

FINAL DETERMINATION

File No. 0250020-016-AC

Titan America Pennsuco Cement Plant Medley, Miami-Dade County

On April 6, 2005, the Florida Department of Environmental Protection (Department) distributed an "Intent to Issue Air Construction Permit" for the re-issuance of Permit 0250020-010-AC for the Titan America's Pennsuco Cement Plant located at 11000 NW 121 Way, Medley, in Miami-Dade County. The package included one copy of the Department's draft air construction permit, the "Intent to Issue Air Construction Permit," the "Technical Evaluation and Preliminary Determination," and the "Public Notice of Intent to Issue Air Construction Permit."

The applicant published the "Public Notice" in the Miami Herald on April 25, 2005 and provided proof of publication to the Department on May 12, 2005.

On April 28, 2005, the Department received from the applicant's consultant, verbal comments. These comments were insignificant and related to the design specifications of the baghouses and other minor modifications to the permit. The Department did not receive comments from the public or any other agencies.

The Department (DEP) accepted Titan's verbal comments (later sent by e-mail) and updated the final permit as requested. However, DEP rejected the request to eliminate the sulfuric acid mist (SAM) emissions limit, due to the fact that SAM is a PSD pollutant and was considered in the previous review (0250020-010-AC) that exempted this facility from PSD requirements.

CONCLUSION

The Department will issue the final permit with the new information for the design specifications of the baghouses and the minor changes submitted by the applicant.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

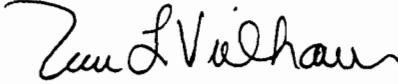
In the Matter of an
Application for Air Construction Permit by:

| | |
|--|---|
| Mr. Hardy Johnson President, Florida Division Tarmac America, LLC 445 Fairway Drive Deerfield Beach, Florida 33441 | DEP File No. 0250020-016-AC Titan America Pennsuco Cement Plant Modernization Re-issuance and Modification of Air Construction Permit Miami-Dade County, Florida |
|--|---|

Enclosed is Final Permit Number 0250020-016-AC. This permit is a re-issuance and modification of Air Construction Permit 0250020-010-AC issued on May 1, 2001 for the modernization of the Titan America Pennsuco Cement Plant. This air construction permit reflects the final configuration and operating parameters of baghouses, finish mills and the coal mill. This permit also revises the particulate matter (PM) air pollutant emissions without triggering the requirements of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.


Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

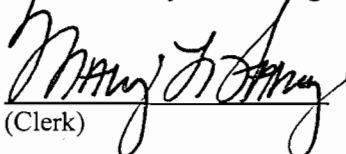
The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 5/31/05 to the person(s) listed:

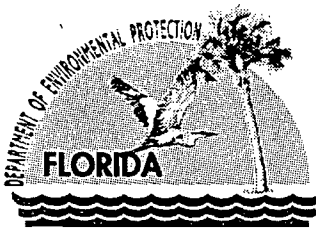
Hardy Johnson, Tarmac America*
Scott Quaas, Tarmac America
David A. Buff, P.E., Golder

Patrick Wong, DERM
EPA Region 4

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to §120.52, Florida Statutes,
with the designated Department Clerk, receipt of
which is hereby acknowledged.


(Clerk) 5/31/05
(Date)



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

PERMITTEE:

Titan America
455 Fairway Drive
Deerfield Beach, Florida 33441

Authorized Representative:

Hardy Johnson, President
Florida Division, Tarmac America

| | |
|------------|--|
| Permit No. | 0250020-016-AC |
| Project: | Pennsuco Cement Plant Modernization Permit Re-issuance and Modification |
| SIC: | 3241 Cement, Hydraulic |
| Expires: | October 31, 2005 |

PROJECT AND LOCATION:

Re-issuance and modification of Air Construction Permit 0250020-010-AC issued on May 1, 2001 for modernization of the Titan America Pennsuco Cement Plant. This air construction permit reflects the final configuration and operating parameters of baghouses, finish mills and the coal mill. This permit also revises the particulate matter (PM) air pollutant emissions for several baghouses without triggering the requirements of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.


The Titan America Pennsuco Cement Plant is located at 11000 NW 121 Way, Medley, Dade County. UTM coordinates are Zone 17; 562.8 km E; 2861.7 km N.

STATEMENT OF BASIS:

This air construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to construct/operate the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached appendix and documents made a part of this permit:

| | |
|-----------------------|---|
| Appendix GC | Construction Permit General Conditions |
| Permit 0250020-010-AC | Construction Permit issued on May 1, 2001 |


 Michael G. Cooke, Director
 Division of Air Resource
 Management

SECTION I. GENERAL INFORMATION

FACILITY DESCRIPTION

This facility consists of a dry process portland cement manufacturing plant which includes a coal handling system; raw feed system; kilns; coolers; finish mills; clinker and cement storage and handling systems; and a cement distribution system. The facility also consists of a non-metallic mineral processing plant, and ready-mix concrete block and batch plants, located adjacent to the portland cement manufacturing plant.

EMISSIONS UNITS

This permit addresses the following emissions units. Emission Units shown as stricken-through are no longer permitted to operate.

| EMISSION UNIT NO. | | EMISSION UNIT DESCRIPTION |
|-----------------------|-----------------------|---|
| Permit 0250020-016-AC | Permit 0250020-010-AC | |
| 010 | - | Finish Mill No. 1 |
| 012 | 003 | Finish Mill No. 3 |
| 013 | 003 | Finish Mill No. 4 |
| 014 | 004 | Cement Storage Silos 1 through 12 |
| 015 | 004 | Cement Distribution, Rail and Truck Loadout |
| 016 | 004 | Cement Packhouse |
| 026 | 001 | Coal Handling System |
| 027 | 002 | Clinker Handling and Storage |
| 028 | 005 | Raw Mill and Pyroprocessing System |
| 029 | 006 | Raw Material Handling |
| 030 | 003 | Finish Mill No. 6 |
| 031 | | Unregulated Emissions Units |

REGULATORY CLASSIFICATION

Because potential emissions of at least one regulated pollutant exceed 100 tons per year, the existing facility is a Title V Source and major source of air pollution in accordance with Chapter 62-213, F.A.C. Regulated pollutants include pollutants such as nitrogen oxides (NO_x), particulate matter (PM/PM₁₀), and sulfur dioxide (SO₂).

The facility is a portland cement plant which is one of the 28 Major Facility Categories listed in Table 212.400-1 of Section 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) of Air Quality. Potential emissions of at least one regulated pollutant exceed 100 tons per year. Therefore, the facility is classified as a Major Facility with respect to the PSD Regulations.

In addition, this facility is a major source of hazardous air pollutants (HAPs), based upon potential emissions of hydrogen chlorides.

RELEVANT DOCUMENTS

The construction permit application 0250020-016-AC was received March 4, 2004. The last additional application information was received on February 8, 2005.

Other relevant documents include the applications, additional information and technical evaluations for Air Construction Permits 0250020-008-AC and 0250020-010-AC related to the modernization of the Pennsuco Cement Plant.

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

This permit supersedes construction permit 0250020-010-AC, dated May 1, 2001. The specific conditions of the attached air construction permit 0250020-010-AC are incorporated into this air construction permit except for the changes indicated in each of the sections that follow.

Section II, Facility-Wide Specific Conditions A.1 through A.33 in Permit 0250020-010-AC dated May 1, 2001 are adopted in their entirety except for the amendments shown below:

1. Permitting Authority:

For this permit, the permitting authority is the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, and phone number (850)488-0114.

2. Completion of Construction: The permit expiration date is October 31, 2005.

3. Application for Title V Permit Revision: The Applicant's Title V Renewal application due April 25, 2005 shall include all operations described in this air construction permit.

4. Permanent Shut Down of Certain Equipment: The following equipment has been permanently shut down or was never built, or never operated. It shall remain permanently shut down as a condition of the operation of the plant modernization and operation of Kiln No. 5 and associated equipment.

- Kilns 1, 2, 3, and 4
- Coolers 1, 2, 3, and 4
- Finish Mills 2 and 5
- All slag dryers
- Insufflation of cement kiln dust

[Applicant Request. Section 62-212.400, F.A.C. To Avoid Exceeding Significant Emissions Rates]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Section III, Emission Units Specific Conditions B.0 through B.33 in Permit 0250020-010-AC dated May 1, 2001 are adopted in their entirety and modified as shown below:

- B.0. These emissions unit shall comply with the 40 CFR 63 Subpart LLL – National Emissions Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry for Major Sources of HAPs; and 40 CFR 63, Subpart A - General Provisions for Subpart LLL - Portland Cement Plants.

EMISSIONS UNIT NO. 026 – COAL HANDLING SYSTEM

Operational Requirements

- B.1 Hours of Operation: These process units may not operate in excess of 7,884 hours per year except the railcar fuel dump hopper, coal and petcoke feed bins and transfer equipment (and baghouses 461.BF130 and 461.BF230) which may not exceed 4,000 hours per year. The coal mill may be operated for 400 of its allowed 7,884 hours per year when the Kiln/Cooler/Raw Mill is not operating.

[Applicant request; Permit 0250020-010-AC]

- B.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 190,000 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.

[Rule 62-210.200 & 62-4.070(3) F.A.C., Applicant request; Permit 0250020-010-AC; Rule 62-4.070(3), F.A.C.]

- B.3 Particulate and Fugitive Emissions: Particulate and fugitive emissions from coal handling facilities shall be minimized by following the procedures listed below:

- (1) All conveyers and transfer points shall be enclosed or covered to preclude particulate emissions (except those directly associated with coal stacking/reclaiming).
- (2) Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion.
- (3) 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.

[Rule 62-296.320(4)(c), F.A.C.; 62-4.070(3); Permit 0250020-010-AC]

Emissions Limitations and Performance Standards

- B.4 Design Specifications and Particulate Matter Emissions Limits:

- a. The baghouses for the coal handling system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits listed in the following table:

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

| Coal Handling System Process Unit | Baghouse ID Manufacturer Model No. | Grain Loading Limit (gr/dscf) | Flow Rate acfm (dscfm) | Cloth Area (ft ²) | Air to Cloth Ratio | PM/PM ₁₀ Emissions Limits | |
|--|---------------------------------------|-------------------------------|------------------------|-------------------------------|--------------------|--------------------------------------|-------|
| | | | | | | (lb/hr) | (TPY) |
| Dump Hopper (Transfer) | 461-BF130 FLS Airtech 36TAX10FM | 0.0095 | 1400 (1339) | 469 | 3.0:1 | 0.11 | 0.22 |
| Conveyors (2) (Transfer) & Coal and Petroleum Coke Feed Bins | 461-BF230 FLS Airtech 36TAX10FM | 0.0095 | 1400 (1339) | 469 | 3.0:1 | 0.11 | 0.22 |
| Coal Mill * | 461-BF300 FLS Airtech 73SSX12 | 0.01 | 54,500 (45,245) | 13855 | 3.9:1 | 3.88 | 0.78 |
| Coke/Petroleum Coke (Transfer) Surge Bin (Feeder) | 461-BF750 FLS Airtech 800/7 | 0.0095 | 294 (243) | 75 | 3.9:1 | 0.02 | 0.08 |
| Coal (Transfer) Surge Bin (Feeder) | 461-BF650 FLS Airtech 800/7 | 0.0095 | 294 (243) | 75 | 3.9:1 | 0.02 | 0.08 |
| Coal Mill Feed | 461.BF350 | 0.01 | 5,500 (5,261) | 1575 | 3.5:1 | 0.45 | 1.78 |
| Total | | | | | | 4.59 | 3.15 |

*The emission limit of 0.125 lb/ton of dry clinker for the Main Stack for the Raw Mill and Pyroprocessing includes emission from the Coal Mill which are also vented to the atmosphere through the Main Stack. So that Tarmac may operate the coal mill when the Raw Mill and Pyroprocessing are down, 400 hours of emissions (0.78 TPY) from the Coal Mill operating alone are included here. The emissions associated with the additional 7484 hours of operation for the coal mill are included with the potential emissions for the Main Stack.

