2,000	340	5.9
Line 1						
Bulk Loadout Unit 3	B-374	Mikropul	36S-8-30-C	2,000	340	5.9
Line 2						
Bulk Loadout Unit 3	B-382	Mikropul	121S-10-20B	5,000	1,424	3.5
Airside						
Packhouse	B-621	Fuller	2 zone #78	12,000	1,632	7.4

{Permitting note: Cement Silo 7-9 and Bulk Cement Loadout Units 1 and 2 are subject to the following: 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality; and 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry.}

Slag Dryer

The major components of the slag dryer processing operation area 125 TPH dryer with a baghouse, and a dry slag conveyor with baghouse. The slag processing operation will use the portland cement plant's existing Clinker Silos Nos. 21, 22, 23, 26, 27 and 28 for storage, Cement Silos Nos. 7, 8, and 9 for the ground slag cement storage, No. 4 Finish Mill, and Bulk Cement Loadout Units Nos. 1 and 2.

The Slag Dryers air emissions are controlled by a baghouse: manufacturer Flex-Kleen, Model 84UDLM288M216XLA, design air flow rate: 22,000 acfm, design exit temperature: 450 °F maximum, cloth area: 3,391 ft² air to cloth ratio: 6.5, cloth type: 4 oz. Nomex felt, cleaning method: Pulse Jet

{Permitting note(s): The emission unit is regulated under 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality, and 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry}

Insufflation Systems:

Kiln System 2 contains a dust insufflation system which can return captured particulate to the kiln firing hood. The dust handling equipment for the insufflation system includes a surge bin and a dust bin controlled by baghouse (K-181) emitting particulate 103 feet Above Ground Level (A.G.L).

Kiln System 3 contains a dust insufflation system which can return captured particulate to the kiln firing hood. The dust handling equipment for the insufflation system includes a scoop bin and a dust bin for the kiln precipitator controlled by baghouses (K-383 and K-396 respectively) emitting particulate 100 feet A.G.L. The baghouses have the following design specifications:

Source	Baghouse	Manufacturer	Model No.	Flow	Cloth Area	Air to
	ID			Rate	(ft^2)	Cloth Ratio
				(acfm)		
Kiln # 2	K-181	Mikropul	168-F8-20H	3,000	2,375	1.3
Waste Bin			_			
Scoop Bin	K-383	Norblo	11-BE-88	5,000	1,100	4.5
Kiln 3	K-396	Norblo	HE-6-6	5,000	1,035	4.8
Waste Bin						

{Permitting note(s): The emission unit is regulated under 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality; and 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry}

Concrete block plants:

- a. Plant # 1: Concrete block plant with a design capacity of 2,000 blocks per hour or approximately 35 tons per hour of concrete- emissions from the cement storage silo and cement weigh hopper controlled by separate baghouses.
- b. Plant # 2: Concrete block plant with a design capacity of 1,000 blocks per hour or approximately 17.5 tons per hour of concrete emissions from the cement storage silo and cement weigh hopper controlled by separate baghouses.

The baghouses have the following design specifications:

Source	Manufacturer	Model No.	Flow Rate (acfm)	Cloth Area (ft ²)	Air to Cloth Ratio
Cement Silo Unit #1	Merts	250 SF	1,250	250	5.0
Weigh Hopper Unit #1	Merts	156 SF	780	156	5.0
Cement Silo Unit #2	Griffin Environmental	36-J	920	125	7.4
Weigh Hopper Unit #2	Griffin Environmental	18-VD	200	18	11.1

Ready Mix Plant:

This emission unit consists of a 130 cubic yard/hour ready mix concrete batch plant (243.75 tons/yr). The facility has three cement storage silos with emissions controlled by dust collectors. The weigh hopper's emissions are controlled by a separate dust collector. The baghouses have the following design specifications:

Source	Manufacturer	Model No.	Flow Rate	Cloth Area	Air to Cloth
			(acfm)	(ft^2)	Ratio
Cement/Flyash	Griffin	JA-80-SA	3,000	720	4.2
Silo #1	Environmental				
Cement/Flyash	MTW	SV-170	650	170	3.8
Silo #2					
Cement/Flyash	MTW	SV-170	650	170	3.8
Silo #3					
Weigh Hopper	MTW	BFV-15	90	15	6.0

General

D.0. The following Specific Conditions are in effect beginning at 12:01 a.m. of June 10, 2002. [Rule 62-204.800, F.A.C.; and, 40 CFR 63, Subpart LLL.

