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

FINAL Title V Air Operation Permit No. 0250020-018-AV

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
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Table of Contents

Section	Page Numbers
PLACARD PAGE	3
I. FACILITY INFORMATION	4
Subsection A. Facility Description	4
Subsection B. Emissions Unit ID No(s). and Brief Description(s)	4
Subsection C. Relevant Documents	5
Subsection D. Shutdown Operations	5
II. FACILITY WIDE CONDITIONS	6
III. EMISSIONS UNIT (S) SPECIFIC CONDITIONS	
Subsection A. Cement Plant Raw Material Handling System	8
Subsection B. Cement Plant Pyroprocessing and Raw Mill System	10
Subsection C. Cement Plant Clinker Handling & Storage System	18
Subsection D. Cement Plant Finish Mill System	20
Subsection E. Cement Plant Product Storage and Packhouse/Loadout System	23
Subsection F. Cement Plant Coal Handling System	25
Subsection G. Facility Fugitive Emissions	27
Subsection H. Aggregate Plant Operation	29
Subsection I. Concrete Block Plant Operation	32
Subsection J. Concrete Batch Ready Mix Plants Operation	34
IV. FACILITY COMMON AND GENERAL CONDITIONS	35
List of Appendices made part of this Permit (attached)	3

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FINAL Permit No.: 0250020-018-AV
Facility ID No.: 0250020
SIC Nos.: 3241, 3271, 3273, 1422, 1442
Project: Title V Air Operation Permit Renewal

PERMITTING ACTION: This permitting action is for the renewal of the Titan America Pennsuco Title V Operation Permit No. 0250020-009-AV and its revisions. The key changes since the Initial Title V Operation Permit are explained in a separate and more detailed Statement of Basis that accompanies this permit. 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.

This Title V Air Operation Permit Renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212 and 62-213, 62-296, and 62-297. The above named permittee is hereby authorized to 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.

A detailed Statement of Basis is attached for informational purposes. The following attachments are made a part of this permit:

Appendix A:	40 CFR 60, Subpart A, General Provisions - Standards of Performance for New Stationary Sources (NSPS)
Appendix A-1:	40 CFR 63, Subpart A, General Provisions - National Emissions Standards for Hazardous Air Pollutants for Source Categories (NESHAP)
Appendix CAM:	Compliance Assurance Monitoring
Appendix CG:	Common and General Conditions
Appendix CP-1	Compliance Plan
Appendix CF:	Citation Format
Appendix F:	40 CFR 60, Subpart F - Standards of Performance for Portland Cement Plants
Appendix H-1:	Permit History *(for information purpose*)
Appendix LLL:	40 CFR 63, Subpart LLL - National Emissions Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry – Major Sources
Appendix OOO:	40 CFR 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.
Appendix U-1:	List of Unregulated Emission Units and/or Activities
Appendix SS-1:	Stack Sampling Facilities
Appendix TV-6:	Title V Conditions
Appendix Y:	40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation Plants
Table 297.310-1:	Calibration Schedule
Figure 1:	Summary Report: Gaseous and Opacity Excess Emissions and Monitoring System Performance
Table 1:	Summary of Air Pollutant Standards for the Nonmetallic Mineral Processing Plant

Effective Date: October 26, 2005
Renewal Application Due Date: April 25, 2010
Expiration Date: October 25, 2010
Florida Department of Environmental Protection

_____
Joseph Kahn, Director
Division of Air Resource Management

Subsection A. Facility Description.

Titan America (through various subsidiaries or affiliates) operates the Pennsuco Facility in Medley, Miami-Dade County, Florida. The facility consists of a portland cement plant, an aggregate plant, two batch "ready-mix" concrete plants, and a cement block plant.

The portland cement plant has an allowable production rate of 2,190,000 TPY of clinker and is capable of producing approximately 2,400,000 TPY of cement. It includes fuel and raw material storage, feed bins, a coal mill, a dry process pyroprocessing line, transfer equipment, finish mills, clinker and cement silos, and product packaging and load out facilities.

The aggregate plant consists of a quarry, crushers, decks, bins, screens, transfer equipment and piles. It is permitted to process 14,560,000 tons per year (TPY) of raw material from the on-site limestone quarry and shipments received from other sources. A portion is consumed in the adjacent cement plant while the remainder is supplied to other users.

Two concrete "ready-mix" plants include batching, cement and fly ash silos, additive tanks, racks, stackers, hoppers and truck loadouts.

The concrete block plant includes aggregate and cement storage silos, mixers, curing kilns, mold shop storage and loadout. It operates at about 50 cubic yards per hours and makes about 5,500 blocks per hour.

Pollution control equipment for the block and ready-mix plants consists of baghouses on storage silos and key process steps and reasonable precautions to control fugitive dust. Pollution prevention measurements for the aggregate plant consist of reasonable precautions to control fugitive dust.

Pollution control equipment for the cement plant consists of a common fabric filter system (baghouse) for particulate emissions (PM/PM_{10}) from the kiln, raw mill, coal mill and cooler; absorption of sulfur compounds and metals into the product; combustion controls for volatile organic compounds (VOC) and carbon monoxide (CO); indirect firing, multiple burn points, and a Low NO_X calciner for NO_X; and baghouses for particulate emissions from other process emission units.

Subsection B. Emissions Unit ID Nos. and Brief Descriptions per ARMS Database.

ARMS Emissions Unit No.	Brief Description of Facility Emissions Units
010	Finish Mill System: Finish Mill No. 1
011	Finish Mill System: Finish Mill No. 2
012	Finish Mill System: Finish Mill No. 3
013	Finish Mill System: Finish Mill No. 4
030	Finish Mill System: Finish Mill No. 6
014	Cement Handling System: Cement Storage Silos. 1 through 12
015	Cement Handling System: Cement Distribution, Rail and Truck Loadout
016	Cement Handling System: Cement Packhouse
022	Nonmetallic Mineral Processing Plant Equipment and Operations at Aggregate Plant Subject to 40 CFR 60, Subpart OOO
023	Nonmetallic Mineral Processing Plant Equipment and Operations at Aggregate Plant NOT Subject to 40 CFR 60, Subpart OOO
024	Concrete Block Plant
025	Two Concrete Batch Ready Mix Plants
026	Coal Handling System
027	Clinker Handling and Storage System
028	Pyroprocessing/Raw Mill System
029	Raw Material Handling System
031	Unregulated Emissions Units and/or Activities: Fugitive Emissions

The Department has determined that this facility is a major source of hazardous air pollutants (HAPs).

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.

1. FINAL Title V Air Operation Permit 0250020-009-AV. Effective Date: October 26, 2000.
2. Air Construction Permit 0250020-010-AC to modernize cement plant issued May 1, 2001.
3. Air Construction Permit 0250020-012-AC to increase hours of operation for the aggregate plant and replace hourly and daily production limits with monthly and yearly limits. The permit was issued January 25, 2002.
4. Title V Air Operation Permit Revision 0250020-011-AV to incorporate the aggregate plant into the Title V Operation Permit and a compliance plan for NO_X and clarifications related to the wet process plant and modernization of the facility. The permit was issued March 21, 2002.
5. Air Construction Permit 0250020-014-AC to construct the 5,500 blocks per hour concrete block plant that replaced two smaller block plants. The permit was issued September 20, 2002.
6. Air Construction Permit 0250020-016-AC to keep Finish Mill 1 and upgrade Finish Mill 3. The permit was issued May 31, 2005.
7. Air Construction Permit 0250020-017-AC (PSD-FL-360) to increase cement production, establish best available control technology (BACT) for carbon monoxide (CO) and establish a Facility Fugitive Emissions Control Plan. The permit was issued December 2, 2005.
8. Air Construction Permit 0250020-019-AC to use Finish Mill 2 as a backup. The permit was issued October 13, 2006.

These documents are provided to the permittee for information purposes only:

1. Appendix H-1: Permit History.
2. Statement of Basis.

These documents and all related applications, permits and correspondence are on file with the permitting and compliance authorities:

1. All permit documents and related applications listed in attached Appendix H-1.
2. Title V Operation Permit Renewal Application received April 28, 2005.
3. Revised Title V Operation Permit Renewal Application received February 24, 2006.
4. DEP's electronic communications dated April 7, May 17, June 8, and July 13, 2006.
5. Titan's electronic communications dated April 6, April 10, May 1, May 17, June 9, July 27, August 7, and November 14, 2006. Titan's Statement of Compliance received August 28, 2006.
6. DERM's electronic mail dated July 14, 2006. Titan Compliance Status Confirmation.

Subsection D. Information on Shutdown Operations

Since the time the existing Pennsuco Facility was constructed in 1960 to the present, several emissions units operations have shutdown or were permitted but never operated or were never built.

These emissions units are listed in Appendix H-1: Permit History.

The following conditions apply facility-wide:

1. APPENDIX TV-6, TITLE V CONDITIONS, is a part of this permit.

   {Permitting Note: APPENDIX TV-6, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. General Pollutant Emissions Limiting Standards. Objectionable Odor Prohibited. 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.]