- b. All of the above process units, except for the dump hopper with baghouse 461-BF130, are subject to 40 CFR 60, Subpart Y, NSPS for Coal Preparation Plants.
- c. The pending information listed in this table will be submitted to the DERM Air Facilities Section-within 30 days of issuance of this final permit.
- d. Initial and annual compliance testing requirements for PM emissions from all emissions points listed above, except 461-BF300 serving the Coal Mill, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.

[Rule 62-297.620(4), F.A.C.; Permit 0250020-010-AC; Applicant request to Escape BACT]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

B.5 Coal Handling Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|--|-------------------------|--|--|
| Dump Hopper (Transfer) | 461-BF130 | 20% with PM testing 5% w/out PM testing | Rule 62-296.320(4)(b)1, F.A.C. Rule 62-297.620(4), F.A.C. |
| Conveyors (2) Coal & Petroleum Coke Feed Bins (shared with conveyors) | 461-BF230 | 20% with PM testing 5% w/out PM testing | 40 CFR 60, Subpart Y Rule 62-297.620(4), F.A.C. |
| Coal Mill Dust Collector* | 461-BF300 | 10% | 40 CFR 63.1345 |
| Coke/Coal Surge Bins | 461-BF750 | 20% with PM testing 5% w/out PM testing | 40 CFR 60, Subpart Y Rule 62-297.620(4), F.A.C. |
| | 461-BF650 | 20% with PM testing 5% w/out PM testing | 40 CFR 60, Subpart Y Rule 62-297.620(4), F.A.C. |
| Coal Mill Feed | 461.BF350 | 20% with PM testing 5% w/out PM testing | 40 CFR 60, Subpart Y Rule 62-297.620(4), F.A.C. |

Note: *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. [40 CFR 63.1345(a)(2)]

EMISSIONS UNIT NO. 027 – CLINKER HANDLING & STORAGE SYSTEM

Operational Requirements

B.6 Hours of Operation: These process units may not operate in excess of the following:

| Process Unit | Baghouse ID No. | Hours Per Year |
|--|------------------------|-----------------------|
| Clinker Silos 21-23 & 26-28 | F633 | 8,760 |
| Clinker transfer conveyors from cooler | 441.BF540 | 7,884 |
| Clinker Silos | 481.BF140 | 7,884 |
| Clinker Transfer Conveyors | 481.BF540 | 8,760 |
| Clinker Off-spec Bins | 481-BF330 | 8,760 |
| Clinker transfer | 481.BF640 | 8,760 |
| Clinker transfer | 481.BF730 | 8,760 |
| Clinker transfer | 481.BF930 | 8,760 |

[Applicant request; Permit 0250020-010-AC]

B.7 Clinker Handling & Storage Throughput Limits: The clinker handling and storage maximum hourly and annual throughput rates shall not exceed 250 TPH on a 24-hour block average or 1,642,500 TPY, respectively. [Applicant request; Permit 0250020-010-AC; Rules 62-4.070(3)]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Emissions Limitations and Performance Standards

B.8 Design Specifications and Particulate Matter Emissions Limits:

- a. The baghouses for the clinker handling and storage system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

| System Process Units | Baghouse ID Manufacturer Model No. | Grain Loading Limit (gr/dscf) | Flow Rate acfm (dscfm) | Cloth Area (ft ²) | Air to Cloth Ratio | PM/PM ₁₀ Emissions Limits | |
|--|------------------------------------|-------------------------------|------------------------|-------------------------------|--------------------|--------------------------------------|-------|
| | | | | | | (lb/hr) | (TPY) |
| Clinker Silos 21-23 & 26-28 | F633 | 0.01 (gr/acf) | 6,000 | Pending | Pending | 0.51 | 2.25 |
| Clinker Transfer conveyors from cooler | 441.BF540 FLS Airtech 100C10 | 0.0095 | 4,600 (3,421) | 1302 | 3.5:1 | 0.28 | 1.10 |
| Clinker Silos | 481.BF140 FLS Airtech 196C10 | 0.0095 | 12,000 (8,924) | 2552 | 4.7:1 | 0.73 | 2.86 |
| Clinker Transfer Conveyors | 481.BF540 FLS Airtech 100C10 | 0.0095 | 4,700 (3,495) | 1302 | 3.6:1 | 0.28 | 1.25 |
| Clinker Off-spec Bins | 481.BF330 FLS Airtech 100C10 | 0.0095 | 6,100 (4,536) | 1302 | 4.7:1 | 0.37 | 1.62 |
| Clinker transfer | 481.BF640 | 0.0095 | 4,700 (3,495) | 1302 | 3.6:1 | 0.28 | 1.25 |
| Clinker transfer | 481.BF730 | 0.0095 | 18,700 (13,906) | 3958 | 4.7:1 | 1.13 | 4.96 |
| Clinker transfer | 481.BF930 | 0.0095 | 15,000 (11,155) | 3958 | 3.8:1 | 0.91 | 3.98 |
| Total | | | | | | 4.49 | 19.27 |

- b. All the above silos and bins are subject to 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry.
- c. Initial and annual compliance testing requirements for PM emissions from all emissions points listed above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. [Rule 62-297.620(4), F.A.C.]

[Permit 0250020-010-AC; Applicant request to Escape BACT]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

B.9 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| System Process Unit | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|--|------------------|--|--|
| Clinker Silos 21-23 & 26-28 | F633 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Rule 62-297.620(4), F.A.C. |
| Clinker Transfer conveyors from cooler | 441.BF540 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Permit 0250020-010-AC |
| Clinker Silos | 481.BF140 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Permit 0250020-010-AC |
| Clinker Transfer Conveyors | 481.BF540 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Permit 0250020-010-AC |
| Clinker Off-spec Bins | 481-BF330 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Permit 0250020-010-AC |
| Clinker transfer | 481.BF640 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Rule 62-297.620(4), F.A.C. |
| Clinker transfer | 481.BF730 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Rule 62-297.620(4), F.A.C. |
| Clinker transfer | 481.BF930 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Rule 62-297.620(4), F.A.C. |

[Permit 0250020-010-AC; Rule 62-4.070(3), F.A.C.; 40 CFR 63.1348]

EMISSIONS UNITS NOS. 010, 012, 013, and 030 – FINISH MILLS

Operational Requirements

B.10 Hours of Operation: These emissions units may operate continuously, i.e., 7,884 hours per year. [Applicant request received February 8, 2005.]

B.11 Finish Mill Process Rates: The maximum total hourly process rate of cement is 334359.0 TPH on a 24-hour block average. This is a total of the individual process rates listed below:

| Finish Mill | Baghouses | Process Rate (TPH) |
|-------------|---------------------------------------|--------------------|
| No. 1 | F113/F130/F330 | 25 |
| No. 3 | 533.BF340 F-330 / F-332 | 84 |
| No. 4 | F-430 / F-432 / F-603 / F-604 / F-605 | 140 |
| No. 6 | 531.BF01 / 531.BF02 | 110 |
| Total | | 359 |

The owner or operator shall record all hourly process rates, and maintain records for a minimum of 5 years.

[Applicant request received February 8, 2005; Permit 0250020-010-AC; Rules 62-4.070(3); and 62-213.440, F.A.C.]

Emissions Limitations and Performance Standards

B.12 Design Specifications and Particulate Matter Emissions Limits:

- a. The baghouses for the finish mills have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

| Emissions Unit | Baghouse ID Manufacturer Model No. | Grain Loading Limit (gr/acf) | Flow Rate acfm | Cloth Area (ft ²) | Air to Cloth Ratio | PM/PM ₁₀ Emissions Limits | |
|--|--|---------------------------------------|-----------------------------|-------------------------------------|-----------------------|---|-------|
| | | | | | | (lb/hr) | (TPY) |
| Finish Mill No. 1 | F-113 Mikropul 16FF-10-20 | 0.01 | 11,800 | 2,100 | 5.6 | 1.01 | 3.99 |
| Finish Mill No. 1 | F-130 Norblo 468 AMT | 0.01 | 12,000 | 1,977 | 6.1 | 1.03 | 4.05 |
| Finish Mill No. 3 | F-330 Norblo 702 AMT | 0.01 | 20,000 | 9,477 | 2.1 | 1.71 | 6.76 |
| Finish Mill No. 3 | F-332 Norblo 390 AMT | 0.01 | 13,500 | 5,465 | 2.5 | 1.16 | 4.56 |
| Finish Mill No. 3 <i>O-Sepa Cement Separator</i> | 533.BF340 | 0.0095 gr/dscf | 77,800 (65,307 dscfm) | Pending | Pending | 5.32 | 20.96 |
| Finish Mill No. 4 <i>Belt conveyor/ Separator</i> | F-432 Fuller 5 zone #48 | 0.01 | 17,000 | 2,510 | 6.8 | 1.46 | 5.74 |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-605 Mikropul 645-10-30 | 0.01 | 4,000 | 753 | 5.3 | 0.34 | 1.35 |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-603 Mikropul 121S-10-20 | 0.01 | 8,000 | 1,424 | 5.6 | 0.69 | 2.70 |
| Finish Mill No. 4 <i>Ball Mill/Mill Sweep</i> | F-430 Fuller 6 zone #96 | 0.01 | 30,000 | 6,028 | 5.0 | 2.57 | 10.14 |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-604 Mikropul 121S-10-20 | 0.01 | 8,000 | 1,424 | 5.6 | 0.69 | 2.70 |
| Finish Mill No. 6 <i>Main</i> | 536.BF340 FLS Airtech 2M690S12(6) | 0.0095 (gr/dscf) | 97,300 (80,905 dscfm) | 34683 | 2.8 | 6.59 | 25.97 |
| Finish Mill No. 6 <i>Sweep</i> | 536.BF500 FLS Airtech 360S12(6) | 0.0095 (gr/dscf) | 25,900 (21,536 dscfm) | 6786 | 3.8 | 1.75 | 6.91 |
| Total | | | | | | 24.32 | 95.83 |

- b. Initial testing to demonstrate compliance with the PM limits established above, shall be conducted only for units F-330, 533.BF340, F-430, 536.BF340, and 536.BF500. All subsequent compliance testing for PM emissions from the emission points in the table above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

- c. The pending information listed in this table will be submitted to the DERM Air Facilities Section within 30 days of issuance of this final permit.
- Emissions Limits for Finish Mill No. 4 are based on PSD-FL-236 dated July 1, 1998; and Permittee request in application received November 14, 2000.
[Applicant request to Escape BACT; Permit 0250020-010-AC; and Rule 62-297.620(4), F.A.C.]