D.1. Exemption From New Source Performance Standards. Except as provided in paragraphs 40 CFR 63.1356(a)(1) and (a)(2), any affected source subject to the provisions of 40 CFR 63, Subpart LLL is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart F. Specifically this facility is exempted from new source performance standard contained in 40 CFR 60, Subpart 60.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1356]

D.2. Attachment "40 CFR 63, Subpart A" is incorporated by reference.

Essential Potential to Emit (PTE) Parameters

D.3. Permitted Capacity. The maximum process/transfer/throughput rates are:

<u>Permitted Capacity for Coal Handling System.</u> The maximum hourly process rate is 38 tons/hr of coal throughput.

[AC13-27742 dated May 28, 1980; and PSD-FL-050 dated July 8, 1980]

<u>Permitted Capacity for the Clinker System.</u> The maximum throughput rates are shown in the following table:

Source Description	Throughput Maxim	num	
	(TPH)	(TPY)	
Clinker Handling	25	219,000	Limited by Cooler No.2
System- Kiln # 2			·
Clinker Handling	87.5	766,500	Limited by Cooler No. 3
System- Kiln # 3			
Slag Dryer Transfer	125	300,000	Limited by Slag Dryer
Total	262.5	1,504,500*	

Note:

<u>Permitted Capacity for Finish Mill No. 1, No. 2, No. 3 and No. 4.</u> The maximum process rate of cement is 258.5 TPH. Refer to individual capacities shown in the following table.

Finish Mill	Baghouse	Process Rate (TPH)
No. 1	F-130/F-113	25
No. 2	F-230/F-213	25
No. 3	F-313/F-330/F-332	83.5
No. 4	F-430/F-432/F-603/F-604/F-605	125
Total		258.5

PERMITTED CAPACITY FOR CEMENT SILO STORAGE/LOADOUT/ PACKHOUSE

Permitted Capacity for Cement Storage Silos No. 1 through 12.

The maximum process input rate to each cement silo is 500 tons per hour. Particulates from silo filling and distribution are controlled by individual baghouses each emitting a total of 7.9 tons per year.

The maximum process input rate to the rail loadout and two truck loadout operations is a total of 500 tons per hour. Particulates are controlled by individual baghouses.

^{*} reflects transfer of clinker and/or slag, not cement.

Permitted Capacity for the Cement Distribution Packhouse:

The maximum production rate of the Packhouse is 85 tons per hour of cement. Particulates controlled by individual baghouses.

[AC 13-21098 dated November 2, 1979]

Permitted Capacity for the Slag Dryer:

The maximum wet blast furnace slag input rate to the dryer shall not exceed 125 TPH. The facility shall not process more than 300,000 tons of blast furnace slag during any calendar year. [02500020-001-AC, PSD-FL-236]

Only natural gas and low sulfur No. 2 fuel oil shall be burned in the blast furnace slag dryer. The sulfur content of the fuel shall not exceed 0.2 percent. The maximum heat input to the dryer shall not exceed 57.5 MMBtu/hr (approximately 410.6 gal/hr of oil or 57,000 cubic feet/hour of gas). The maximum fuel consumption shall not exceed 1,281,000 gal/yr of oil or 178 MM cubic feet/year of gas.

Permitted Capacity for Insufflation System:

The maximum throughout rate is 50 TPH of Cement Kiln Dust into the system. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Permitted Capacity for Concrete Block Plants.

The maximum hourly production for:

- a. Plant # 1 is 35 tons per hour and
- b. Plant # 2 is 17.5 tons per hour.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Permitted Capacity for Ready Mix Plant:

The maximum hourly production of concrete is 243.75 tons per hour for the ready mix plant. [AC 13-158138 dated February 28, 1990]

D.4. Hours of Operation.