3. General Particulate Emissions 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. Any Risk Management Plan original submittals, revisions or updates to submittals, should be sent to:

      RMP Reporting Center
      P.O. Box 1515
      Lanham-Seabrook, Maryland 20703-1515
      Telephone: 301/429-5018

   b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

   [40 CFR 68]

5. Unregulated Emission Units and/or Activities: Appendix U-1, List of Unregulated Emission Units and/or Activities, is a part of this permit.

6. General Pollutant Emissions 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 emissions control devices or systems deemed necessary and ordered by the Department. The Department has not required or deemed anything necessary to date. [Rule 62-296.320(1)(a), F.A.C.; and SIP approved]

7. Emissions of Unconfined Particulate Matter: Pursuant to Rules 62-296.320(4)(c)1, 3, & 4, F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57 of APPENDIX TV-6, TITLE V CONDITIONS, Condition 12 of Appendix CG, Subsection G, Facility Fugitives Emissions and Appendix CP-1):

   1. Paving and maintenance of roads, parking areas and yards.
   2. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
   3. Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.

4. 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.
5. Landscaping or planting of vegetation.
6. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
7. Confining abrasive blasting where possible.
8. Enclosure or covering of conveyor systems.

8. Recording, Monitoring and Reporting: 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.]

9. Statement of Compliance: The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to DERM and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rule 62-213.440(3) and 62-213.900, F.A.C.]

   {Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2 & 3, F.A.C. (see Condition 51. of APPENDIX TV-6, TITLE V CONDITIONS)}

10. Annual Report Required: On or before March 1 of each calendar year, a completed DEP Form 62-210.900(5), Annual Operations Report (AOR) Form for Air Pollutant Emitting Facility, shall be submitted to the DERM, Air Facilities Section. Included with this report shall be additional reports, if any, required by this permit in Section III -- Emissions Units and Conditions and Section IV – Common and General Conditions. [Rule 62-4.070(3), F.A.C.; and Rule 62-210.900(5), F.A.C.]

11. Miami-Dade County Compliance Authority: The permittee shall submit all compliance related notifications and reports required of this permit to DERM at the following address:

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

12. EPA Compliance Authority**:** 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 30303-8960
    Telephone: 404/562-9155; Fax: 404/562-9163

13. Certification by Responsible Official (RO): In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.
    [Rule 62-213.420(4), F.A.C.]

This subsection addresses the following emissions units system.

ARMS Emissions Unit No.	Brief Description of Emissions Unit
029	Cement Plant Raw Material Handling System

The raw material handling operations are controlled by the following baghouses:

Emission Point	Descriptions of Emissions Points
Baghouse I.D. 311.BF650	Dust collector for limestone and mineral aggregate feed bins/conveying
Baghouse I.D. 311.BF750	Dust collector for raw material conveyance from feed bins to raw mill
Baghouse I.D. 311.BF470	Dust collector for raw material conveyance from feed bins to raw mill
Baghouse I.D. 311.BF950	Dust collector for raw material conveyance from feed bins to raw mill

Operational Requirements

1. Hours of Operation: This emissions unit system is allowed to operate 8,760 hours per year. [Permit 0250020-017-AC]

2. Raw Material Handling System Throughput Specification: The maximum dry throughput rate is 3,723,000 TPY. The owner or operator shall record all throughput rates on a rolling 12-month basis, and maintain records for a minimum of 5 years. [Permit 0250020-017-AC; and 62-213.440, F.A.C.]

Emissions Limitations, Test Methods and Performance Standards

3. Visible Emissions Limits: Visible emissions are limited to 5 percent from each of the above listed baghouses. Compliance shall be determined in the manner described in 40 CFR 63.1350(a)(4)(i), (ii), (iii) and (iv) below except that the applicable standard is 5% instead of 10%. Numeration tracks the referenced CFR provision.

   (4) Procedures to be used to periodically monitor affected sources subject to opacity standards under Sections 63.1346 and 63.1348. Such procedures must include the provisions of Paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

   (i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to [40 CFR] Part 60 of this chapter. The test must be conducted while the affected source is in operation.

   (ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and 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 source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six (6) consecutive monthly tests.

   (iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of Appendix A to part 60 of this Chapter. The Method 9 test must begin within one hour of any observation of visible emissions.

{Note: The applicant advised that the baghouses are designed to control particulate emissions to 0.0095 grains/dry standard cubic foot (gr/dscf). The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM_{10} for all emission points in this emission unit system will be less than 13 TPY. This annual emission estimate is part of the facility-wide netting calculation to escape PSD applicability for PM/PM_{10}. Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition and not necessarily an exceedance of the opacity limitations given in 40 CFR 63, Subpart LLL.}

[Permit 0250020-017-AC; 40 CFR 63.1348]

Test Procedures, Recordkeeping and Additional Requirements

4. Common and General Conditions: This emissions unit is subject to all applicable requirements of the attached Appendices, made part of the permit.

This subsection addresses the following emissions unit.

ARMS Emissions Unit No.	Brief Description of Emissions Unit
028	Cement Plant Pyroprocessing and Raw Mill System

The pyroprocessing and raw mill system are controlled by the following baghouses:

Emission Point	Descriptions of Emissions Point
Baghouse I.D: 331.BF200	Main Stack & dust collector for preheater/kiln/cooler/raw mill/coal mill
Baghouse I.D: 331.BF740	Dust collector for kiln dust conveyance and storage bin
Baghouse I.D: 341.BF350	Dust collector for preheater feed silo
Baghouse I.D: 351.BF440	Dust collector for raw meal conveyance from feed silo to preheater
Baghouse I.D: 351.BF470	Dust collector for raw meal conveyance from feed silo to preheater
Baghouse I.D: 331.BF645	Dust collector for truck loadout of kiln dust

Operational Requirements

1. Hours of Operation: This emissions unit system is allowed to operate 8760 hours per year.
   [Permit 0250020-017-AC]

2. Pyroprocessing System Production Limits: The maximum production of clinker shall not exceed 250 TPH on a 24-hour block average and 2,190,000 TPY.
   [Permit 0250020-017-AC; Rule 62-210.200, (Definitions – Potential to Emit), F.A.C.]

3. Fuels: Allowable fuels fired in the pyroprocessing/raw mill emission unit consist of natural gas, bituminous coal, petroleum coke, No. 2 fuel oil with used oil blend and No. 6 fuel oil with used oil blend. Fuel oil includes on-spec used oil (refer to definition in specific condition 13).

   {Note: There is no heat input limitation. For reference, the design heat input capacities of the kiln burner and calciner burner are 290 million Btu per hour (mmBtu/hr) and 385 mmBtu/hr respectively. The clinker production effectively limits PTE.}

   [Permit 0250020-017-AC]

Emissions Limitations and Performance Standards

4. Visible Emissions Limits: Visible emissions are limited to 5 percent from each of the above listed baghouses, except for the main stack baghouse, I.D.331.BF200. Compliance shall be determined in the manner described in 40 CFR 63.1350(a)(4)(i), (ii), (iii) and (iv) below except that the applicable standard is 5% instead of 10%. Numeration tracks the referenced CFR provision.

   (4) Procedures to be used to periodically monitor affected sources subject to opacity standards under Sections 63.1346 and 63.1348. Such procedures must include the provisions of Paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

   (i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to [40 CFR] Part 60 of this chapter. The test must be conducted while the affected source is in operation.

   (ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and 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 source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six (6) consecutive monthly tests.

(iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of Appendix A to part 60 of this Chapter. The Method 9 test must begin within one hour of any observation of visible emissions.

{Note: The applicant advised that the baghouses are designed to control particulate emissions to 0.0095 grains/dry standard cubic foot (gr/dscf). The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM_{10} for all emission points, except for the main stack, in this emission unit system will be less than 7 TPY. This annual emission estimate is part of the facility-wide netting calculation to escape PSD applicability for PM/PM_{10}. Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition and not necessarily an exceedance of the opacity limitations given in 40 CFR 63, Subpart LLL}

5. Main Stack - Pyroprocessing/Raw Mill Emission Limits: Emissions exiting the main stack from the Pyroprocessing/Raw Mill system shall not exceed the limits shown in the following table:

PARAMETER	EMISSION LIMIT	AVERAGING TIME	COMPLIANCE METHOD	LIMIT BASIS
Opacity[6]	10 Percent	6 minute block	COMS, Method 9	PTE, Avoid PSD 40 CFR Subpart LLL
PM[6]	0.063 lb/ton of dry kiln feed	3 hours[5]	Annual Method 5	PTE, Avoid PSD 40 CFR Subpart LLL
	26.8 lb/hr			
PM_{10}[6]	0.053 lb/ton of dry kiln feed	3 hours[5]	Annual Method 5	PTE, Avoid PSD 40 CFR Subpart LLL
	22.5 lb/hr			
SO_2	0.50 lb/ton of clinker	30 days[2]	CEMS Method 6 or 6C	PTE, Avoid PSD
	320 lb/hour	24 hours[1]		
NO_X (as NO_2)	2.17 lb/ton of clinker	12-months[3]	CEMS Method 7 or 7E	PTE, Avoid PSD
	720 lb/hour	24 hours[1]		
CO	2.0 lb/ton of clinker	30 days[2]	CEMS/Method 10	BACT
	576 lb/hour [1]	24 hours[1]		
VOC[4]	0.16 lb/ton of clinker [2]	30 days[2]	CEMS Method 25 or 25A	PTE, Avoid PSD
	40 lb/hour	24 hours[1]		
Mercury (Hg)	229 lb/yr (base + 199 lb/yr)	12-month	Fuels, Materials[8]	PTE, Avoid PSD
Temperature[7]	Baghouse Temperature (T) $\leq$ T during Dioxin/Furan Tests	Continuous	Established during Method 23	40 CFR 63, Subpart LLL
Dioxin/Furan	0.2 ng TEQ/dscm ($T \geq 204$ °C)	3 hours	30 Months, Method 23	40 CFR 63, Subpart LLL
	0.4 ng TEQ/dscm ($T < 204$ °C)			

1 Compliance with the short-term emission limit for SO_2, NO_X, CO, and VOC shall be based on a 24-hour block average computed in accordance with Specific Condition 10. Compliance with lb/hr SO_2 emissions limitations in this condition will insure compliance with Miami-Dade County Code, Section 24-17(2)(a) limiting emissions to 1.2 lb SO_2/MMBtu heat input when solid fuel is fired, or 0.8 lb SO_2/MMBtu heat input when liquid fuel is fired, based on a 24 hour average.