B.13 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| Emission Unit | Baghouse Id. No. | Visible Emissions Limits | Rule Applicability |
|----------------------|-------------------------|--|--|
| Finish Mill No. 1 | F-113 | 10% with initial PM testing 5% thereafter | 40 CFR 63.1347 Rule 62-297.620(4), F.A.C. |
| | F-130 | | |
| Finish Mill No. 3 | 533.BF340 | 10% with initial PM testing 5% thereafter | 40 CFR 63.1347 Rule 62-297.620(4), F.A.C. |
| | F-330 | 10% with initial PM testing 5% thereafter | 40 CFR 63.1347 Rule 62-297.620(4), F.A.C. |
| | F-332 | 10% with initial PM testing 5% | 40 CFR 63.1347 Rule 62-297.620(4), F.A.C. |
| Finish Mill No. 4 | F-430 | 5% | PSD-FL-236 |
| | F-432 | | |
| | F-603 | | |
| | F-604 | | |
| | F-605 | | |
| Finish Mill No. 6 | 531.BF01 | 10% with initial PM testing 5% thereafter | 40 CFR 63.1347 Rule 62-297.620(4), F.A.C. |
| | 531.BF02 | | |

[Applicant request; Permit 0250020-010-AC; and Permit PSD-FL-236]

EMISSIONS UNITS NOS. 014/016/015– CEMENT STORAGE SILOS/ PACKHOUSE/ LOADOUT

Operational Requirements

B.14. Hours of Operation: These emissions units may operate continuously, i.e., 8,760 hours per year, except for the packhouse which shall not exceed 4,000 hours of operation per year.
[Requested by applicant November 14, 2000; Permit 0250020-010-AC]

B.15. 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 85 TPH on a 24-hour block average. [Permit AC13-21098 dated November 2, 1979; and Permit 0250020-010-AC]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

B.16. Design Specifications and Particulate Matter Emissions Limits:

- a.** The baghouses for the Cement Storage/Packhouse/Loadout system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the amounts shown in the following table:

| System | Baghouse ID Manufacturer Model No. | Grain Loading Limit (gr/acf) | Flow Rate acfm (dscfm) | Cloth Area (ft ²) | Air to Cloth Ratio | PM/PM10 Emissions Limits | |
|--|--|---------------------------------------|---------------------------------|-------------------------------------|--------------------------|-----------------------------|--------------|
| | | | | | | (lbs/hr) | (TPY) |
| Cement Silos 1-6 | F-511 Fuller 2 zone #78 | 0.01 | 18,000 | 1,625 | 11.1 | 1.54 | 6.76 |
| Cement Silos 7-9 | F-512 Norblo 156 AMT | 0.01 | 10,000 | 2,142 | 4.7 | 0.86 | 3.75 |
| Cement Silo 10 | F-513 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 0.43 | 1.88 |
| Cement Silo 11 | F-514 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 0.43 | 1.88 |
| Cement Silo 12 | F-515 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 0.43 | 1.88 |
| Bulk Loadout Unit 1 (Rail/Truck) | B-110 Norblo 120 AMT | 0.01 | 3,000 | 1,650 | 1.8 | 0.26 | 1.13 |
| Bulk Loadout Unit 2 (Truck) | B-210 Norblo 120 AMT | 0.01 | 3,000 | 1,650 | 1.8 | 0.26 | 1.13 |
| Bulk Loadout Unit 3 Line 1 | B-372 Mikropul 36S-8-30-C | 0.01 | 2,000 | 340 | 5.9 | 0.17 | 0.75 |
| Bulk Loadout Unit 3 Line 2 | B-374 Mikropul 36S-8-30-C | 0.01 | 2,000 | 340 | 5.9 | 0.17 | 0.75 |
| Bulk Loadout Unit 3 Line 3 | B-382 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 0.43 | 1.88 |
| Packhouse ^(a) | Pending | 0.01 | 23,400 (23,400) | Pending | Pending | 1.19 | 5.20 |
| Total | | | | | | 6.99 | 25.80 |

Notes: ^(a) Emissions reflect permit limits established in Permit No. PSD-FL-028 dated March 19, 1980

- b.** Initial and annual compliance testing requirements for PM emissions from all emissions points listed above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. [Rule 62-297.620(4), F.A.C.]
- c.** The pending information listed in this table will be submitted to the DERM Air Facilities Section within 30 days of issuance of this final permit.

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

[PSD-FL-028 dated March 19, 1980; Applicant requests dated November 14, 2000 and February 8, 2005]

B.17. Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | | | |
|-------------------------------|---------|-----|----------------|
| Cement Silos 1-6 | F-511 | 10% | 40 CFR 63.1348 |
| Cement Silos 7-9 | F-512 | 5% | PSD-FL-236 |
| Cement Silos 10, 11, 12 | F-513 | 5% | AC13-21098 |
| | F-514 | | |
| | F-515 | | |
| Bulk Loadout Unit 1 | B-110 | 10% | PSD-FL-236 |
| Bulk Loadout Unit 2 | B-210 | 10% | PSD-FL-236 |
| Bulk Loadout Unit 3 Line 1 | B-372 | 5% | AC13-21098 |
| Bulk Loadout Unit 3 Line 2 | B-374 | 5% | AC13-21098 |
| Bulk Loadout Unit 3 Line 3 | B-382 | 5% | AC13-21098 |
| Packhouse | Pending | 5% | PSD-FL- 028 |

EMISSIONS UNIT NO. 028 – RAW MILL/ AND PYROPROCESSING SYSTEM

Operational Requirements

B.18 Hours of Operation: This emissions unit may not operate in excess of 7,884 hours per year except for the CF blend silo (and baghouse 341.BF350) which may operate 8760 hours per year. [Applicant request; Permit 0250020-010-AC]

B.19 Raw Mill/Pyroprocessing System Production Limits: The maximum production of clinker shall not exceed 250 TPH on a 24-hour block average and 1,642,500 TPY. [Rule 62-210.200 (228)(PTE), F.A.C.; Applicant request; Permit 0250020-010-AC]

B.20 Operating Limits for In-line kiln/raw mills.

(a) The owner or operator of a in-line kiln/raw mill subject to a D/F emissions limitation under 40 CFR 63.1343 must operate the in-line kiln/raw mill such that the temperature of the gas at the inlet to the kiln Particulate Matter control device (PMCD) does not exceed the applicable temperature limit specified in the following paragraph (b). The owner or operator of an in-line kiln/raw mill subject to a D/F emission limitation under 40 CFR 63.1343 must operate the in-line kiln/raw mill such that:

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

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

and established during the performance test when the raw mill was not operating, is not exceeded.

(b) The temperature limit for affected sources meeting the limits of paragraph (a) above is determined in accordance with the following: the run average temperature must be calculated for each run, and the average of the run average temperature must be determined and included in the performance test report and will determine the applicable temperature limit.

(c), (d), and (e) are deleted because the owner or operator do not employ carbon injection to control dioxin/furan.

[40 CFR 63.1344(a) & (b), and 63.1349(b)(3)(iv); Permit 0250020-010-AC]

B.21 Methods of Operation – Fuels:

| | Allowable Fuels |
|---|---|
| Raw Mill and Pyroprocessing System | 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.* |

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.

| <u>Constituent/Property</u> | <u>Allowable Level</u> |
|-----------------------------|------------------------|
| Arsenic | 5 ppm maximum |
| Cadmium | 2 ppm maximum |
| Chromium | 10 ppm maximum |
| Lead | 100 ppm maximum |
| Total Halogens | <1000 ppm maximum* |
| PCBs | <50 ppm maximum |
| Flash Point | 100 °F minimum |

The above parameters shall be as determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

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 three years.

[40 CFR 279.72; Permit 0250020-010-AC]

{*Permitting note: "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.}

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Emissions Limitations and Performance Standards

B.22 Design Specifications and Particulate Matter Emissions Limits:

- a. The Particulate Matter emissions from the Raw Mill/Pyroprocessing system are controlled by baghouses with the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

Particulate Matter from Raw Mill/Pyroprocessing

| Raw Mill/ Pyroprocessing System Process Unit | Baghouse ID Manufacturer Model No. | Grain Loading Limit gr/dscf | Flow Rate acfm (dscfm) | Cloth Area ft ² | Air to Cloth Ratio | PM ₁₀ Emissions Limit TPY | PM Emissions Limits | |
|---|---|--------------------------------------|------------------------------|-------------------------------|--------------------------|---|---|--------|
| | | | | | | | lb/hr [lb/ton of feed to kiln (dry basis)] | TPY |
| Kiln/Cooler/ Raw Mill (and Coal Mill when operated simultaneously) <i>Main Stack</i> | 331.BF200 FLS Airtech M5C690D16(16) | 0.125* | 515,000 (360,637) | 173,397 | 3.0:1 | 147.00 | 50.0 (instant- aneous) (44.4 annual average for 7884 hrs/year) [0.40] | 175.00 |
| Kiln Dust Bin | 331.BF740 FLS Airtech 100C10 | 0.0095 | 4,250 (2,953) | 1302 | 3.3:1 | 0.95 | 0.24 | 0.95 |
| CF Blend Silo | 341.BF350 FLS Airtech 64C10 | 0.0095 | 3,760 (3,112) | 833 | 4.5:1 | 1.11 | 0.25 | 1.11 |
| Raw Meal <i>Preheat/Calcliner Tower</i> | 351.BF410 FLS Airtech 64C10 | 0.0095 | 4,000 (3,310) | 833 | 4.8:1 | 1.06 | 0.27 | 1.06 |
| Raw Meal <i>Preheat/ CalclinerTower</i> | 351.BF440 FLS Airtech 100C10 | 0.0095 | 4,760 (3,939) | 1320 | 3.7:1 | 1.26 | 0.32 | 1.26 |
| Raw Meal <i>Preheat/ CalclinerTower</i> | 351.BF470 FLS Airtech 100C10 | 0.0095 | 4,100 (3,409) | 1302 | 3.2:1 | 1.09 | 0.28 | 1.09 |
| Kiln Dust <i>Truck Loadout</i> | 331.BF645 | 0.0095 | 3,500 (2,910) | | | 0.93 | 0.24 | 0.93 |
| Total | | | | | | 153.41 | 51.60 | 181.41 |

* Main Stack PM Emissions Limit is 0.125 lbs/ton of kiln feed.

- b. Grain loading of 0.0095 gr/dscf proposed permit limits for all emissions points listed in table above except main stack and assume PM₁₀ = 84% of PM for main stack and 100% for all

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

other emissions points listed in table above.

[Applicant request to Escape BACT; 40 CFR 63.1343 and 63.1345; Permit 0250020-010-AC]

- c. Initial and annual compliance testing requirements for PM emissions limits listed in table above, except limit for baghouse 331.BF200 which exhausts to the main/common stack, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. [Rule 62-297.620(4), F.A.C.; Permit 0250020-010-AC]
- d. All the above process units are also subject to 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry.