	Hours of Operation	Permit/Rule Applicability
Coal Handling	8,760	Rules 62-4.160(2) and 62-
		210.200(PTE), F.A.C.
Clinker Handling and	8,760	Rules 62-4.160(2) and 62-
Storage for Kiln No. 2		210.200(PTE), F.A.C.
Clinker Handling and	8,760	PSD-FL-142 & AC 13-169901
Storage for Kiln No. 3		
Finish Mill No.1, 2, 3, and 4	8,760	Rules 62-4.160(2) and 62-
		210.200(PTE), F.A.C.
Cement Storage Silos 1	8,760	Rules 62-4.160(2) and 62-
through 12		210.200(PTE), F.A.C.
Cement Distribution Rail	8,760	Rules 62-4.160(2) and 62-
Truck Load		210.200(PTE), F.A.C.
Cement Distribution	8,760	Rules 62-4.160(2) and 62-
Packhouse		210.200(PTE), F.A.C.
Slag Dryer	3,120	0250020-001-AC, PSD-FL 236
Insufflation	8,760	Rules 62-4.160(2) and 62-
		210.200(PTE), F.A.C.
Concrete Block Plant	4,992	Rules 62-4.160(2) and 62-
		210.200(PTE), F.A.C.
Ready Mix Plant	8,760	Rules 62-4.160(2) and 62-
		210.200(PTE), F.A.C.

D.5. Emissions Unit Operating Rate Limitation During Testing. See Specific Condition D.13. [Rule 62-297.310(2), F.A.C.]

Emission Limitations

D.6. Particulate Matter. The maximum allowable Particulate Matter emissions are:

Coal Handling System consisting of the following:

Source	Baghouse ID	Grain (gr/acf)	Loading	Flow Rate ACFM	Potential Emission	
				7 CT W	(lb/hr)	(TPY)
Dump Hopper	G-509	0.01	_	4,000	0.3	1.3
Screening Tower	G-521	0.01		6,000	0.5	2.2
Coal Mill Feed Bin	G-527	0.01		4,000	0.3	1.3
K3 Coal Bin*	G-576/578/ 580/582	0.01		36,000	2.8	12.3
Total					3.9	17.1

^{*}System includes a cyclone used for coal transfer to the pulverizer

Emissions of Particulate Matter from each of the baghouses on the coal handling system (G-509, G-521, G-576, G-578, G-580, and G-582) shall not exceed 0.01 grains per actual cubic foot (gr/ACF). [AC13-27742 dated May 28, 1980; and PSD-FL-050 BACT dated April 8, 1980]

Slag Dryer

Emissions of Particulate Matter (total PM and PM10) from the baghouse serving the slag dryer shall not exceed any of the following: 0.02 gr/dscf, 4.8 lbs/hr, 7.44 TPY. This standard may be modified if compliance tests show that the baghouse has an air to cloth ratio of 4.5:1 or larger and the filtering area is unable to meet a standard of 0.02 gr/dscf. [0250020-001-AC, PSD-FL-236]

Clinker Handling System:

Particulate Matter emissions shall not exceed the amounts shown in the following table:

Emission Unit	Baghouse Id.	PM/PM10 Emission Limit	PM/PM10 Emissions (total)	
			lb/hr	(TPY)
Clinker Handling System	K-147, K,-247, K-347, K-447, K-521, K-522 and K-	0.01	1.76	7.7
	633			

Finish Mill No. 1, No. 2, No. 3 and No. 4:

Particulate Matter from Finish Mill No. 1, No. 2 and No. 3 emissions shall not exceed that allowed by the process weight table.