2 Compliance with the long-term emission limit for SO_2, CO, and VOC shall be based on a 30 operating-day block average computed in accordance with Specific Condition 10.

3 Compliance with the long-term emission limit for NO_X shall be based on 12 month rolling average computed in accordance with Specific Condition 10.

4 VOC emissions shall be expressed as propane.

5 The averaging times for PM and PM_{10} correspond to the required length of sampling for the initial and subsequent emission tests (e.g., a minimum of 3 one-hour test runs). Compliance demonstration with these limits shall be conducted pursuant to 40 CFR 63.1349(b)(1).

6 Compliance with the Opacity, PM and PM_{10} permit limits given for in-line kiln/raw mill will insure compliance with applicable limits from 40 CFR 63, Subpart LLL for the in-line kiln/raw mill, and clinker cooler, and 40 CFR 60, Subpart Y for the coal mill.

7 The temperature requirements for the operation of in-line kiln/raw mill are in accordance with 40 CFR 63.1344(a) & (b), and 63.1349(b)(3).

8 Determined by raw materials and fuels entering the process. Refer to Conditions 6 and 12.

[Permit 0250020-017-AC (PSD-FL-360) including BACT determination for CO; Permit 0250020-019-AC; Rule 62-210.200, (Definitions – Potential to Emit), F.A.C. to avoid PSD applicability for other pollutants; 62-212.400, F.A.C.; 40 CFR 63.1343 and 63.1345]

{Permitting Note: For compliance with the long term CO, NO_X, SO_2, and VOC limits (30-day block and 12-month rolling averages), the averaging periods began January 1, 2006.}

6. Mercury Emissions from the Pyroprocessing/Raw Mill System: Mercury emissions exiting the main stack from the Pyroprocessing/Raw Mill system shall not exceed 229 pounds per year on a 12-month rolling basis. [Permit 0250020-017-AC; Rule 62-210.200, (Definitions – Potential to Emit), F.A.C. to avoid PSD applicability for Hg]

Test Methods and Monitoring Procedures

7. Determination of Clinker Production Rate during Testing: Prior to any emission testing to demonstrate compliance with any emission limit, the permittee shall determine the clinker production rate for the test as described in Specific Condition 15. The permittee shall notify the DERM of the preheater kiln feed rate and the factor used to determine the clinker production rate in advance of the commencement of any test(s). The rate of clinker production shall be used to determine compliance with all clinker-based emission limits in the permit for that test. [DERM Requirement. Rule 62-4.070(3), F.A.C.]

8. Testing Procedures and Methods: In addition to the CEMS or COMS compliance requirements listed in Condition 10, the main stack & dust collector, Baghouse I.D. 331.BF200, serving the preheater/kiln/cooler/raw mill/coal mill shall be tested according to the EPA Methods and at the frequencies listed below:

POLLUTANT	TEST METHOD	FREQUENCY
PM/PM_{10}	EPA Method 5	Annual
Opacity	EPA Method 9	Annual
SO_2	EPA Methods 6 or 6C	Annual*
NO_X (as NO_2)	EPA Methods 7 or 7E	Annual*
CO	EPA Method 10	Annual*
VOC	EPA Methods 25 or 25A	Annual*
Dioxins/Furans	EPA Method 23	30 months

* The tests conducted annually for the relative accuracy test audit (RATA) for the CEM system may be used to satisfy this requirement provided the owner or operator satisfies the prior notification requirements and emission testing requirements of this permit for performance and compliance tests. The result from the actual referenced method (RM) test during the RATA needs to show compliance with the allowable permit emission limit.

[Permit 0250020-017-AC; Rules 62-297.310(7) and 62-212.400, F.A.C.;]

9. Feed or Fuel Changes and D/F and PM Performance Testing: The owner or operator shall notify the compliance authority prior to initiating any significant change in the feed or fuel used in the most recent compliant performance test for D/F or PM. For purposes of this condition, significant means any of the following: a physical or chemical change in the feed or fuel; the use of a raw material not previously used; a change in the loss on ignition (LOI) characteristic of the fly ash; a change between non-beneficiated fly ash and beneficiated fly ash. Based on the information provided, the compliance authority will, within seven days of notification from the permittee, determine if the proposed change would be reasonably expected to cause a change in D/F emissions such that performance testing pursuant to 40 CFR 63.1349 will be required for the new feed or fuel. If the compliance authority fails to respond within seven days of notification and the permittee believes such change would not reasonably be expected to cause an increase in D/F emissions that might jeopardize compliance with the applicable D/F standard, the change may be implemented immediately without performance testing. A significant change shall not include switching to a feed/fuel mix for which the permittee already tested in compliance with the dioxin/furan and PM emission limits. [Permit 0250020-017-AC]

10. Continuous Emission Monitoring Systems: The owner or operator shall install, calibrate, maintain, and operate continuous emission monitoring systems (CEMS) in the in-line kiln/raw mill stack to measure and record the emissions of NO_X, SO_2, CO, and VOC from the in-line kiln/raw mill, in a manner sufficient to demonstrate compliance with the emission limits of this permit. The CEMS systems shall express the results in units of pounds per ton of clinker produced and pounds per hour. Emissions of VOC shall be reported in units of the standards (lb/hour, lb/ton clinker) and ppmvd as propane corrected to 7% oxygen.

    a. *Compliance Demonstration*: Compliance with the short-term emission limits for NO_X, SO_2, CO, and VOC shall be based on a 24-hour block average. The 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive hourly average values. If there are less than 24 hours during the block, the 24-hr block average shall be the average of all valid hourly average values available during the 24 hour block. Compliance with the long-term emission limits for SO_2, CO, and VOC shall be based on a 30 operating-day block average that shall be computed as the arithmetic average of all valid hourly averages occurring within each 30 operating-day block. For purposes of the SO_2, CO, and VOC long-term emission limits, an operating day is any day that the kiln produces clinker or fires fuel. The first 30 operating day block shall begin the first operating day on or after January 1, 2006.

    b. *Compliance with the long-term NO_X emissions limit:* Compliance with the long-term NO_X emission limit shall be based on a 12 month rolling average that shall be recomputed each month as the arithmetic average of that month and the preceding 11 months. Each monthly average shall be computed by averaging all valid hourly averages occurring within each calendar month. The first 12 month period shall commence on January 1, 2006.

    c. *Valid Hourly Averages*: Each hourly average shall be computed as the arithmetic average of the data points generated by the CEM system. Data points must be generated at least once per minute. For an hourly average to be considered valid, at least two data points separated by a period of 15 minutes or more must be used to compute the hourly average.

        - Hours during which there is no preheater feed and no fuel fired to the kiln systems are not valid.

- Hours during which the plant is firing fuel but producing no clinker are valid, but these hours are excluded from the production-normalized emission rate computation (pounds per ton of dry preheater feed or pounds per ton of clinker). These hours are included in any pollutant mass emission rate computation (pounds per hour).

d. *Data Availability*: During each semiannual (six-month) period, CEM system valid hourly averages shall be obtained for at least 95 percent of the operating hours for which the plant is producing clinker. If the CEM system does not obtain valid hourly averages for 95 percent or more of the operating hours per semiannual period for which the plant is producing clinker, the permittee shall also submit a continuous monitoring system performance report with the excess emissions report. This report must include corrective actions, and it shall be submitted within 30 days following the end of each reporting period.

e. *Compliance Assurance*: CEM system breakdowns, malfunctions, repairs, calibration checks, zero adjustments, and span adjustments all result in periods during which CEM system data are not obtained. During such periods in excess of five percent of the total operating hours per calendar quarter, the permittee shall assure compliance with the emissions standards of this permit through stack tests, alternative monitoring systems, or other methods as approved by the Department.

[Permit 0250020-017-AC]

11. Continuous Emissions Monitor System (CEMS) Requirements**:** All CEM systems shall be operational, recording and continuously transmitting available data. The monitoring systems shall be certified in accordance with the appropriate Performance Specification in 40 CFR 60 Appendix B. The systems shall comply with the requirements for continuous monitoring systems found in the general provisions of 40 CFR 63, Subpart A including development of a quality control program. Data on monitoring equipment specifications, manufacturer, type calibration and maintenance requirements, and the proposed location of each monitor shall be provided to the DERM for review at least 45 days prior to replacement of any CEMS. [Permit 0250020-017-AC; and 62-204.800, F.A.C.]