B.23 SO₂, NO_x, CO, VOC, and SAM Emission Limits: The emissions from the Raw Mill/Pyroprocessing system shall not exceed the limits shown in the following table:

| Pollutant | Allowable Emissions | | Emissions Limits in lbs./ton of clinker | | Monitors |
|--------------------|--|-----------------------|---|--|----------|
| | 12-month rolling average in TPY ⁽ⁱ⁾ | Lbs./hr 24-hr average | 24-hr avg. @208 TPH of clinker production | 24-hr average @250 TPH of clinker production | |
| SO ₂ | 806 | 320 | 1.54 | 1.28 | CEM |
| NO _x | 1953 | 720 | 3.46 | 2.88 | CEM |
| CO ⁽ⁱⁱ⁾ | 1457 | 576 | 2.76 | 2.30 | Process |
| VOC | 155 | 40 | 0.19 | 0.16 | CEM |
| SAM | 8.86 | 2.24 | 0.0108 | 0.0108 | - |

Notes:

- (i) The 12-month rolling average in TPY would be the average of the daily values for the current month and the preceding 11 months. The averages shall be based on the operating days or hours, and shall exclude days or hours in which the plant is not operating.
- (ii) The averaging time for CO corresponds to the required length of sampling for the initial and subsequent emission tests.

[Rules 62-4.070(3) and 62-212.400, F.A.C.; Permit 0250020-010-AC]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

B.24 PM/PM₁₀ and Dioxins/Furans Main Stack Emissions:

| Pollutant | Allowable Emissions | | Emissions | | |
|--------------------|---------------------|---------|---|--------------------------|----------------|
| | TPY | lbs./hr | Limit | Unit | Averaging Time |
| PM | 175 | 50.0 | 0.125 | lbs/ton of dry kiln feed | 3 hours |
| PM ₁₀ | 147 | 42.0 | 0.105 | lbs/ton of dry kiln feed | 3 hours |
| Dioxins/ Furans | | | 0.20 (or 0.40 when the average of the performance test run average PM control device inlet temperature is 204°C or less. [Corrected to 7% O ₂ .]) | ng TEQ/dscm | 3 hours |

Notes: The averaging times for PM and PM₁₀ correspond to the required length of sampling for the initial and subsequent emissions tests.

[Rules 62-4.070(3) and 62-212.400, F.A.C.; 40 CFR 63.1343; Permit 0250020-010-AC]

B.25. Sulfur Dioxide Emissions: Emissions of SO₂ shall not exceed 1.2 lb/MMBtu heat input when solid fuel is fired, or 0.8 lb/MMBtu heat input when liquid fuel is fired, based on a 24 hour average.

[Miami-Dade County Code, Section 24-17(2)(a); Permit 0250020-010-AC]

B.26. Mercury and Lead into the Pyroprocessing System Limited: The baseline potential emissions for mercury and lead, as stated in the Application received June 30, 1998, are 30 lbs/year and 94 lbs/year, respectively. An increase in mercury and lead emissions of 200 and 1,200 pounds, respectively, above the previously stated baseline emissions per consecutive 12-month period shall subject this facility to Prevention of Significant Deterioration (PSD) Review. [Rules 62-4.070(3) and 62-212.400, F.A.C.; Permit 0250020-010-AC]

B.27. Pursuant to 40 CFR 63.1343 Standards for Kilns and In-line Kiln/raw Mills:

- (a) *General.* The provisions in this section apply to each in-line kiln/raw mill.
- (be) No owner or operator of a inline kiln/raw mill shall cause to be discharged into the atmosphere from these affected sources any gases which:
 - (1) Contain particulate matter (PM) in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln.
 - (2) Exhibit opacity greater than 20 percent.
 - (3) Contain D/F in excess of:
 - (i) 0.20 ng per dscm (8.7 X 10⁻¹¹ gr per dscf)(TEQ) corrected to seven percent oxygen; or
 - (ii) 0.40 ng per dscm (1.7 X 10⁻¹⁰ gr per dscf)(TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

[40 CFR 63.1343(a) & (b); Permit 0250020-010-AC]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

B.28 Engineering Design Capacities For The Raw Mill And Pyroprocessing System Unit:

| Process Units | Maximum Capacity (MMBtu/hr heat input) |
|----------------------|---|
| Preheater/Calciner | 385 |
| Kiln | 290 |
| Total System | 675 |

[Applicant Request; Permit 0250020-010-AC]

B.29 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| Emissions Point | Baghouse Id. No. | Visible Emissions Limit | Permit/Rule Applicability |
|---|-------------------------|--|--|
| Main Dust Collector exhausts to Main/Common Stack | 331.BF200 | 10%* | 40 CFR 63.1342 |
| Cement Kiln Dust Bin | 331.BF740 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Rule 62-297.620(4), F.A.C. |
| Blending & Storage System | 341.BF350 | | |
| | 351.BF410 | | |
| | 351.BF440 | | |
| | 351.BF470 | | |

Note: (*) 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. The raw mill is also limited to 10% opacity. [40 CFR 63.1345(a)(2) and 63.1347; Permit 0250020-010-AC; Permit application 0250020-016-AC]

EMISSIONS UNIT NO. 029 – RAW MATERIAL HANDLING

Operational Requirements

B.30. Hours of Operation: This emissions unit may not operate in excess of 7,884 hours per year, except for baghouse 232.BF01 for the lime/gypsum silos (existing silos) which shall not exceed 4,000 hours of operation per year. [Applicant request; Permit 0250020-010-AC]

B.31. Raw Material Handling System Throughput Specification: The maximum dry throughput rate is shown in the following table:

| Source Description | Throughput Maximum (TPY) |
|------------------------------|---------------------------------|
| Raw Material Handling System | 3,260,000 (dry) |

The owner or operator shall record all throughput rates on a rolling 12-month basis, and maintain records for a minimum of 5 years. [Applicant request; Permit 0250020-010-AC; Rules 62-4.070(3); and 62-213.440, F.A.C.]

Emissions Limitations and Performance Standards

B.32. Design Specifications and Particulate Matter Emissions Limits:

- a.** The Particulate Matter emissions from the Raw Material Handling system are controlled by baghouses with the following or equivalent design specifications:

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

| System Process Units | Baghouse ID Manufacturer Model No. | Grain Loading Limit gr/dscf | Flow Rate acfm (dscfm) | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM/PM ₁₀ Emissions Limits | |
|----------------------|------------------------------------|-----------------------------|------------------------|-------------------------------|--------------------|--|-------|
| | | | | | | (lb/hr) | (TPY) |
| Lime/Gyp Silos | 232.BF01 Pending Pending | 0.0095 | 5,170 (5,170) | Pending | Pending | 0.42 | 0.84 |
| Additives Silo 1 | 311.BF650 FLS Airtech 144C10 | 0.0095 | 8,500 (8,130) | 1875 | 4.5 | 0.66 | 2.61 |
| Additives Silo 2 | 311.BF750 FLS Airtech 144C10 | 0.0095 | 7,750 (7,413) | 1875 | 4.1 | 0.60 | 2.38 |
| Additives Silo 3 | 311.BF470 FLS Airtech 225C10 | 0.0095 | 10,800 (10,039) | 2930 | 3.7 | 0.82 | 3.22 |
| Additives Silo 4 | 311.BF950 FLS Airtech 225C10 | 0.0095 | 11,700 (10,876) | 2930 | 4.0 | 0.89 | 3.49 |
| Total | | | | | | 3.39 | 12.54 |

b. Initial and annual compliance testing requirements for PM emissions from all emissions points listed above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. [Rule 62-297.620(4), F.A.C.]

c. The pending information listed in this table will be submitted to the DERM Air Facilities Section-within 30 days of issuance of this final permit.

[Permit 0250020-010-AC]

B.33. Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| Process unit | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|------------------|------------------|--|--|
| Lime/Gyp Silos | 232.BF01 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Rule 62-297.620(4), F.A.C. |
| Additives Silo 1 | 311.BF650 | | |
| Additives Silo 2 | 311.BF750 | | |
| Additives Silo 3 | 311.BF470 | | |
| Additives Silo 4 | 311.BF950 | | |

[Permit 0250020-010-AC]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Section III, Emissions Units Specific Conditions C.0 through C.26 in Permit 0250020-010-AC dated May 1, 2001 are adopted in their entirety. Certain conditions of that permit are modified as shown below.

C. COMMON CONDITIONS

These emissions units shall comply with the 40 CFR 63 Subpart LLL – National Emissions Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry for Major Sources of HAPs; and 40 CFR 63, Subpart A - General Provisions for Subpart LLL - Portland Cement Plants.

Emissions Unit Specific Testing, Monitoring, Notification, Recordkeeping, and Reporting Requirements

C.1. Test Methods and Procedures: The permittee shall conduct testing/monitoring on all emissions units as indicated below:

| System | Unit ID | Pollutant | EPA Test Method | Frequency |
|--|-----------|---------------|-----------------|--|
| EU 026 Coal Handling | | | | |
| Coal Mill (if not operated simultaneously with Kiln/Cooler/Raw Mill) | 461.BF300 | PM Opacity | 5 9 | Initial & Annual ^(b) Initial & Annual |
| Dump Hopper (Transfer) | 461.BF130 | PM Opacity | 5 9 | Initial ^(b) & Annual ^(b) Initial & Annual |
| Conveyors (2) (Transfer) & Coal and Petroleum Coke Feed Bins | 461.BF230 | | | |
| Coke/Petroleum Coke (Transfer) | 461.BF750 | | | |
| Surge Bin (Feeder) | 461.BF650 | | | |
| Coal (Transfer) | 461-BF650 | | | |
| Surge Bin (Feeder) | 461-BF650 | | | |
| Coal Mill Feed | 461.BF350 | | | |
| EU 027 Clinker Handling & Storage | | | | |
| Clinker Silos 21-23 & 26-28 | F633 | PM Opacity | 5 9 | Initial ^(b) & Annual ^(b) Initial & Annual |
| Clinker Transfer conveyors from cooler | 441.BF540 | | | |
| Clinker Silos | 481.BF140 | | | |
| Clinker Transfer Conveyors | 481.BF540 | | | |
| Clinker Off-spec Bins | 481.BF330 | | | |
| Clinker transfer | 481.BF640 | | | |
| Clinker transfer | 481.BF730 | | | |
| Clinker transfer | 481.BF930 | | | |

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

| EUs 012 and 013 Finish Mills | | | | |
|---|-----------|---------------|---------------------------------|--|
| Finish Mill No. 1 | F113 | PM | 5 | Initial ^(b) & Annual ^(b) |
| | F130 | Opacity | 9 | Initial & Annual |
| Finish Mill No. 3 | F-330 | PM | 5 | Initial & Annual ^(b) |
| | | Opacity | 9 | Initial & Annual |
| | F-332 | PM | 5 | Initial ^(b) & Annual ^(b) |
| | | Opacity | 9 | Initial & Annual |
| 533.BF340 | PM | 5 | Initial & Annual ^(b) | |
| | | Opacity | 9 | Initial & Annual |
| Finish Mill No. 4 <i>Belt conveyor/ Separator</i> | F-432 | | | |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-605 | PM Opacity | 5 | Initial ^(b) & Annual ^(b) Initial & Annual |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-603 | | | |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-604 | | | |
| Finish Mill No. 4 <i>Ball Mill/Mill Sweep</i> | F-430 | PM Opacity | 5 | Initial & Annual ^(b) Initial & Annual |
| Finish Mill No. 6 <i>Main</i> | 531.BF500 | | | |
| Finish Mill No. 6 <i>Sweep</i> | 531.BF340 | | 9 | |
| EUs 014, 015, and 016 Cement Storage, Packhouse, & Loadout | | | | |
| Cement Silos 1-6 | F-511 | PM Opacity | 5 9 | Initial ^(b) & Annual ^(b) Initial & Annual |
| Cement Silos 7-9 | F-512 | | | |
| Cement Silo 10 | F-513 | | | |
| Cement Silo 11 | F-514 | | | |
| Cement Silo 12 | F-515 | | | |
| Bulk Loadout Unit 1 (Rail/Truck) | B-110 | | | |
| Bulk Loadout Unit 2 (Truck) | B-210 | | | |
| Bulk Loadout Unit 3 Line 1 | B-372 | | | |
| Bulk Loadout Unit 3 Line 2 | B-374 | | | |
| Bulk Loadout Unit 3 Line 3 | B-382 | | | |
| Packhouse | Pending | | | |