[Rule 62-296.310(2)(a)]

Finish Mill	Allowable Emission by Process	Allowable Emission by Process Weight Table		
	(lb/hr) (a)	(TPY)		
No. 1	26.4	115.7		
No. 2	26.4	115.7		
No. 3	35.1	153.9		

Note:

(a) The process weight standards formulas applied are as follow: For Finish Mills 1, 2 (TPH < 30) lb/hr= 3.59 x Process Rate (TPH)^0.62 For Finish Mills 3 (TPH > 30) lb/hr = 17.31 x Process Rate (TPH)^0.16

Particulate Matter emissions (total PM and PM10) from Finish Mill No. 4 shall not exceed any of the following limits listed on table below:

Finish Mill No. 4	Baghouse ID	Maximum Process Rate	PM/PM10 Emission Limit	PM/PM10) Emissions
				(lb/hr)	(TPY)
Ball Mill/Mill sweep	F-430	125	0.01 gr/acf	2.57	11.26
Belt conveyor/ separator/ cement	F-432	125	0.01 gr/acf	1.46	6.38
Clinker/gypsum conveyors	F-603	125	0.01 gr/acf	0.69	3.0
Clinker/gypsum conveyors	F-604	125	0.01 gr/acf	0.69	3.0
Clinker/gypsum conveyors	F-605	125	0.01 gr/acf	0.34	1.50

[PSD-FL-236 dated July 1, 1998]

Note: Emissions are based on 0.01 gr/acf; lb/hr; limits by permit PSD-FL-236 dated July 1, 1998]

Cement Silo Storage/ Bulk loadout/ Packhouse:

Particulate Matter emissions (total PM and PM10) from the Cement Storage, Packhouse and Loadout shall not exceed the following:

Source	Baghouse ID	Grain Loading (gr/acf)	PM/PM10 Emiss	ions
			(lb/hr)	(TPY)
Cement Silos 1-6	F-511	0.01	1.54	6.76
Cement Silos 7-9	F-512	0.01	0.86	3.75
Cement Silo 10	F-513	0.01	0.43	1.88
Cement Silo 11	F-514	0.01	0.43	1.88
Cement Silo 12	F-515	0.01	0.43	1.88
Bulk Loadout Unit 1	B-110	0.01	0.26	1.13
Bulk Loadout Unit 2	B-210	0.01	0.26	1.13
Bulk Loadout Unit 3 Line 1	B-372	0.01	0.17	0.75
Bulk Loadout Unit 3 Line 2	B-374	0.01	0.17	0.75
Bulk Loadout Unit 3 Airside	B-382	0.01	0.43	1.88
Packhouse (a)	B-621	0.01	1.19	5.20
Total			6.2	27.0

Note: (a) Emissions reflect permit limits established in PSD-FL-028 dated March 19, 1980 [PSD-FL-028 dated March 19, 1980]

D.7. Visible Emissions.

,	Baghouse Id. No.	Visible	Permit/Rule Applicability
		Emissions	
Coal Handling	G-509	5%	PSD-FL-050
Coal Handling	G-521	5%	PSD-FL-050
Coal Handling	G-527	5%	PSD-FL-050
Coal Handling	G-576/578/	5%	PSD-FL-050
	580/582		
Handling Line 1	K-247	10%	40 CFR 63, Subpart LLL
Handling Line 2	K-147	10%	40 CFR 63, Subpart LLL
Clinker Handling	K-347	10%	PSD-FL-236
Line 3			
Clinker Handling	K-447	10%	PSD-FL-236
Line 3			
Clinker Silo 4 and 18	K-521	10%	40 CFR 63, Subpart LLL
Clinker Silo 11,19,20	K-522	10%	40 CFR 63, Subpart LLL
Clinker Silo 21-23, 26-28	K-633	5%	PSD-FL-236
Finish Mill No. 1	F-130/F-113	10%	40 CFR 63, Subpart LLL
Finish Mill No. 2	F-230/F-213	10%	40 CFR 63, Subpart LLL
Finish Mill No. 3	F-313/F-330/F- 332	10%	40 CFR 63, Subpart LLL
Finish Mill No. 4	F-430/F-432/F- 603/ F-604/F-605	5%	PSD-FL-236
Cement Silos 1-6	F-511	10%	40 CFR 63, Subpart LLL
Cement Silos 7-9	F-512	5%	PSD-FL-236
Cement Silos 10,11, 12	F-513/F-514/F- 515	5%	AC13-21098
Bulk Loadout Unit 1	B-110	10%	PSD-FL-236
Bulk Loadout Unit 2	B-210	10%	PSD-FL-236
Bulk Loadout Unit 3 Line 1	B-372	5%	AC13-21098
Bulk Loadout Unit 3 Line 2	B-374	5%	AC13-21098
Bulk Loadout Unit 3 Airside	B-382	5%	AC13-21098
Packhouse	B-621	5%	PSD-FL- 028
Insufflation	K-181/K-383/K- 396	20%	Rule 62-296.320(4)(b)