12. Mercury Compliance Demonstration: The owner or operator shall demonstrate compliance with the mercury throughput limitation by material balance and maintaining records of the monthly and rolling 12-month mercury throughput. The following sampling and analytical procedures shall be used:

    a. Samples of the raw mill feed and all fuels shall be collected each day. A single composite daily sample shall be made from all samples collected during a day. A monthly composite sample shall be made from each of the daily composite samples.

    b. Each monthly composite sample shall be analyzed to determine the representative mercury concentration for the month.

    c. For each composite sample, the monthly mercury throughput rate (pounds per month) shall be the product of the mercury concentration from the monthly composite sample and the corresponding monthly processing rate.

    d. For each month, the mass of mercury introduced into the pyroprocessing system (pounds per month) shall be the sum of the monthly mercury throughput rates for each raw material and fuel.

    e. The consecutive 12-month mercury throughput rate shall be the sum of the individual monthly records for the current month and the preceding eleven months (pounds of mercury per consecutive 12-months). Such records, including calculations and data, shall be completed no later than 25 days following the month of the records. The first 12-month rolling period shall begin on August 1, 2006.

    f. The analytical methods used to determine mercury concentration shall be EPA or ASTM methods such as EPA Method 7471A (Mercury in Solid or Semisolid Waste). No other methods may be used unless prior written approval is received from the Department. If the mercury concentration is below detection limit or below the limits of quantification, the detection limit will be assumed for the concentration of the raw material or fuel, the permittee shall report the detection limit as the corresponding level. [Permit 0250020-019-AC; Compliance with 229 lb Hg/12-month limitation]

On-Specification Used Fuel Oil

13. Limits and Test Methods Applicable to On-Spec Fuel Oil:

a. "Non-hazardous 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 shall not be fired.

CONSTITUENT/PROPERTY	LIMIT	TEST METHOD [(2)]
Arsenic	5 ppm	EPA SW-846 (3040-7130)
Cadmium	2 ppm	EPA SW-846 (3040-7130)
Chromium	10 ppm	EPA SW-846 (3040-7130)
Lead	100 ppm	EPA SW-846 (3040-7130)
Total Halogens	<1000 ppm [(1)]	ASTM E442
PCBs	<50 ppm	ASTM D4059
Flash Point	100 °F (minimum)	ASTM D93
Sulfur	% by weight (informational)	ASTM D2622, D4294-90, or both D4057-88 & D129-91
Heat of Combustion	Btu/gal (informational)	ASTM D240-76
Density	Lb/gal (informational)	ASTM D1298-80

(1) 40 CFR 279.10(b)(1) (ii) *Rebuttable presumption for used oil.* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in subpart D of 40 CFR part 261. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW–846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of 40 CFR part 261). EPA Publication SW–846, Third Edition, is available from the Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250–7954, (202) 512–1800 (document number 955–001–00000–1”). If successfully rebutted for used oil up to 4000 ppm total halogens, used oil up to 4000 ppm maximum total halogens may be fired.

(2) Other test methods may be used only after receiving written approval from the DERM.

b. *Analysis of Used Oil Fuel.* The permittee may determine that the used oil to be burned for energy recovery meets the fuel specifications of §279.11 by performing analyses, or obtaining copies of analyses or other information, documenting that the used oil fuel meets the specifications.

c. *Record Retention*. The permittee must keep copies of analyses of the used oil (or other information used to make the determination) for five years.

d. *Fuel Analysis for On-specification Used Oil Requirements.* 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):

e. *Submittal of Samples.* The results of each sample analysis (on the laboratory's letterhead) shall be submitted to the DERM within 30-days after the sample is taken and analyzed.

f. *Sample Results*. The results of each sample analysis (on the laboratory's letterhead) shall be submitted to the DERM within 30 days after a sample is taken and analyzed.

[Permit 0250020-017-AC; 40 CFR 279.11 (which is adopted by reference in Rule 62-710.210(2), F.A.C.), 40 CFR 279.72; 40 CFR 63.1343 and 63.1345]

14. Used Oil Usage Records: In order to document compliance with the used oil limitations, the following requirements shall be adhered to as a minimum:

a. *Transfers to Storage Tank.* The dates and quantities of both on-specification used oil and purchased fuel oil transferred to the in-line kiln/raw mill'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 end of the quarter.

b. *Recordkeeping*. When burning used oil, records shall be maintained in accordance with applicable provisions of 40 CFR 279, Subpart B and Subpart G (July 1, 1996 version), Standards for the Management of Used Oil and Chapter 62-710, F.A.C.

c. *Delivery Receipts.* The following shall be recorded on the delivery receipt:

- the use of tamper proof seals on the delivery receipt
- the volume of fuel delivery
- a cross reference to the analysis which establishes that the used oil meets EPA used oil fuel specifications
- the results of the screening analysis
- the name of the person performing the test
- the specific test kit used
- the amount of oil sampled
- the amount and name of the solution used to dilute the oil

d. *Delivery Procedures*. The following procedures shall be implemented:

- On and off specification used oil that is delivered without a delivery receipt containing all the above information, or which is not properly sealed, or for which the delivery receipt does not contain all the necessary information, is not to be accepted and the DERM is to be notified by phone immediately (with written confirmation to follow), if such a delivery is attempted.
- Verification by signature on the delivery receipt shall be provided by plant personnel that the delivery truck arrived on site with all seals intact. As delivered samples of all used oil fuel received shall be accumulated through each quarter for each supplier.

[Permit 0250020-017-AC; DERM Requirements]

Process and Production Recording

15. Production Rate Recording**:** The owner or operator shall record the preheater kiln feed rate using the F.L. Smidth automated preheater feed weighing device and record the daily clinker production. The clinker production rate for the purposes of determining compliance with Specific Condition 2, shall be determined as the product of Preheater Kiln Feed and the Loss on Ignition (LOI) factor. LOI for the preheater kiln feed is based on a 30 operating-day block average of daily measurements. For purposes of this requirement, an operating day is any day that the kiln produces clinker or fires fuel. The calculation shall be expanded as needed to consider the additional feed points and LOI. [Permit 0250020-017-AC]

16. Excess Emissions Reports: In case of excess emissions resulting from malfunctions, the owner or operator shall notify the DERM in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report.

    [Rules 62-210.700(6) and 62-4.070(3), F.A.C.]

Test Procedures, Recordkeeping and Additional Requirements

17. Common and General Conditions: This emissions unit is subject to all applicable requirements of the attached Appendices, made part of the permit.

Subsection C. Cement Plant Clinker Handling & Storage

This subsection addresses the following emissions units system.

ARMS Emissions Unit No.	Brief Description of Emissions Unit
027	Cement Plant Clinker Handling & Storage System

The clinker handling operations are controlled by the following baghouses:

Emissions Point	Descriptions of Emissions Points
Baghouse I. D: 441.BF540	Conveyance/transfer from cooler to new clinker silos and off-spec silo
Baghouse I. D: 481.BF140	Conveyance/transfer/storage for new clinker silos and off-spec silo
Baghouse I. D: 481.BF330	Storage from off-spec silo and conveyance from new clinker silos
Baghouse I. D: 481.BF540	Conveyance from new clinker silos and off-spec silo to old clinker storage
Baghouse I. D: 481.BF640	Conveyance from new clinker and off-spec silos to old clinker storage area
Baghouse I. D: 481.BF730	Conveyance/transfer to old clinker area and storage clinker silos 2, 5, 18
Baghouse I. D: 481.BF930	Storage clinker silos 21, 22, 26, 27
Baghouse I.D: F-633	Storage clinker silos 12, 19, 20, 23, 28
Baghouse K-447	Storage clinker silo 17

Operational Requirements

1. Hours of Operation: This emissions unit is allowed to operate 8760 hours per year. Production is automatically limited by the clinker production limits established in Subsection B., Specific Condition 2 for the pyroprocessing system. [Permits 0250020-017-AC and 0250020-019-AC]

Emissions Limitations, Test Methods and Performance Standards

2. Visible Emissions Limits: Visible emissions are limited to 5 percent from each of the above listed baghouses. Compliance shall be determined in the manner described in 40 CFR 63.1350(a)(4)(*i*), (*ii*), (*iii*) and (*iv*) below except that the applicable standard is 5% instead of 10%. Numeration tracks the referenced CFR provision.

   (4) Procedures to be used to periodically monitor affected sources subject to opacity standards under Sections 63.1346 and 63.1348. Such procedures must include the provisions of Paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

   (i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to [40 CFR] Part 60 of this chapter. The test must be conducted while the affected source is in operation.

   (ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and 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 source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six (6) consecutive monthly tests.

(iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of Appendix A to part 60 of this Chapter. The Method 9 test must begin within one hour of any observation of visible emissions.