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

| EU 028 Raw Mill and Pyroprocessing System | | | | |
|---|-----------|----------------|------------|--|
| Kiln/Cooler/Raw Mill (and Coal Mill when operated simultaneously) <i>Main/Common Stack</i> | 331.BF200 | PM | 5 | Initial & Annual |
| | | PM10 | 5 | Initial & Annual |
| | | Opacity | 9 | Initial & 5 years |
| | | SO2 | 6 | Initial & 5 years |
| | | NOx | 7 or 7E | Initial & 5 years |
| | | CO | 10 | Initial & 5 years |
| | | VOC | 25 or 25A | Initial & 5 years |
| | | SAM | 5 & 8 | Initial & 5 years |
| | | Dioxins/Furans | 23 | Initial & 30 months |
| | | Lead/Mercury | 29 or 101A | Initial & Annual ^(a) |
| Kiln Dust Bin | 331.BF740 | PM Opacity | 5 9 | Initial ^(b) & Annual ^(b) Initial & Annual |
| CF Blend Silo | 341.BF350 | | | |
| Raw Meal Preheat/Calciner Tower | 351.BF410 | | | |
| Raw Meal Preheat/Calciner Tower | 351.BF440 | | | |
| Raw Meal Preheat/Calciner Tower | 351.BF470 | | | |
| Kiln Dust <i>Truck Loadout</i> | 331.BF645 | | | |
| EU 029 Raw Material Handling | | | | |
| Lime/Gyp Silos | 232.BF01 | PM Opacity | 5 9 | Initial ^(b) & Annual ^(b) Initial & Annual |
| Additives Silo 1 | 311.BF650 | | | |
| Additives Silo 2 | 311.BF750 | | | |
| Additives Silo 3 | 311.BF470 | | | |
| Additives Silo 4 | 311.BF950 | | | |

- ^(a) In the event that initial testing for mercury and lead result in potential annual emissions below 130 and 694 pounds, respectively, the DERM may waive the annual testing and require testing once every 5 years. Should subsequent test results indicate levels greater than those mentioned above, the facility shall revert to an annual testing schedule.
- ^(b) Initial and subsequent compliance testing requirements for PM emissions, except those listed below, are waived and an alternative standard of 5% opacity is imposed. If the DERM has reason to believe that the particulate weight emissions standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. The following emissions units require initial testing for PM emissions: 331.BF200, F-330, 533.BF340 F-430, 536.BF340, 536.BF500
- [Permit No. 0250020-010-AC; Rule 62-297.310(7), F.A.C.]

C.2 through C.9. No changes in these conditions.

C.10. Fuel Analysis for On-specification Used Oil: Fuel analysis shall be in accordance with 40 CFR 266.43(b)(1) & (6). A sample shall be taken from the outlet of the blend tank on the first working day (i.e., Monday-Friday; exceptions: holidays) of each month, if any used oil was placed in the blend tank the previous month; or, the sample can be taken directly from the used oil mobile collection tank after final collection and prior to the time of initial transfer; but, that sampling frequency shall be no less than quarterly and the sampling methodology shall have been established with the DERM, Miami-Dade County prior to sampling. Upon taking a sample, the sample shall be analyzed for the following constituent/property and associated unit and using the following test methods (or their latest version):

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

| Constituent/Property | Unit | Test Method |
|-----------------------------|-------------|--|
| Arsenic | ppm | EPA SW-846 (3040-7130) |
| Cadmium | ppm | EPA SW-846 (3040-7130) |
| Chromium | ppm | EPA SW-846 (3040-7130) |
| Lead | ppm | EPA SW-846 (3040-7130) |
| Total Halogens | ppm | ASTM E442 |
| PCBs | ppm | ASTM D4059 |
| Sulfur | % by weight | ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 & ASTM D129-91 |
| Flash Point | °F | ASTM D93 |
| Heat of Combustion | Btu/gal | ASTM D240-76 |
| Density | Lbs/gal | ASTM D1298-80 |

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

C.11 through C.26. No changes in these conditions.

APPENDIX GC
General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - (a) Have access to and copy and records that must be kept under the conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of non-compliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

APPENDIX GC
General Conditions

- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- (a) Determination of Best Available Control Technology (not applicable to project);
 - (b) Determination of Prevention of Significant Deterioration (not applicable to project); and
 - (c) Compliance with New Source Performance Standards (X) and
 - (d) Compliance with National Emissions Standards for Hazardous Air Pollutants (X).
- G.14 The permittee shall comply with the following:
- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Florida Department of
Environmental Protection

Memorandum

TO: Michael Cooke

THRU: Trina Vielhauer *TV*
A. A. Linero *aal*

FROM: Teresa Heron *TH*

DATE: May 24, 2005

SUBJECT: Titan America Pennsuco Cement Plant – Miami-Dade County
Re-issuance and modification of Air Construction Permit 0250020-010-AC
DEP File No. 0250020-016-AC

The Final Permit for this project is attached for your approval and signature.

This permit is a re-issuance and modification of Air Construction Permit 0250020-010-AC issued on May 1, 2001 for the modernization of the Titan America Pennsuco Cement Plant. This air construction permit reflects the final configuration and operating parameters of baghouses, finish mills and the coal mill. This permit also revises the particulate matter (PM) air pollutant emissions without triggering the requirements of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.

We recommend your approval of the attached permit.

Attachments

TLV/aal/th

Additional Notes :

- This is not the production increase for their new kiln. That project is incomplete. They need to submit PSD netting analysis.
- We received their Title V ^{Renewal} application. It is under review.



May 1, 2001

CERTIFIED MAIL: 7000 0600 0027 7981 5918
RETURN RECEIPT REQUESTED

ENVIRONMENTAL RESOURCES MANAGEMENT
AIR QUALITY MANAGEMENT DIVISION
33 S.W. 2nd AVENUE
SUITE 900
MIAMI, FLORIDA 33130-1540
TELEPHONE: (305) 372-6925
FAX: (305) 372-6954

PERMITTEE:

Tarmac America, Inc.
455 Fairway Drive
Deerfield Beach, Fl 33441

Permit No. 0250020-010-AC
Issue Date: May 1, 2001
Expiration Date: October 31, 2003

Authorized Representative:
Hardy Johnson
President, Florida Division

PROJECT AND LOCATION:

Project:

The project encompasses the construction of a dry process modernization plant to include a new preheater/calcliner/kiln, cooler, coal mill and raw mill. This new process will replace the existing wet kiln and cooler systems. A new finish mill (No. 6) will be constructed to operate with units 3 & 4. Finish Mill units 1 & 2 will be shut down.

The project will result in an increase in production at the facility while maintaining air pollution emissions at or below the levels allowed in the construction Permit Number 0250020-008-AC, dated October 21, 1999. The facility will accomplish this increase in production while maintaining emissions through adjusting facility operating hours and increasing production efficiency.

Facility Description: Portland Cement Plant (SIC # 3241)
Facility Name: Tarmac-Pennsuco Cement
Location: 11000 NW 121 Way, Medley, Florida 33178
Lat./Long.: 25° 52' 30" N / 80° 22' 30" W
UTM: Zone 17; 562.8 Km. E; 2861.7 Km. N

This is Permit Number 0250020-010-AC to construct an air pollution source issued by the **Miami-Dade County Department of Environmental Resources Management (DERM)** pursuant to **Chapter 24, Code of Miami-Dade County and Chapter 403.087, Florida Statutes (F.S.)**.

The Florida Department of Environmental Protection (FDEP) has permitting jurisdiction under Section 403.087, Florida Statutes (F.S.). However, in accordance with Section 403.182, F.S., the FDEP recognizes the DERM as the approved local air pollution control program of Miami-Dade County. Through a Specific Operating Agreement, the FDEP delegated to the DERM the authority to issue or deny permits for this type of air pollution source located in Miami-Dade County.

NOTICE OF RIGHTS:

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to **Section 120.68, F.S.**, by the filing of a Notice of Appeal pursuant to **Rule 9.110, Florida Rules of Appellate Procedure**, with the Clerk of the Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, at 33 SW 2nd Avenue, Suite 900, Miami, Florida 33130-1540 and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Order is filed with the Clerk of the DERM.

STATEMENT OF BASIS:

This permit is issued under the provisions of **Chapter 24, Code of Miami-Dade County, Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, and 62-204 through 62-297**, and in conformance with all existing regulations of the FDEP and the DERM rules. The above named owner or operator is hereby authorized to perform the work or construct the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the DERM and made a part hereof and specifically described in this permit.

Attached appendices and Tables made a part of this permit:

Appendix A – General Conditions

Appendix SS-1 – Stack Sampling Facilities

Table 297.310-1 – Calibration Schedule Table

Figure 1, Summary Report, Gaseous and Opacity Excess Emission and Monitoring System Performance

SECTION I. FACILITY INFORMATION

SUBSECTION A. FACILITY DESCRIPTION

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

DERM issued a construction permit 0250020-008-AC to this facility on October 21, 1999 to modernize the existing operation. On November 14, 2000 the facility submitted a modified construction permit application to construct a new preheater/calcliner/kiln, cooler, coal mill and raw mill to replace existing kilns and coolers system. In addition, a new finish mill (No. 6) will be constructed to operate with units 3 & 4. Finish Mill units 1 & 2 will be shut down when the existing operation ceases.

The project will result in an increase in production at the facility while maintaining air pollution emissions at or below the levels allowed in the construction permit dated October 21, 1999. The facility will have a capacity of 250 tons per hour of clinker production and annual production will be limited (on a rolling 12-month average) to 1,642,500 tons per year of clinker production. The facility will accomplish this increase in production while maintaining emissions, through adjusting facility operating hours and increasing production efficiency.