Slag Dryer	Slag Dryer Baghouse	10%	PSD-FL-236
Concrete Block Plant	4 Baghouses	5%	Rule 62-296.414
Concrete Ready Mix	4 Baghouse	5%	Rule 62-296.414

Excess Emissions

- **D.8.** Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **D.9.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

- **D.10.** Particulate Matter. Particulate Matter emissions compliance testing shall be demonstrated annually for the following emissions unit, using EPA Method 5 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C.
- (1) Slag Dryer [Rules 62-204.800, 62-297.401, F.A.C.]
- **D.11.** <u>Visible Emissions</u>. Visible emissions compliance testing shall be demonstrated <u>annually</u> using EPA Method 9 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C. See Specific Conditions D.7., D.15(a) and D.16.
- [Rules 62-204.800 and 62-297.401, F.A.C.; and, 40 CFR 63.1349(b)(2)]
- **D.12.** Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of

compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

D.13. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

D.14. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

D.15. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of Particulate Matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of Particulate Matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 30 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached).
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]

- **D.16.** Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit. [Rule 62-297.310(6), F.A.C.]
- **D.17.** <u>Frequency of Compliance Tests</u>. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

 (a) General Compliance Testing.
 - 1. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate.
 - 2. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; or, 100 tons per year or more of any other regulated air pollutant; and,
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
 - 3. The owner or operator shall notify the Department, at least 60 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) Special <u>Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for Particulate Matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, 40 CFR 63.1349(c)]

- **D.18.** The owner or operator of an affected emissions unit subject to 40 CFR 63, Subpart LLL, shall demonstrate initial compliance with the emission limits of 40 CFR 63.1347 and 40 CFR 63.1348 using the test methods and procedures in paragraph 40 CFR 63.1349(b) and 40 CFR 63.7. Performance test results shall be documented in complete test reports that contain the information required 40 CFR 63.1349(a)(1) through (a)(10), listed below, 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.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1349(a)]

Monitoring of Operations

D.19. Determination of Process Variables.

- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

- **D.20.(a)** The owner or operator of each Portland cement plant shall prepare for each affected emissions unit subject to the provisions of this subpart, a written operations and maintenance plan. The plan shall be submitted to the Administrator for review and approval as part of the application for a 40 CFR Part 70 permit and shall include the following information:
 - (1) Procedures for proper operation and maintenance of the affected emissions unit and air pollution control devices in order to meet the emission limits and operating limits of 40 CFR 63.1347 and 40 CFR 63.1348;
 - (2) Corrective actions to be taken when required by paragraph 40 CFR 63.1350(e); and

- (3) Procedures to be used to periodically monitor affected emissions units subject to opacity standards under 40 CFR 63.1348. Such procedures must include the provisions of paragraphs 40 CFR 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 emissions unit in accordance with Method 22 of Appendix A, 40 CFR Part 60. The test must be conducted while the affected emissions unit is in operation.
 - (ii) If no visible emissions are observed in six consecutive monthly tests for any affected emissions unit, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected emissions unit. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected emissions unit on a monthly basis and maintain 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 emissions unit, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected emissions unit. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected emissions unit on a monthly basis and maintain 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, 40 CFR Part 60. The Method 9 test must begin within one hour of any observation of visible emissions.
- (b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with paragraph 40 CFR 63.1350(a) shall be a violation of the standard. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1350(a)(1), (2) & (4) and (b)]
- **D.21.** The owner or operator of a finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCDs (PM control devices) of this affected source, in accordance with the procedures of Method 22 of Appendix A, 40 CFR Part 60. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six 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 paragraphs 40 CFR 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 visual opacity test of each stack from which visible emissions were observed in accordance with Method 9 of Appendix A, 40 CFR Part 60. The duration of the Method 9 test shall be thirty minutes.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1350(e)]