{Note: The applicant advised that the baghouses are designed to control particulate emissions to 0.0095 grains/dry standard cubic foot (gr/dscf) and 0.01 gr/acf (Baghouse F-633). The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM_{10} for all emission points in this emission unit system will be less than 19.70 TPY. This annual emission estimate is part of the facility-wide netting calculation to escape PSD applicability for PM/PM_{10}. Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition and not necessarily an exceedance of the opacity limitations given in 40 CFR 63, Subpart LLL}

[Permits 0250020-017-AC; and 40 CFR 63.1348]

Test Procedures, Recordkeeping and Additional Requirements

3. Common and General Conditions: This emissions unit is subject to all applicable requirements of the attached Appendices, made part of the permit.

This subsection addresses the following emissions units.

ARMS Emissions Unit No.	Brief Descriptions of Emissions Units
010	Cement Plant Finish Mill No. 1
011	Cement Plant Finish Mill No. 2
012	Cement Plant Finish Mill No. 3
013	Cement Plant Finish Mill No. 4
030	Cement Plant Finish Mill No. 6

The finish mill handling operations are controlled by the following baghouses:

Emissions Point	Descriptions of Emissions Points
Baghouse I.D. F-113	Dust collector – Finish Mill No. 1 – Feeder
Baghouse I.D. F-130	Dust collector – Finish Mill No. 1 – Mill Sweep
Baghouse I.D. F-213	Dust collector – Finish Mill No. 2 – Feeder
Baghouse I.D. F-230	Dust collector – Finish Mill No. 2 – Mill Sweep
Baghouse I.D. F-313	Dust collector – Finish Mill No. 3 – Feeder
Baghouse I.D. F-332	Dust collector – Finish Mill No. 3 – Mill Sweep
Baghouse I.D. 533.BF340	Dust collector – Finish Mill No. 3 – O-Sepa Cement Separator
Baghouse I.D. F-432	Dust collector – Finish Mill No. 4 – Belt conveyor/Separator
Baghouse I.D. F-430	Dust collector – Finish Mill No. 4 – Ball Mill/Mill Sweep
Baghouse I.D. F-730	Dust collector – Finish Mill No. 4 – O-Sepa Cement Separator
Baghouse I.D. 536.BF340	Dust collector – Finish Mill No. 6 – O-Sepa Cement Separator
Baghouse I.D. 536.BF500	Dust collector – Finish Mill No. 6 – Sweep
Baghouse I.D. 516.BF510	Dust collector – Finish Mill No. 6 – Feeder

Operational Requirements

1. Hours of Operation: These emissions unit system is allowed to operate 8,760 hours per year. Finish Mill No. 2 (EU 011) shall not operate unless one of the other Finish Mills is not in operation. [Permits 0250020-017-AC and 0250020-019-AC]

2. Finish Mill Process Rates: The maximum total hourly process rate of cement is 359 TPH on a 24-hour block average. The individual process rates are 25 TPH (Finish Mill 1); 25 TPH (Finish Mill 2); 84 TPH (Finish Mill 3); 140 TPH (Finish Mill 4); and 110 TPH (Finish Mill 6). The owner or operator shall record all hourly process rates, and maintain records for a minimum of 5 years. [Permits 0250020-017-AC and 0250020-019-AC]

Emissions Limitations, Test Methods and Performance Standards

3. Visible Emissions Limits: Visible emissions are limited to 5 percent from each of the above listed baghouses. For baghouses F-113, F-213, F-313, and 516.BF510, compliance shall be determined in the manner described in 40 CFR 63, Section 63.1350(a)(4)(i), (ii), (iii) and (iv) below except that the applicable standard is 5% instead of 10%. Numeration tracks the referenced CFR provision.

(4) Procedures to be used to periodically monitor affected sources subject to opacity standards under Sections 63.1346 and 63.1348. Such procedures must include the provisions of Paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to [40 CFR] Part 60 of this chapter. The test must be conducted while the affected source is in operation.

(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and 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 source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six (6) consecutive monthly tests.

(iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of Appendix A to part 60 of this Chapter. The Method 9 test must begin within one hour of any observation of visible emissions.

{Note: The applicant advised that the baghouses are designed to control particulate emissions to 0.0095 grains/dry standard cubic foot (gr/dscf) and 0.01 gr/acf (F-113; F-130; F-213; F-230; F-313; F-330; F-430; and F-432). The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM_{10} for all emission points in this emission unit system will be less than 136.15 TPY. This annual emission estimate is part of the facility-wide netting calculation to escape PSD applicability for PM/PM_{10}. Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition and not necessarily an exceedance of the opacity limitations given in 40 CFR 63, Subpart LLL}

[Permits 0250020-017-AC and 0250020-019-AC; 40 CFR 63.1348]

Monitoring Requirements

4. Finish Mill Monitoring: For baghouses F-130, F-230, F-332, 533.BF340, F-432, F-430, F-730, 536.BF340 and 536.BF500, 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 these affected sources, in accordance with the procedures of Method 22 of Appendix A, 40 CFR Part 60 and as required by 40 CFR 63.1350(e), Subpart LLL.

Pursuant to 40 CFR 63.1350(e):

The owner or operator of a raw mill or finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCDs of these affected sources, in accordance with the procedures of Method 22 of Appendix A to Part 60 of this chapter. The Method 22 test shall be conducted while the affected source is operating at the representative performance conditions. The duration of the Method 22 test shall be 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 (a)(1) and (a)(2) of this section; and

(2) Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow up Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the follow up Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 test in accordance with Method 9 of Appendix A to Part 60 of this chapter. The duration of the Method 9 test shall be 30 minutes.

[Permits 0250020-017-AC and 0250020-019-AC; 40 CFR 63.1350, Monitoring Requirements]

Test Procedures, Recordkeeping and Additional Requirements

5. Common and General Conditions: This emissions unit is subject to all applicable requirements of the attached Appendices, made part of the permit.

Subsection E. Cement Plant Storage & Packhouse/Loadout System

This subsection addresses the following emissions units system.

ARMS Emissions Unit No.	Brief Descriptions of Emissions Units
014	Cement Plant Storage Silos 1 through 12
015	Cement Plant Distribution Rail Truck Load
016	Cement Plant Packhouse

The cement handling operations are controlled by the following baghouses:

Emissions Point No.	Description of Emissions Points
Baghouse I.D. F-511	Dust collector - Cement Silos 1-6
Baghouse I.D. F-512	Dust collector - Cement Silos 7-9
Baghouse I.D. F-513	Dust collector - Cement Silo 10
Baghouse I.D. F-514	Dust collector - Cement Silo 11
Baghouse I.D. F-515	Dust collector - Cement Silo 12
Baghouse I.D. B-110	Dust collector - Bulk Loadout Unit 1 (Rail/Truck).
Baghouse I.D. B-210	Dust collector - Bulk Loadout Unit 2 (Truck).
Baghouse I.D. VL002	Dust collector - Bulk Loadout Unit 2 - Line 2 (Truck Loadout Operation)
Baghouse I.D. B-372	Dust collector - Bulk Loadout Unit 3 - Line 1
Baghouse I.D. B-374	Dust collector - Bulk Loadout Unit 3 - Line 2
Baghouse I.D. B-382	Dust collector - Bulk Loadout Unit 3 - Line 3
Baghouse I.D. VL003	Dust collector - Bulk Loadout Unit 3 - Line 3 (Truck Loadout Operation)
Baghouse I.D. B-120	Dust collector - Packhouse
Baghouse I.D. B-200	Dust collector - Packhouse
Baghouse I.D. B-400	Dust collector - Packhouse

Operational Requirements

1. Hours of Operation: These emissions units are allowed to operate 8,760 hours per year. [Permits 0250020-017-AC and 0250020-019-AC]

2. Cement Storage Silo/Packhouse/Loadout Process and Production Design Specifications: The maximum process input rate to each cement silo and loadout operation is 500 TPH on a 24-hour block average. The maximum production rate of cement in the Packhouse is 170 TPH on a 24-hour block average. [Permit 0250020-017-AC and 0250020-019-AC]

Emissions Limitations, Test Methods and Performance Standards

3. Visible Emissions Limits: Visible emissions are limited to 5 percent from each of the above listed baghouses. Compliance shall be determined in the manner described in 40 CFR 63, Section 63.1350(a)(4)(i), (ii), (iii) and (iv) below except that the applicable standard is 5% instead of 10%. Numeration tracks the referenced CFR provision.

   (4) Procedures to be used to periodically monitor affected sources subject to opacity standards under Sections 63.1346 and 63.1348. Such procedures must include the provisions of Paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to [40 CFR] Part 60 of this chapter. The test must be conducted while the affected source is in operation.

(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and 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 source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six (6) consecutive monthly tests.

(iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of Appendix A to part 60 of this Chapter. The Method 9 test must begin within one hour of any observation of visible emissions.

{Note: The applicant advised that the baghouses are designed to control particulate emissions to 0.01 grains/actual cubic foot (gr/acf) except for baghousesVL002 and VL003 which are designed to 0.03 gr/acf. The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM_{10} for all emission points in this emission unit system will be less than 36.30 TPY. This annual emission estimate is part of the facility-wide netting calculation to escape PSD applicability for PM/PM_{10}. Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition and not necessarily an exceedance of the opacity limitations given in 40 CFR 63, Subpart LLL}

[Permits 0250020-017-AC; 40 CFR 63.1348]

Test Procedures, Recordkeeping and Additional Requirements

4. Common and General Conditions: This emissions unit is subject to all applicable requirements of the attached Appendices, made part of the permit.