EMISSIONS UNITS

This permit addresses the following emissions units:

| EMISSIONS UNIT NO. | SYSTEM | EMISSIONS UNITS DESCRIPTION |
|--------------------|-------------------------------------|--|
| 001 | Coal Handling | Coal Feed Bin, Pet Coke Feed Bin, Coal Mill (Pet Coke- Coal) Handling and Storage (Fugitive) |
| 002 | Clinker Handling and Storage | Clinker Transfer from Burner Building, Clinker Silo, Clinker Transfer and Clinker Bins |
| 003 | Finish Mill | Finish Mill # 3, 4, & 6 |
| 004 | Cement Storage, Packhouse & Loadout | Cement Silos 1-12, Packhouse & Bulk Loadout Units #1-3 |
| 005 | Raw Mill and Pyroprocessing unit | Raw Mill, and Pyroprocessing consists of the Preheater/Calcliner, Kiln, and Cooler |
| 006 | Raw Material Handling | Limestone/gypsum and additive storage silos and handling |

SUBSECTION B. REGULATORY CLASSIFICATION

The Tarmac America Pennsuco Cement Plant directly emits more than 100 tons per year (TPY) of several regulated air pollutants and emits over 10 TPY of at least one hazardous air pollutant. Therefore it is classified as a "Major Source of Air Pollution or Title V Source," per the definitions in **Rule 62-204.200, F.A.C.**

This industry is listed in Table 62-212.400-1 of Chapter 62-212, F.A.C., "Major Facility Categories." Therefore, stack and fugitive emissions of over 100 TPY of carbon monoxide, volatile organic compounds, sulfur dioxide, nitrogen oxides, or particulate matter characterize the installation as a major facility per the definitions in Rule 62-210.200, F.A.C.

The Brownfield facility is also subject to 40 CFR 63, Subpart LLL, Portland Cement Manufacturing Plant, and 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants.

SIGNIFICANT DATES:

Permit Number 0250020-008-AC was issued on April 28, 1999.

Permit Number 0250020-009-AV was issued on October 26, 2000.

Permit Application and Attachments Received: November 14, 2000.

Additional information requested by DERM on December 13, 2000 and January 25, 2001.

Additional information received from applicant on January 3, 2001 and February 1, 2001.

SECTION II. FACILITY-WIDE CONDITIONS

ADMINISTRATIVE

- A.1 Regulating Agencies: All documents related to applications for permits to operate, reports, tests, minor modifications and notifications shall be submitted to the Air Facilities Section of the Miami-Dade County Department of Environmental Resources Management (DERM), Suite 900, 33 Southwest Second Avenue, Miami, Florida 33130-1540.
- A.2 Specific and General Conditions: The owner or operator shall be subject to the specific and general conditions of this permit and the owner or operator shall be aware of, and operate under, the attached General Conditions, attached as Appendix A of this permit. General Conditions are binding and enforceable pursuant to Chapter 403, F.S.
[F.A.C. Rule 62-4.160]
- A.3 Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
- A.4 Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C.
[Rule 62-210.900, F.A.C.]
- A.5 Expiration: This air construction permit shall expire on October 31, 2003. The permittee may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, prior to 60 days before the expiration of the permit. However, the permittee shall promptly notify the DERM of any delays in completion of the project, which would affect the startup day by more than 90 days.
[Rule 62-210.300(1), F.A.C., 62-4.090, F.A.C.]
- A.6 Other Permits: This air pollution permit does not preclude the owner or operator from obtaining any other types of required permits, licenses or certifications from the DERM or other departments or agencies.
- A.7 Title V Permit is Required: This permit authorizes construction and/or installation of the permitted emissions units and initial operation to determine compliance with the FDEP and the DERM rules. An application for a Title V operation permit must be submitted to the Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, **90 days before the expiration date of this permit, but no later than 180 days after commencing operation**. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, and such additional information as the DERM may by law require.
[F.A.C. Rule 62-4.030, 62-4.050, and 62-213.420(1)(a)2]

- A.8 Applicable Regulations: Unless otherwise indicated, the construction of a dry process Portland Cement Plant and associated equipment shall be in accordance with the capacities and specifications stated in the application. This facility is subject to all applicable provisions of Chapter 24 Code of Miami-Dade County, Chapter 403, F.S. and Florida Administrative Code Chapters 62-4; 62-103; 62-204, 62-210, 62-212, 62-213, 62-296, 62-297; and the Code of Federal Regulations Section 40, Part 60. Specifically, this facility is subject to National Emissions Standards for Hazardous Air Pollutants for Portland Cement Plant, 40 CFR 63, Subpart LLL. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations.
[Rule 62-210.300, F.A.C.]

EMISSIONS LIMITING STANDARDS

- A.9 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% opacity). The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1, F.A.C.]

A.10 Unconfined Emissions of Particulate Matter

- (a) The owner or operators shall not cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any source whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emissions.
- (b) Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.

Reasonable precautions may include, but are not limited to the following:

1. Paving and maintenance of roads, parking areas and yards.
2. Applying water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
3. Applying asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
4. Removing particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
5. Confining abrasive blasting where possible.
6. Landscaping and planting of vegetation.
7. Using hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
8. Enclosing or covering of conveyor systems.
9. Storing all materials, coal and petroleum coke at the plant under roof on compacted clay or concrete, or in enclosed vessels.
10. Locating water supply lines, hoses and sprinklers near all unenclosed materials to prevent unconfined particulate matter emissions.

11. Installing tire wash for bulk transport trucks leaving the plant, to remove particulate matter from vehicle tires before traveling on the facility's access roadways.
- (c) In determining what constitutes reasonable precautions for a particular source, the DERM shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.
- [Rule 62-296.320(4)(c), F.A.C.; 62-4.070(3)]

A.11 General Pollutant Emissions Limiting Standards:

- (a) No person shall 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 DERM.
- [Rule 62-296.320 (1)(a), F.A.C.]
- (b) 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.]

NOTE: An objectionable odor is defined in Rule 62-210.200(203), F.A.C., as any odor present in the outdoor atmosphere, which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.

OPERATION AND MAINTENANCE

- A.12 Final Construction Schedule: The permittee shall provide to the DERM a final construction schedule after selection of the contractor and before commencement of construction.
- [Rule 62-4.070(3), F.A.C.]

A.13. The existing kiln No. 3 shall be permanently shut down no later than 180 days from the startup date of emissions unit No. 005 (Raw Mill and Pyroprocessing Unit). The shutdown date of kiln No.3 shall not be extended for any reason. The operation/shutdown of kiln No. 3 shall comply with the following conditions:

- Operation of kiln No. 3 shall not result in an exceedance of any 12-month rolling average ton per year emissions limit specified in condition B.23 and B.24 of this permit.
- Shut down of kiln No. 3 shall commence within 48-hours of introduction of kiln feed to the preheater/calciiner, and shut down shall be completed within 5 days of commencement of such action. This schedule shall be followed each time kiln feed is introduced to the preheater/calciiner.
- Simultaneous operation of kiln No. 3 and emissions unit No. 005 for the purpose of clinker production is prohibited, except during the duration of the shut down of kiln No. 3 (5 days).
- Dates of introduction of kiln feed to the preheater/calciiner, and the dates of commencement and completion of kiln No. 3 shutdown must be recorded and reported to the DERM Air Facilities Section within 15 days of each mentioned action.
- A log of hourly clinker production from kiln No. 3 and emissions unit No. 005 for the 180 days after the startup of emissions unit No. 5 shall be maintained at the facility. These records must be submitted to the DERM Air Facilities Section on a weekly basis.

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

*NOTE: Startup is defined as the setting in operation of an affected source for any purpose.
Shutdown is defined as the cessation of operation of an affected source for any purpose.
[40 CFR 63.2, Definitions]*

- A.14 Changes/Modifications: The owner or operator shall submit to the DERM, Air Facilities Section, for review and obtain approval for any changes in, or modifications to the method of operation; process or pollution control equipment; increase in hours of operation; equipment capacities; or any change which would result in an increase in potential/actual emissions. Depending on the size and scope of the modification, it may be necessary to submit an application for, and obtain an air construction permit prior to making the desired change.
[Rule 62-4.030, 62-210.300 and 62-4.070(3), F.A.C.]
- A.15 Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the owner or operator shall notify the DERM, Air Facilities Section as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include, pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and applicable rules.
[Rule 62-4.130, F.A.C.]
- A.16 Circumvention: The owner or operator shall not circumvent any air pollution control equipment or allow the emission of air pollutants without this equipment operating properly.
[Rules 62-210.650, F.A.C.]
- A.17 Excess Emissions Requirements: The following excess emissions provisions can not be used to vary any NSPS or NESHAP requirements from any subpart of 40 CFR 60 or 40 CFR 63.
- (a) Excess emissions resulting from start-up, shutdown or malfunction of these emissions units shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24 hour period unless specifically authorized by the DERM, Air Facilities Section for longer duration.
[Rule 62-210.700(1), F.A.C.]
 - (b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

MONITORING OF OPERATIONS

A.18 Determination of Process Variables:

- (a) **Required Equipment.** The permittee shall install, operate, and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emissions limiting standards.
[Rule 62-297.310 (5), F.A.C.]
- (b) **Accuracy of Equipment.** Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]

TEST REQUIREMENTS

A.19 Test Performance: DERM shall be notified of startup date in writing by the facility within 15 days of initial startup. Within 60 days after achieving the maximum production rate at which this facility will be operated, but no later than 180 days after initial startup, the owner or operator shall conduct performance tests, pursuant to 40 CFR 63.1349, Performance Tests, Rule 62-296.310 F.A.C., 40 CFR 63, Appendix A and 40 CFR 51, Appendix M. In the event that the facility fails any initial or annual performance test, a retest shall be conducted within 30 days of the test date of the failed test. No other test method shall be used unless approval from the DERM has been received in writing. Unless otherwise stated in the applicable emissions limiting standard rule, testing of emissions shall be conducted with the emissions unit(s) operating at permitted capacity pursuant to Rule 62-297.310(2) F.A.C.

[Rules 62-204.800, 62-297.310, 62-297.400, 62-297.401, and 62-4.070(3) F.A.C.]

*NOTE: Startup is defined as the setting in operation of an affected source for any purpose.
[40 CFR 63.2, Definitions]*

A.20 Clinker Production Rate Determination: Prior to any emission testing to demonstrate compliance with any emission limit, the permittee shall determine the clinker production rate for the test according to a factor based on the preheater/precalciner feed rate. The permittee shall notify the DERM of the preheater/precalciner 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.
[Rule 62-4.070(3), F.A.C.]

A.21 Test Procedures/Test Reports: All test procedures and test reports shall meet all applicable requirements of the Florida Administrative Code Chapter 62-297.
[Rule 62-297.310 (4), F.A.C.]

A.22 Test Notification: Unless otherwise specified in this permit, the DERM, Air Facilities Section shall be notified in writing of expected compliance test dates (when required) at least fifteen (15) days prior to compliance testing. The notification shall include the following information: the date, time, and location of each test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner.
[Rule 62-297.310(7)(a)9, F.A.C.]

- A.23 Special Compliance Tests: When the DERM, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emissions standard contained in Rule 62-204 through 62-297, F.A.C. or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the facility to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions units and to provide a report on the results of said tests to the DERM., Air Facilities Section.
[Rule 62-297.310(7)(b), F.A.C.]
- A.24 Stack Testing Facilities: The owner or operator shall install stack-testing facilities in accordance with Rule 62-297.310(6), F.A.C.
- A.25 Exceptions and Approval of Alternate Procedures and Requirements: An Alternate Sampling Procedure (ASP) may be requested from the Bureau of Monitoring and Mobile Sources of the Florida Department of Environmental Protection in accordance with the procedures specified in Rule 62-297.620, F.A.C.