D.22. The owner or operator of an affected source subject to a limitation on opacity under 40 CFR 63.1348 shall monitor opacity in accordance with the operation and maintenance plan developed in accordance with paragraph 40 CFR 63.1350(a). See Specific Condition D.20. [Rule 62-206.800, F.A.C.; and, 40 CFR 63.1350(j)]

Notification, Recordkeeping and Reporting Requirements

D.23. Notification requirements.

- (a) The notification provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a notice that contains all of the information required in a notification listed in 40 CFR 63.1353, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of 40 CFR 63.1353 for that notification.
- (b) Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9 as follows:
 - (1) Initial notifications as required by 40 CFR 63.9(b) through (d). For the purposes of 40 CFR 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 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under 40 CFR Part 70 of this chapter 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 CFR 63.7 and 63.9(e).
 - (3) Notification of opacity and visible emission observations required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 63.9(f).
- (4) Notification, as required by 40 CFR 63.9(g), of the date that the continuous emission monitor performance evaluation required by 40 CFR 63.8(e) of this part is scheduled to begin.
- (5) Notification of compliance status, as required by 40 CFR 63.9(h). [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1353]
- **D.24.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

D.25. Reporting requirements.

- (a) The reporting provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a report that contains all of the information required in a report listed in 40 CFR 63.1354, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of 40 CFR 63.1354 for that report.
- (b) The owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of 40 CFR Part 63, Subpart A as follows:
 - (1) As required by 40 CFR 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 CFR 63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by 40 CFR 63.1349.
 - (3) As required by 40 CFR 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 CFR 63.6(i) shall submit such reports by the dates specified in the written extension of compliance.
 - (4) As required by 40 CFR 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 CFR 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.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1354(a) and (b)(1) thru (5)]

D.26. Recordkeeping requirements.

- (a) The owner or operator shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 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.
- (b) The owner or operator shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3); and
 - (1) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 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 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.

[Rules 62-204.800 and 62-213.440, F.A.C.; and, 40 CFR 63.1355(a) and (b)]

D.27. The permittee shall maintain a daily log of the actual hours of dryer operation, quantity of slag processed, and fuel consumed by the slag dryer.

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D.28. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

- 1. The type, location, and designation of the emissions unit tested.
- 2. The facility at which the emissions unit is located.
- 3. The owner or operator of the emissions unit.
- 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
- 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
- 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

Mr. Hardy Johnson Vice President, Cement & Ready Mix Tarmac America, Inc.

Miscellaneous

D.29. Delegation of Authority.

- (a) In delegating implementation and enforcement authority to a State under Subpart E of 40 CFR Part 63, the authorities contained in paragraph 40 CFR 63.1358(b) shall be retained by the Administrator and not transferred to a State.
- (b) Authority which will not be delegated to States:
 - (1) Approval of alternative non-opacity emission standards under 40 CFR 63.6(g).
 - (2) Approval of alternative opacity standards under 40 CFR 63.6(h)(9).
 - (3) Approval of major changes to test methods under 40 CFR 63.7(e)(2)(ii) and 63.7(f). A major change to a test method is a modification to a federally enforceable test method that uses unproven technology or procedures or is an entirely new method (sometimes necessary when the required test method is unsuitable).
 - (4) Approval of major changes to monitoring under 40 CFR 63.8(f). A major change to monitoring is a modification to federally enforceable monitoring that uses unproven technology or procedures, is an entirely new method (sometimes necessary when the required monitoring is unsuitable), or is a change in the averaging period.
- (5) Waiver of recordkeeping under 40 CFR 63.10(f) [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1358]