Subsection F. Cement Plant Coal & Petroleum Coke Handling System

This subsection addresses the following emissions units system.

ARMS Emissions Unit No.	Brief Description of Emissions Unit
026	Cement Plant: Coal and Petroleum Coke Handling System

The provisions of 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants and 40 CFR 60, Subpart A- General Provisions are applicable to this process emissions unit system (Appendix A and Appendix Y attached).

The coal handling operations are controlled by the following baghouses:

Emission Point	Description of Emissions Points
Baghouse I.D. 461-BF500	Coal Mill*
Baghouse I.D. 461-BF130	Coal Feed Bin
Baghouse I.D. 461-BF230	Petroleum Coke Feed Bin
Baghouse I.D. 461-BF750	Coke/Petroleum Coke (Transfer) Surge Bin Feeder
Baghouse I.D. 461-BF650	Coal (Transfer) / Surge Bin (Feeder)
Baghouse I.D. 461-BF350	Coal Mill Feed

* This emissions unit discharges to the common (main) stack. The Clinker Cooler which is limited to 10% opacity, discharges to the common (main) stack and therefore determines the opacity limit for this emissions unit. Total PM/PM_{10} emissions from Pyroprocessing/Raw Mill/Coal Mill Systems shall not exceed 117 and 99 TPY respectively. [Permits 0250020-017-AC and 0250020-019-AC]

All of the above process emissions units are subject to 40 CFR 60, Subpart Y, NSPS for Coal Preparation Plants, except units solely engaged in processing, handling or storage of petroleum coke.

Operational Requirements

1. Hours of Operation: This emissions unit system is allowed to operate 8,760 hours per year. [Permit 0250020-017-AC]

2. Coal/Petroleum Coke Maximum Usage: The maximum combined usage of coal and petroleum coke is 30 TPH on a 24-hour block average and 263,000 TPY. The maximum petroleum coke usage rate shall not exceed 20 TPH on a 24-hour block average. Daily records of usage must be kept on site and retained for a minimum of 5 years. [Permit 0250020-017-AC]

Emissions Limitations, Test Methods and Performance Standards

3. Visible Emissions Limits: Visible emissions are limited to 5 percent from each of the above listed baghouses, except for the coal mill main baghouse 461-BF500. Compliance shall be demonstrated by EPA Reference Method 9 and the procedures specified in 40 CFR 60.11.

   For the coal mill main, baghouse 461-BF500, the opacity shall not exceed 10%. Compliance shall be demonstrated pursuant to EPA Reference Method 9. Annual emissions of PM_{10} for the kiln/cooler/coal mill main stack shall not exceed 99 TPY.

   {Note: The applicant advised that the baghouses are designed to control particulate emissions to 0.0095 grains/dry standard cubic foot (gr/dscf) and to 0.01 grains/actual cubic foot (gr/acf) (for baghouses 461-BF300; 461.BF350). The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM_{10} for all emission points in this emission unit system will be less than 3.10 TPY. This annual emission estimate is part of the facility-wide netting calculation to escape PSD applicability for PM/PM_{10}. Exceedance of the 5% opacity

limit shall be deemed an exceedance of this permit condition and not necessarily an exceedance of the opacity limitations given in 40 CFR 60, Subpart Y}

[Permits 0250020-017-AC and 0250020-019-AC; 40 CFR 60, Subpart Y; Rules 62-297.620(4); 40 CFR 63.1348]

4. Particulate and Fugitive Emissions: Particulate and fugitive emissions from coal handling facilities shall be minimized by following the procedures listed below:
   a. All conveyers and transfer points shall be enclosed or covered to preclude particulate emissions (except those directly associated with coal stacking/reclaiming).
   b. Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion.
   c. Water sprays or chemical wetting agents and stabilizers shall be applied to storage piles, handling equipment, etc., during dry periods as necessary to all facilities to maintain an opacity of less than 20 percent at the property line for fugitive emission sources.

   [Permits 0250020-017-AC; Rule 62-296.320(4)(c), F.A.C.]

Test Procedures, Recordkeeping and Additional Requirements

5. Common and General Conditions: This emissions unit is subject to all applicable requirements of the attached Appendices, made part of the permit.

Subsection G. Facility Fugitive Emissions

This subsection addresses the following emissions units

ARMS Emissions Unit No.	Brief Description of Emissions Unit and/or Activities
031	Facility-wide particulate matter fugitive emissions from miscellaneous activities, such as truck operations throughout the facility, wind erosion, etc. Fugitive Emissions – Transportation, Miscellaneous Transfers, and Storage

Unregulated Emissions Units and/or Activities: An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

Vehicular traffic and coal, petcoke, and raw material transfer points generate fugitive PM emissions from the handling, transfer, and storage between the unloading areas and the storage building. The activities are listed in the following table:

Activity	Description	Estimated Emissions (PM and PM_{10})*
Coal Handling	Drop Operations	0.17 and 0.059 TPY
Coal Handling	Vehicular Traffic	6.9 and 2.4 TPY
Raw Material Blending	Drop Operations	1.6 and 0.6 TPY
Raw Material Blending	Vehicular Traffic	14 and 4.9 TPY
Total Quantifiable Emissions	Fugitive Emissions	23 and 8 TPY

* The estimates given were included in calculations by the applicant demonstrating that the modernization and production increase projects related to the cement plant do not trigger PSD. It is not practicable to actually measure the emissions directly. Reasonable assurance that these emissions are controlled to the levels given above is by adherence to the Reasonable Precautions listed below.

[Permits 0250020-017-AC]

1. Reasonable Precautions for Emissions of Unconfined Particulate Matter: This facility is subject to applicable requirements of Rule 62-296.320(4)(c)1, 2, 3, & 4, F.A.C. Refer to Appendix CG: Common and General Conditions.

2. Additional Reasonable Precautions for Emissions of Unconfined Particulate Matter: Pursuant to Rule 62-296.320(4)(c)2, F.A.C, the permittee shall implement the following additional reasonable precautions at this facility:

   Personnel

   a. Aggregate and material handling personnel, their supervisors, and environmental personnel, shall be trained in visible emissions, permit conditions related to fugitive emissions, and the Best Management Practices developed by Titan to implement the Fugitive Dust Improvement Plan under Construction Permit 0250020-017-AC.

   b. Personnel shall be trained on proper operation of wet-dry sweeper and water trucks. Training shall include but not be limited to speed, nozzle operation, and cleaning patterns around the plants that comprise the facility.

Roads

The permittee shall:

c. Continue to identify areas where the installation of speed bumps would be beneficial in reducing vehicular speed and fugitive emissions.

d. Continue cleaning and maintaining paved road surfaces, which includes removing silt build-up, repairing all potholes, sweeping on a daily basis and utilizing a water truck to control visible emissions.

e. Continue to maintain dedicated berm areas that have been established throughout the facility to further reduce wind erosion from ground areas.

f. Operate the sprinkler system, as needed, to reduce dust along the aggregate road between the pits and the raw materials storage building and other areas of the facility.

g. Maintain and continuously improve the main entrance by establishing green areas between the security gate and the main facilities.

Materials

h. To the extent feasible, raw materials and fuels for the cement facility will be stored inside the raw material building. Outside material storage will be maintained to control fugitive emission from all raw material and fuels. All material within the raw material building will be moved by stacker/reclaimer and covered conveyor belts.

i. All conveyors are to be enclosed on at least three sides.

j. The facility shall continue to maintain the clinker production area and continue to implement a cleaning process inside buildings to minimize dust emitted to the outside environment.

k. Unloading and reclaiming of materials will be curtailed during windy or dry conditions.

l. Raw materials will be managed to minimize their time in storage.

Trucks

m. All trucks leaving the aggregate facility will be required to dewater and drive through the tire wash system.

n. Titan America/Tarmac will work with all transport companies to further educate drivers in the Florida Department of Transportation requirements that all loads be tarped prior to leaving the facility.

o. All trucks traveling within the cement facility should stay on asphalt or concrete surfaces. All road surfaces outside of the aggregate facility shall be constructed of concrete and/or asphalt.

[Rule 62-296.320(4)(c)2.,F.A.C., Rule 62-4. 070(3)F.A.C., Application received April 18, 2005 and, Fugitive Dust Improvement Plan dated August 19, 2005]

3. Fugitive Dust Improvement Plan - Appendix CP-1: The owner or operator shall complete the Fugitive Dust Improvement Plan described within the Compliance Plan under Appendix CP-1 that is part of this permit. The permittee shall submit quarterly progress reports to include a status report on the action implemented. The first quarterly report was submitted in January 2006. The updates shall be submitted every 3 months thereafter for a two-year period. The progress reports shall be submitted to the Compliance Authority (Miami-Dade County DERM).

4. Unconfined Emissions of Particulate Matter: Refer to Section II, Specific Condition No. 7.

Subsection H. Aggregate Plant

This subsection addresses the following emissions units.

ARMS Emissions Unit No.	Brief Descriptions of Emissions Units
022	Nonmetallic Mineral Processing Plant Equipment and Operations at the Aggregate Plant Subject to 40 CFR 60, Subpart OOO
023	Nonmetallic Mineral Processing Plant Equipment and Operations at the Aggregate Plant NOT Subject to 40 CFR 60, Subpart OOO

This Subsection covers raw materials processing (limestone & overburden) from the quarry up to the raw materials storage. The quarry and its associated processing plant have been in operation since 1960 and consist of nonmetallic mineral processing operations such as crushing, screening, conveying, storage, and rail and truck loadout operations. The above emissions unit (EU 022) also includes an aggregate plant, that is adjacent to the portland cement manufacturing plant.