REPORTS AND RECORDS

- A.26 Duration of Record Keeping: Upon request, the permittee shall furnish all records and plans required under DERM and FDEP rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the DERM. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five years from the date of the sample, measurement, report, or application unless otherwise specified by DERM or FDEP rule.
[Rules 62-4.160(14)(a)&(b) and 62-213.440(1)(b)2.b., F.A.C.]
- A.27 Emissions Compliance Stack Test Reports
- (a) A *test report* indicating the results of the required compliance tests shall be filed with the DERM, Air Facilities Section as soon as practical, but no later than 45 days after the last sampling run is completed.
[Rule 62-297.310, F.A.C.]
- (b) The *test report* shall provide sufficient detail on the tested emissions unit and the procedures used to allow the DERM to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed, other than for EPA Method 9 Test, in Rule 62-297.310 (8), F.A.C.
[Rule 62-297.310, F.A.C.]
- A.28 Excess Emissions Report: If excess emissions occur, the owner or operator shall notify the Air Facilities Section of the DERM, within (1) working day (excluding weekends and legal holidays) of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the DERM may request a written summary report of the incident.
[Rules 62-4.130 and 62-210.700(6), F.A.C.]
- A.29 Excess Emissions Report - Malfunctions: In case of excess emissions resulting from malfunctions, each owner or operator shall notify the DERM in accordance with Rule 62-4.130, F.A.C. In addition, a full written report on the malfunctions shall be submitted in a quarterly report.
[Rule 62-210.700(6), F.A.C.]

A.30 Annual Operating Report for Air Pollutant Emitting Facility. Before March 1st of each year, the owner or operator shall submit to the DERM this required report [DEP Form No. 62-210.900(5)], which summarizes operations for the previous calendar year.
[Rule 62-210.370(3), F.A.C.]

A.31 Central File Requirements: This facility shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit. Operators shall keep a daily Operation and Maintenance log to include, at a minimum, the following information:

- The data collected from in-stack monitoring instruments
- The records on daily feed rates and clinker production rate
- The amount and type of fuel burned
- Calibration logs for all instruments
- Maintenance/repair logs for any work performed on equipment or instrument which is subject to this permit;
- The following fuel records shall be maintained for a minimum of five (5) years and made available upon request:
 1. Coal/Petroleum Coke
 - (a) The coal/petroleum coke usage rate in tons per hour on a 24-hour basis;
 - (b) The average sulfur content and heating value (Btu/lb) of each coal shipment based upon supplier analysis or analysis of a sample representative of the shipment (trainload).
 2. Liquid Fuels
 - (a) The fuel type (number) and usage rate in gal per day;
 - (b) Records of the sulfur content and heating value (Btu/gal) of each oil shipment based upon supplier analysis or analysis of a sample representative of the shipment.
 3. Natural Gas
 - (a) The fuel usage rate in MMBtu per day;

All measurements, records, and any other data required to be maintained by Tarmac shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These data shall be made available to the DERM upon request. DERM shall be notified in writing at least 15 days prior to the testing (auditing) of any emission measurement instrument required to be operated by these specific conditions in order to allow witnessing by authorized personnel.
[Rule 62-4.070(3), F.A.C.]

OTHER REQUIREMENTS

- A.32 Used Oil and Grease: Used oil and grease burned at this facility shall not be a hazardous waste as defined by 40 CFR Part 261.3 or Rule 62-730.030, F.A.C. It shall not include fuels or blended fuels consisting in whole or in part of hazardous waste or which include mixture of any solid waste generated from the treatment, storage, or disposal of hazardous waste. These fuels shall be burned in compliance with Section 403.769(3), Florida Statutes.
- A.33 Other Regulations: The owner or operator shall comply with applicable provisions of Rule 62-710, Used Oil Management and 40 CFR Parts 279, Standards for the Management of Used Oil.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

THIS SECTION ADDRESSES THE FOLLOWING EMISSIONS UNITS

| EMISSIONS UNIT NO. | SYSTEM | EMISSIONS UNITS DESCRIPTION |
|--------------------|-------------------------------------|--|
| 001 | Coal Handling | Coal Feed Bin, Pet Coke Feed Bin, Coal Mill (Pet Coke- Coal) Handling and Storage (Fugitive) |
| 002 | Clinker Handling and Storage | Clinker Transfer from Burner Building, Clinker Silo, Clinker Transfer and Clinker Bins |
| 003 | Finish Mill | Finish Mill # 3, 4, & 6 |
| 004 | Cement Storage, Packhouse & Loadout | Cement Silos 1-12, Packhouse, Bulk Loadout Units #1-3 |
| 005 | Raw Mill and Pyroprocessing System | Raw Mill, and Pyroprocessing consists of the Preheater/Calciner, Kiln, and Cooler |
| 006 | Raw Material Handling | Limestone/gypsum and additive storage silos and handling |

B.0 Operational Requirements, Emissions Limitations and Performance Standards Attachment "40 CFR 63, Subpart A" is incorporated by reference.

EMISSIONS UNIT NO. 001 - COAL HANDLING

Operational Requirements

- B.1 Hours of Operation: This emissions unit may not operate in excess of 7,884 hours per year except baghouses 241.BF01 and 241.BF02 which may not exceed 4,000 hours per year. [Requested by permittee in application received November 14, 2000]
- B.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 190,000 TPY. The maximum petroleum coke usage rate shall not exceed 20 TPH on a 24-hour block average. [Rule 62-210.200 & 62-4.070(3) F.A.C., established by permittee in application received November 14, 2000]
- B.3 Particulate and Fugitive Emissions: Particulate and fugitive emissions from coal handling facilities shall be minimized by following the procedures listed below:
 - (1) All conveyers and transfer points shall be enclosed or covered to preclude particulate emissions (except those directly associated with coal stacking/reclaiming).
 - (2) Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion.
 - (3) 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. [Rule 62-296.320(4)(c), F.A.C.; 62-4.070(3)]

Emissions Limitations and Performance Standards

B.4 Design Specifications and Particulate Matter Emissions Limits: The baghouses for the coal handling system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits listed in the following table:

| System | Baghouse ID Manufacturer Model No. | Grain Loading (gr/dscf) | Flow Rate acfm dscfm | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM Emissions | |
|--|--|-------------------------------|------------------------------|-------------------------------------|--------------------------|--|---------------------------|------------------|
| | | | | | | | (lb/hr) | (TPY) |
| Dump Hopper (Transfer) | 241-BF01 Pending Pending | 0.01 | 2,700 2,700 | Pending | Pending | 0.39 | 0.23 | 0.46 |
| Conveyors (2) (Transfer) & Coal and Petroleum Coke Feed Bins | 241-BF02 Pending Pending | 0.01 | 6,400 6,400 | Pending | Pending | 0.92 | 0.55 | 1.10 |
| Coal Mill | 461-BF01 Pending Pending | 0.01 | 54,500 43,600 | Pending | Pending | 12.37 | 3.74 | 14.73 |
| Coke/Petroleum Coke (Transfer) Surge Bin (Feeder) | 461-BF02 Pending Pending 461-BF03 Pending Pending | 0.01 0.01 | 800 665 800 665 | Pending Pending | Pending Pending | 0.19 0.19 | 0.06 0.06 | 0.22 0.22 |
| Total | | | | | | 14.06 | 4.64 | 16.73 |

Notes:

- All the above equipment except for 241-BF01 are subject to 40 CFR 60, Subpart Y, NSPS for Coal Preparation Plants.
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- Emissions of Particulate Matter from each of the baghouses on the coal handling system shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf). Assume PM-10 = 84% of PM for all baghouses.
 [Requested by Permittee in application received November 14, 2000.]
- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above, except 461-BF01 serving the Coal Mill, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
 [Rule 62-297.620(4), F.A.C.]

B.5 Coal Handling Visible Emissions Limits The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|---|-------------------------|--------------------------------|--------------------------------|
| Dump Hopper (Transfer) | 241.BF01 | 20% | Rule 62-296.320(4)(b)1, F.A.C. |
| Conveyors (2) Coal & Petroleum Coke Feed Bins (shared with conveyors) | 241.BF02 | 20% | 40 CFR 60, Subpart Y |
| Coal Mill Dust Collector | 461.BF01 | 10% ^(*) | 40 CFR 63.1345 |
| Coke/Coal Surge Bins | 461.BF02 | 20% | 40 CFR 60, Subpart Y |
| | 461.BF03 | 20% | 40 CFR 60, Subpart Y- |

Note:

- (*) 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.
 [40 CFR 63.1345]

EMISSIONS UNIT NO. 002 - CLINKER HANDLING & STORAGE SYSTEM

Operational Requirements

B.6 Hours of Operation: This emissions unit may not operate in excess of the following:

| Baghouse ID No. | Hours Per Year |
|-----------------|----------------|
| 441.BF01 | 7,884 |
| 481.BF01 | 7,884 |
| 481.BF02 | 8,760 |
| 481.BF03 | 8,760 |

[Requested by permittee in application received November 14, 2000]

B.7 Clinker Handling & Storage Throughput Limits: The clinker handling and storage maximum hourly and annual throughput rates shall not exceed 320 TPH on a 24-hour block average or 1,942,500 TPY, respectively.

[Requested by Permittee in application Received November 14, 2000]

Emissions Limitations and Performance Standards

B.8 Design Specifications and Particulate Matter Emissions Limits: The baghouses for the clinker handling and storage system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

| System | Baghouse ID Manufacturer Model No. | Grain Loading (gr/dscf) | Flow Rate Acfm Dscfm | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM Emissions | |
|-------------------------------------|--|-------------------------------|----------------------------|-------------------------------------|--------------------------|--|---------------------------|-------|
| | | | | | | | (lb/hr) | (TPY) |
| Clinker Transfer Burner Building | 441.BF01 Pending Pending | 0.01 | 3,000 2,494 | Pending | Pending | 0.71 | 0.21 | 0.84 |
| Clinker Silo | 481.BF01 Pending Pending | 0.01 | 10,000 8,315 | Pending | Pending | 2.36 | 0.71 | 2.81 |
| Clinker Transfer | 481.BF02 Pending Pending | 0.01 | 3,000 2,494 | Pending | Pending | 0.79 | 0.21 | 0.94 |
| Clinker Bins | 481-BF03 Pending Pending | 0.01 | 5,000 4,157 | Pending | Pending | 1.31 | 0.36 | 1.56 |
| Total | | | | | | 5.17 | 1.50 | 6.15 |

Notes:

- All the above equipment are subject to 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry.
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- Grain loading of 0.01 gr/dscf proposed permit limits for all the above baghouses and assume PM-10 = 84% of PM for all baghouses.
 [Requested by Permittee in application Received November 14, 2000]
- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
 [Rule 62-297.620(4), F.A.C.]