At least two construction permits directly related to these two units have been issued. They are permit AC13-234568, issued by the Florida Department of Environmental Protection on November 18, 1993 and Permit 0250020-012-AC, issued by the DERM on January 25, 2002.

{Permitting Note: Table 1, Emissions Unit Identification & Summary of Air Pollutant Standards for the Nonmetallic Mineral Processing Plant (E.U. ID Nos. 022 and 023), contains a list of equipment units and their corresponding air pollutant standards, it also summarizes maximum visible emissions standards. An affected facility in fixed or portable nonmetallic mineral processing plant is each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railroad loading station. The information contained in the table is for convenience purposes only and does not supersede any of the terms or conditions of this permit}

Regulations and Requirements

1. Emissions unit (E.U. 022) shall comply with all applicable requirements contained in the attached Appendix OOO: 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants; and the attached Appendix A: 40 CFR 60, Subpart A – NSPS, General Provisions. The term "Administrator" when used in 40 CFR 60 shall mean the Secretary or the Secretary's designee.

Essential Potential to Emit (PTE) Parameters

2. Permitted Capacity:
   a. The processed raw material throughput is limited to 1,213,333 tons per month and 14,560,000 tons in any consecutive 12-month period. See Table 1 of this subsection for the capacity of each component of the nonmetallic mineral processing plant equipment.
   b. For testing purposes, the maximum throughput is 2,000 tons per hour.

   [Permit 0250020-012-AC; Rule 297.310(2)(b), F.A.C.; Rule 62-210.200, F.A.C. (Definitions, Potential to Emit), and Rule 62-4.070(3), F.A.C., Reasonable Assurance for Specific Condition 4 and to net out of PSD]

3. Hours of Operation: The referenced emissions unit(s) may operate continuously (8760 hours per year). [Permit 0250020-012-AC]

Emissions Limitations and Standards

4. Particulate Matter Limitations: The maximum allowable particulate matter emissions are 35.4 TPY of PM and 14 TPY of PM_{10}. [Permit 0250020-012-AC]

5. Visible Emissions:
   a. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, which exhibit opacity greater than 20 percent. [Rule 62-296.320(4)(b), F.A.C.]
   b. No owner or operator shall cause to be discharged into the atmosphere from any crusher subject to NSPS Subpart OOO, at which a capture system is not used, fugitive emissions which exhibit opacity greater than 15 percent. [40 CFR 60.672(c)]
   c. No visible emissions from wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin. (For those operations/equipment subject to NSPS Subpart OOO.) [40 CFR 60.672(h)(1)]

Test Methods and Procedures

6. Visible Emissions Test Required: During the calendar year prior to expiration of this permit, the owner or operator shall determine compliance with all visible emissions limits on all nonmetallic mineral processing equipment, excluding storage piles. The owner or operator shall use EPA Method 9 and the procedures in 40 CFR 60.11, with the following additions:
   a. The minimum distance between the observer and the emissions unit shall be 4.57 meters (15 feet).
   b. The observer shall, when possible, select a position that minimizes interference from other fugitive emissions units (e.g., road dust). The required observer position relative to the sun (EPA Method 9, Section 2.1) must be followed.
   c. For affected emissions units using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

   [Rules 62-204.800 and 62-4.070(3), F.A.C; and, 40 CFR 60.675(c)(1), (2) & (3)]

7. Change of processing material (Saturated vs. Unsaturated): Any screening operation, bucket elevator, or belt conveyor that process saturated material and is subject to 40 CFR 672(h) and subsequently processes unsaturated material, shall submit a report of this change to the Department within 30 days following change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in 40 CFR 672(b) and the emissions test requirement of 40 CFR 60.11 and 40 CFR 60, Subpart OOO. Likewise a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change to the Department within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emissions limit in 40 CFR 60.672(h). [40 CFR 60.676(g)]

8. Annual Operating Report Supplemental Information: Annual-operating reports for the emissions units covered under this permit subsection shall include the following supplemental information that was recorded in the previous calendar year:
   - The amount of material processed on a monthly basis; and
   - A consecutive 12-month total of the amount of material processed, calculated from the monthly totals for the previous twelve calendar months.

   [Rule 62-4.070(3), F.A.C.]

Reporting for Replacement of Facilities at Nonmetallic Mineral Processing Plants

9. Replacement Exemption: When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in 40 CFR 60.671, having the same function as the existing facility, the new facility is exempt from provisions of 40 CFR 60.672 (standards for particulate matter), 40 CFR 60.674 (Monitoring of operations), and 40 CFR 60.675 (Test methods and procedures). Reconstruction costs shall be calculated per 40 CFR 60.673. [40 CFR 60.670(d)(1)]

10. Replacement Not Exempted: Replacing all existing facilities in a production line with new facilities does not qualify for the exemption described above. [40 CFR 60.670(d)(3)]

11. Exemption Requirements: When seeking exemption, the permittee shall submit the following information to the DERM, Air Facilities Section, postmarked 60 days or as soon as practicable before the change is commenced and shall include the expected completion date of the change(s), as well as the following information:

    The required information shall be submitted for both the existing facility that was replaced, and the replacement equipment.

When Replacing....	Required Information	Rule Reference
a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station	Rated capacity in tons per hour; Model and Serial Numbers	40 CFR 60.676(a)(1)
a screening operation	The total surface area of the top screen; Model and Serial Numbers	40 CFR 60.676(a)(2)
a conveyer belt	The width of the belt	40 CFR 60.676(a)(3)
a storage bin	The rated capacity in tons	40 CFR 60.676(a)(4)

    [40 CFR 60.7 and 40 CFR 60.676(a)]

12. Replacement Prohibition: The permittee shall not replace any facility covered under this permit subsection with a piece of equipment of larger size or different function without applying for, and receiving, a modification of this permit to allow such replacement, unless this requirement is specifically waived in writing by the DERM, Air Facilities Section. [40 CFR 60.670]

13. Unconfined Emissions of Particulate Matter: Refer to Section II. Specific Condition 7. [Rule 62-296.320 (4)(c) (2), F.A.C.; 40 CFR 60.670; Permit No. AC13-234568]

14. Facility Common and General Conditions: This emissions unit is subject to all applicable requirements of the attached Appendices, made part of the permit.

15. Aggregate Plant Reasonable Precautions. The following shall constitute additional reasonable precautions to control Unconfined Emissions of Particulate Matter for this plant:

    a. Paved parking and trafficked areas shall be maintained and kept free of particulate matter build-up.

    b. Sprinkling with water shall be used as necessary on paved areas and stockpiles.

    [Rule 62-296.320 (4)(c) (2), F.A.C.; 40 CFR 60.670; Permit No 0250020-012-AC issued 1/25/02, Permit No. AC13-234568 issued 11/18/93]

Subsection I. Concrete Block Plant

This subsection addresses the following emissions unit.

ARMS Emissions Unit No.	Brief Description of Emissions Unit
024	Concrete Block Plant

Operational Requirements

1. Permitted Capacity: The maximum hourly production for the concrete block plant shall not exceed 5,500 blocks per hour, approximately 96 tons per hour of concrete block. [Permit No. 0250020-014-AC]

2. Hours of Operation: The Concrete Block Plant shall not exceed 6,240 hours of operation per year. The permittee shall keep a daily log of the number of hours of operation. [Permit 0250020-014-AC]

3. Plant Design: The concrete block plant consists of three Aggregate Storage Silos with Weigh Hoppers, and two Cement Storage Silos. Each Cement Storage Silo has two Baghouses, a Mixer, and a Weigh Hopper with Baghouse. A total of five baghouses are associated with the Concrete Block Plant. The baghouses have the following design specifications:

Source I.D.	Visible Emissions*	Manufacturer	Model No.	Number of Cartridges	Flow Rate (acfm)	Cloth Area (ft^2)	Air-to-Cloth Ratio
Cement Silo #1	5% Initial/Annual	C & W Mfg.	CP-310 [2 units]	4	1600	304	5.3
Cement Silo #2	5% Initial/Annual	C & W Mfg.	CP-310 [2 units]	4	1600	304	5.3
Weigh Hopper #1	5% Initial/Annual	C & W Mfg.	CP-100 [1 unit]	1	400	110	4.0
Weigh Hopper #2	5% Initial/Annual	C & W Mfg.	CP-100 [1 unit]	1	400	110	4.0

*Emissions from enclosed storage and conveying equipment shall not exceed 5 %.

[Permit 0250020-014-AC; Rule 62-296.414(1) F.A.C.]

Emissions Limits, Test Methods and Reasonable Precautions

4. Visible Emissions (VE) Limit: Visible emissions limits for the baghouses shall not exceed 5% as stated above.

5. Test Procedures: All emissions tests performed on the Concrete Block Plant shall comply with the following requirements:
   a. The test Method for visible emissions shall be EPA Method 9.
   b. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
   c. Visible emissions tests of silo dust collector exhaust points shall be conducted while loading the silo at a rate that is representative of the normal silo loading rate. The minimum loading rate shall be 25 tons per hour unless such rate is unachievable in practice. If emissions from the weigh hopper (batcher) operation are also controlled by the silo dust collector, then the batching operation shall be in operation during the visible emissions test. The batching rate during the emissions test shall be representative of the normal batching rate and duration. Each test report shall state the actual silo loading rate during emissions testing and, if applicable, whether or not batching occurred during emissions testing.

d. If emissions from the weigh hopper (batcher) operation are controlled by a dust collector which is separate from the silo dust collector, visible emissions tests of the weigh hopper (batcher) dust collector exhaust point shall be conducted while batching at a rate that is representative of the normal batching rate and duration. Each test report shall state the actual batching rate during emissions testing.

e. Each dust collector exhaust point shall be tested for a minimum of 30 minutes or, if the operation is normally completed within less than 30 minutes and does not recur within that time, the test shall last for the length of the loading operation.

[Rules 62-296.414(3)F.A.C., and 62-297.310(4)(a), F.A.C.; Permit No. 0250020-014-AC]

6. Annual Testing: Each dust collector exhaust point shall be tested annually for compliance with the visible emissions limiting standard of Rule 62-296.414 (1) F.A.C.
[Rule 62-296.414(1), F.A.C., Permit No. 0250020-014-AC]

7. Unconfined Emissions of Particulate Matter: Refer to Section II, Specific Condition N. 7.
[Rule 62-296.414(2), F.A.C., Rule 62-296.320(4)(c), F.A.C., Permit No. 0250020-014-AC]

8. Concrete Block Plant Reasonable Precautions. The permittee shall take reasonable precautions to control unconfined emissions from hoppers, storage and conveying equipment, conveyor drop points, truck loading and unloading, roads, parking areas, stock piles, and yards as required by Rule 62-296.320 (4) F.A.C. The following shall constitute additional reasonable precautions to control Unconfined Emissions of Particulate Matter for this plant:

   a. Reduction of stock pile height or installation of wind breaks to mitigate wind entrainment of particulate matter from stock piles.

   b. Use of spray bar, chute, or partial enclosure to mitigate emissions at the drop point to the truck.

   [Rule 62-296.414(2), F.A.C.; Permit No. 0250020-014-AC issued 9/20/02]

Test Procedures, Recordkeeping and Additional Requirements

9. Common and General Conditions: This emissions unit is subject to all applicable requirements of the attached Appendices, made part of the permit.

Subsection J. Concrete Batch Ready Mix Plant

This subsection addresses the following emissions unit.

ARMS Emissions Unit No.	Brief Description of Emissions Unit
025	Two Concrete Batch Ready Mix Plants

Operational Requirements

1. Compliance Plan: The applicant may operate both concrete batch ready mix plants subject to the additional terms in the attached Compliance Plan in Appendix CP-1.
2. Permitted Capacity: The maximum hourly production rate of each plant shall not exceed 243.75 tons per hour, approximately 130 cubic yard/hr. [Permit AC13-158138, Applicant' Request November 14, 2006]
3. Hours of Operation: These plants emissions units may operate continuously, i.e., 8,760 hours per year. [Requested by applicant November 14, 2000]
4. Plants Design: The Ready Mix Plants have a total of six storage silos, one of which is a split silo. Emissions are controlled by dust collectors. The two weigh hoppers' emissions are controlled by separate dust collectors. The baghouses have the following design specifications:

Source I.D.	Visible Emissions*	Manufacturer	Model No.	Flow Rate (acfm)	Cloth Area (ft^2)	Air-to-Cloth Ratio
Cement/Flyash Silo No. 1	5% Initial/Annual	C&W Mfg.	CP-310	1,600	267	6.0
Cement/Flyash Silo No. 2	5% Initial/Annual	C&W Mfg.	CP-310	1,600	304	5.3
Cement/Flyash Silo No. 3	5% Initial/Annual	C&W Mfg.	CP-310(2)	1,600	267	6.0
Cement/Flyash Silo No. 4	5% Initial/Annual	C&W Mfg.	CP-340	1,800	267	6.7
Cement Silo No. 5 – Left	5% Initial/Annual	C&W Mfg.	CP-310	1,600	267	6.0
Cement Silo No. 5 – Right	5% Initial/Annual	C&W Mfg.	CP-310	1,600	267	6.0
Cement/Fly ash Silo No. 6	5% Initial/Annual	C&W Mfg.	CP-310(2)	1,600	267	6.0
Weigh/Loadout No. 1	5% Initial/Annual	C&W Mfg.	KR-1100	6,500	912	7.1
Weigh/Loadout No. 2	5% Initial/Annual	Vince Hagen	VH-1083-JP	6,500	1083	6.0

* Rule 62-296.414 (1) F.A.C.

Emissions Limits, Test Methods and Reasonable Precautions

5. Visible Emissions (VE) Limit and Test Method: Visible emissions limits for the baghouses shall not exceed 5% as stated above. EPA Method 9 shall be used to test for compliance with the VE emissions limits. Annual test shall meet the requirements of Chapter 62- 297. F.A.C. [Rule 62-4.070 (3)F.A.C]

6. Unconfined Emissions of Particulate Matter: Refer to Section II, Specific Condition N. 7.
[Rule 62-296.414(2), F.A.C., Rule 62-296.320(4)(c), F.A.C., Permit No. AC13-158138]

7. Ready Mix Plants Reasonable Precautions: The following shall constitute additional reasonable precautions to control Unconfined Emissions of Particulate Matter for these plants:
   a. Paved parking and trafficked areas shall be maintained and kept free of particulate matter build-up.
   b. Sprinkling with water shall be used as necessary on paved areas and stockpiles.
   c. Return concrete material shall be confined to the area around the industrial wastewater system.

   [Rule 62-296.414(2), F.A.C.; Permit No. AC13-158138 issued 5/18/1989]

Test Procedures, Recordkeeping and Additional Requirements

8. Common and General Conditions: This emissions unit is subject to all applicable requirements of the attached Appendices, made part of the permit.

General Requirements

This Section addresses the following emissions unit(s), emissions unit systems, and the regulations to which they are subject which are contained in the Appendices listed in the Placard Page and attached as part of the permit.

ARMS Emissions Unit No.	Brief Description of Emissions Units
010	Cement Plant Finish Mill System: Finish Mill No. 1
011	Cement Plant Finish Mill System: Finish Mill No. 2
012	Cement Plant Finish Mill System: Finish Mill No. 3
013	Cement Plant Finish Mill System: Finish Mill No. 4
030	Cement Plant Finish Mill System: Finish Mill No. 6
014	Cement Handling System: Cement Storage Silos. 1 through 12
015	Cement Handling System: Cement Distribution, Rail and Truck Loadout
016	Cement Handling System: Cement Packhouse
022	Nonmetallic Mineral Processing Plant Equipment and Operations at the Aggregate Plant Subject to 40 CFR 60, Subpart OOO
023	Nonmetallic Mineral Processing Plant Equipment and Operations at the Aggregate Plant NOT Subject to 40 CFR 60, Subpart OOO
024	Concrete Block Plant
025	Two Concrete Ready Mix Plants
026	Cement Plant Coal Handling System
027	Cement Plant Clinker Handling and Storage System
028	Cement Plant Pyroprocessing/Raw Mill System
029	Cement Plant Raw Material Handling System
031	Facility Fugitive Emissions: Unregulated Emissions Units and/or Activities

1. All of the listed emission units (except emissions units 022, 023, 024, 025 and 031) have at least one component that is subject to 40 CFR 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The listed emission units shall comply with Subpart LLL only to the extent that the regulations apply to the facility or its operations.

2. Some of the listed cement plant emission units have at least one component that was subject to 40 CFR 60, Subpart F - Standards of Performance for Portland Cement Plants (NSPS) when originally constructed. The listed emission units shall comply with Subpart F only to the extent that the applicable Subpart F requirements were not subsumed by 40 CFR 63, Subpart LLL. Specifically, 40 CFR 63.1356 exempts units from compliance with NSPS Subpart F if they are complying with NESHAP Subpart LLL.

3. The listed emission units shall comply with 40 CFR 60 Subpart A, General Provisions and 40 CFR 63, Subpart A, General Provisions only to the extent that the requirements apply to the facility or its operations.

4. Emissions Unit 026 is subject to 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants as applicable.

5. Emissions Unit 022 is subject to 40 CFR 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

6. Source Obligation: If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it.

   [Rule 62-212.400 (12) (b) F.A.C.]

   {This facility modification avoided preconstruction review pursuant to Paragraph 62-212.400, F.A.C., except for CO, by taking federally enforceable limitations on the capacity to emit certain criteria pollutants from each of the emission units listed above. Refer to PSD-FL-360/ 0250020-017-AC and 0250020-019-AC .}

The Department adopted the provisions of the referenced NSPS and NESHAPS regulations from 40 CFR 60 and 40 CFR 63, respectively by reference into Rule 62-204.800, F.A.C. The provisions of these regulations are included in this permit as attached Appendices.

{Permitting Note: The numbering of the original rules has been preserved for ease of reference to the rules. The term "Administrator" when used in 40 CFR 60 shall mean the Secretary or the Secretary's designee.}

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