B.9 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|----------------------------------|-------------------------|--------------------------------|---------------------------|
| Clinker Transfer Burner Building | 441.BF01 | 10% | 40 CFR 63.1348 |
| Clinker Silo | 481.BF01 | 10% | 40 CFR 63.1348 |
| Clinker Transfer | 481.BF02 | 10% | 40 CFR 63.1348 |
| Clinker Bins | 481.BF03 | 10% | 40 CFR 63.1348 |

EMISSIONS UNIT NO. 003 – FINISH MILLS

Operational Requirements

B.10 Hours of Operation: This emissions unit may operate continuously, i.e., 8,760 hours per year. [Requested by permittee in application received November 14, 2000]

B.11 Finish Mill Process Rates: The maximum total hourly process rate of cement is 334.0 TPH on a 24-hour block average. This is a total of the individual process rates listed below:

| Finish Mill | Baghouse | Process Rate (TPH) |
|--------------------|-------------------------------|---------------------------|
| No. 3 | F-313/F-330/F-332 | 84 |
| No. 4 | F-430/F-432/F-603/F-604/F-605 | 140 |
| No. 6 | 531.BF01/531.BF02 | 110 |
| Total | | 334 |

[Established by Permittee in application received November 14, 2000.]

Emissions Limitations and Performance Standards

B.12 Design Specifications and Particulate Matter Emissions Limits: The baghouses for the finish mills have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

| System | Baghouse ID Manufacturer Model No. | Grain Loading (gr/acf) | Flow Rate acfm dscfm | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM Emissions | |
|--|--|------------------------------|-------------------------------|----------------------------------|--------------------------|--|---------------------------|-------|
| | | | | | | | (lb/hr) | (TPY) |
| Finish Mill No. 3 | F-330 Norblo 702 AMT | 0.01 | 20,000 | 9,477 | 2.1 | 6.31 | 1.71 | 7.51 |
| Finish Mill No. 3 | F-332 Norblo 390 AMT | 0.01 | 13,500 | 5,465 | 2.5 | 4.26 | 1.16 | 5.07 |
| Finish Mill No. 3 | F-313 Mikropul 196S-10-20 | 0.01 | 8,000 | 2,300 | 3.5 | 2.52 | 0.69 | 3.00 |
| Finish Mill No. 4 <i>Belt conveyor/ Separator</i> | F-432 Fuller 5 zone #48 | 0.01 | 17,000 | 2,510 | 6.8 | 5.36 | 1.46 | 6.38 |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-605 Mikropul 645-10-30 | 0.01 | 4,000 | 753 | 5.3 | 1.26 | 0.34 | 1.50 |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-603 Mikropul 121S-10-20 | 0.01 | 8,000 | 1,424 | 5.6 | 2.52 | 0.69 | 3.00 |
| Finish Mill No. 4 <i>Ball Mill/Mill Sweep</i> | F-430 Fuller 6 zone #96 | 0.01 | 30,000 | 6,028 | 5.0 | 9.46 | 2.57 | 11.26 |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-604 Mikropul 121S-10-20 | 0.01 | 8,000 | 1,424 | 5.6 | 2.52 | 0.69 | 3.00 |
| Finish Mill No. 6 <i>Main</i> | 531.BF01 Pending Pending | 0.01 (dscf) | 97,300 80,905 | Pending | Pending | 25.51 | 6.93 | 30.37 |
| Finish Mill No. 6 <i>Sweep</i> | 531.BF02 Pending Pending | 0.01 (dscf) | 25,900 21,536 | Pending | Pending | 6.79 | 1.85 | 8.09 |
| Total | | | | | | 66.52 | 18.09 | 79.19 |

Notes:

- Finish Mill Nos. 3 & 6 Emission Limits of 0.01 gr/acf; lb/hr; were requested by Permittee in application received November 14, 2000.
- Initial testing to demonstrate compliance with the PM limits established above, shall be conducted only for units F-330, F-430, 531.BF01, and 531.BF02. All subsequent compliance testing for PM emissions from the emission points in the table above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
 [Rule 62-297.620(4), F.A.C.]

Notes cont'd:

- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
 - Emissions Limits for Finish Mill No. 4 are based on PSD-FL-236 dated July 1, 1998 and Permittee request in application received November 14, 2000.
 - Finish Mill Nos. 3 & 4 are existing systems. Finish Mill No. 6 is a new system.

B.13 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | Baghouse Id. No. | Visible Emissions Limits | Rule Applicability |
|-------------------|------------------|--------------------------|--------------------|
| Finish Mill No. 3 | F-313 | 10% | 40 CFR 63.1347 |
| | F-330 | | |
| | F-332 | | |
| Finish Mill No. 4 | F-430 | 5% | PSD-FL-236 -- |
| | F-432 | | |
| | F-603 | | |
| | F-604 | | |
| | F-605 | | |
| Finish Mill No. 6 | 531.BF01 | 10% | 40 CFR 63.1347 |
| | 531.BF02 | | |

EMISSIONS UNIT NO. 004 - CEMENT STORAGE/ PACKHOUSE/ LOADOUT

Operational Requirements

B.14 Hours of Operation: This emissions unit may operate continuously, i.e., 8,760 hours per year, except for the packhouse which shall not exceed 4,000 hours of operation per year. [Requested by permittee in application received November 14, 2000.]

B.15 Cement Storage Silos/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 85 TPH on a 24-hour block average. [AC 13-21098 dated November 2, 1979]

Emissions Limitations and Performance Standards

B.16 Design Specifications and Particulate Matter Emissions Limits The baghouses for the Cement Storage/Packhouse/Loadout system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the amounts shown in the following table: -

| System | Baghouse ID Manufacturer Model No. | Grain Loading (gr/acf) | Flow Rate Acfm Dscfm | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM Emissions | |
|--|--|------------------------------|----------------------------|-------------------------------------|-----------------------|--|---------------------------|-------|
| | | | | | | | (lb/hr) | (TPY) |
| Cement Silos 1-6 | F-511 Fuller 2 zone #78 | 0.01 | 18,000 | 1,625 | 11.1 | 5.68 | 1.54 | 6.76 |
| Cement Silos 7-9 | F-512 Norblo 156 AMT | 0.01 | 10,000 | 2,142 | 4.7 | 3.15 | 0.86 | 3.75 |
| Cement Silo 10 | F-513 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 1.58 | 0.43 | 1.88 |
| Cement Silo 11 | F-514 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 1.58 | 0.43 | 1.88 |
| Cement Silo 12 | F-515 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 1.58 | 0.43 | 1.88 |
| Bulk Loadout Unit 1 (Rail/Truck) | B-110 Norblo 120 AMT | 0.01 | 3,000 | 1,650 | 1.8 | 0.95 | 0.26 | 1.13 |
| Bulk Loadout Unit 2 (Truck) | B-210 Norblo 120 AMT | 0.01 | 3,000 | 1,650 | 1.8 | 0.95 | 0.26 | 1.13 |
| Bulk Loadout Unit 3 Line 1 | B-372 Mikropul 36S-8-30-C | 0.01 | 2,000 | 340 | 5.9 | 0.63 | 0.17 | 0.75 |
| Bulk Loadout Unit 3 Line 2 | B-374 Mikropul 36S-8-30-C | 0.01 | 2,000 | 340 | 5.9 | 0.63 | 0.17 | 0.75 |
| Bulk Loadout Unit 3 Line 3 | B-382 Mikropul 121S-10-20-B | 0.01 | 5,000 | 1,424 | 3.5 | 1.58 | 0.43 | 1.88 |
| Packhouse | Pending Pending Pending | 0.01 (dscf) | 23,400 23,400 | Pending | Pending | 3.37 | 2.01 | 4.01 |
| Total | | | | | | 21.68 | 6.99 | 25.80 |

Notes:

- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. [Rule 62-297.620(4), F.A.C.]

Notes cont'd:

- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- Emissions reflect permit limits established in PSD-FL-028 dated March 19, 1980.
 [PSD-FL-028 dated March 19, 1980 and Requested by Permittee in application Received November 14, 2000]

B.17 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|-------------------------------|-------------------------|--------------------------------|---------------------------|
| Cement Silos 1-6 | F-511 | 10% | 40 CFR 63.1348 |
| Cement Silos 7-9 | F-512 | 5% | PSD-FL-236 |
| Cement Silos 10,11, 12 | F-513 | 5% | AC13-21098 |
| | F-514 | | |
| | F-515 | | |
| Bulk Loadout Unit 1 | B-110 | 10% | PSD-FL-236 |
| Bulk Loadout Unit 2 | B-210 | 10% | PSD-FL-236 |
| Bulk Loadout Unit 3 Line 1 | B-372 | 5% | AC13-21098 |
| Bulk Loadout Unit 3 Line 2 | B-374 | 5% | AC13-21098 |
| Bulk Loadout Unit 3 Line 3 | B-382 | 5% | AC13-21098 |
| Packhouse | Pending | 10% | 40 CFR 63.1348 |

EMISSIONS UNIT NO. 005 - RAW MILL/PYROPROCESSING SYSTEM

Operational Requirements

- B.18 Hours of Operation: This emissions unit may not operate in excess of 7,884 hours per year except for 341.BF01 which may operate 8760 hours per year.
[Requested by permittee in application received November 14, 2000]
- B.19 Raw Mill/Pyroprocessing Unit Production Limits: The maximum production of clinker shall not exceed 250 TPH on a 24-hour block average and 1,642,500 TPY.
[Rule 62-210.200 (228)(PTE), F.A.C.; and Application received November 14, 2000]
- B.20 Operating Limits for In-line kiln/raw mills:
- (a) The owner or operator of a in-line kiln/raw mill subject to a D/F emissions limitation under 40 CFR 63.1343 must operate the in-line kiln/raw mill such that the temperature of the gas at the inlet to the kiln Particulate Matter control device (PMCD) does not exceed the applicable temperature limit specified in the following paragraph.
 - (b) The temperature limit for affected sources meeting the limits above is determined in accordance with the following: the run average temperature must be calculated for each run, and the average of the run average temperature must be determined and included in the performance test report and will determine the applicable temperature limit.
 - (c) The owner or operator of an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must operate the carbon injection system in accordance with paragraphs (c)(1) and (c)(2) of this section.
 - (1) The three-hour rolling average activated carbon injection rate shall be equal to or greater than the activated carbon injection rate determined in accordance with §63.1349(b)(3)(vi).
 - (2) The owner or operator shall either:
 - (i) Maintain the minimum activated carbon injection carrier gas flow rate, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c) of this part, or
 - (ii) Maintain the minimum activated carbon injection carrier gas pressure drop, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c).
 - (d) Except as provided in paragraph (e) of this section, the owner or operator of an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must specify and use the brand and type of activated carbon used during the performance test until a subsequent performance test is conducted, unless the site-specific performance test plan contains documentation of key parameters that affect adsorption and the owner or operator establishes limits based on those parameters, and the limits on these parameters are maintained.
 - (e) The owner or operator of an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique may substitute, at any time, a different brand or type of activated carbon provided that the replacement has equivalent or improved properties compared to the activated carbon specified in the site-specific performance test plan and used in the performance test. The owner or operator must maintain documentation that the substitute activated carbon will provide the same or better level of control as the original activated carbon.
[40 CFR 63.1344]

B.21 Methods of Operation – Fuels:

| | Allowable Fuels |
|--|---|
| RawMill and Pyroprocessing Unit | 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.* |

Note:

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

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

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

Emissions Limitations and Performance Standards

B.22 Design Specifications and Particulate Matter Emissions Limits: The Particulate Matter emissions from the Raw Mill/Pyroprocessing system are controlled by baghouses with the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

| System | Baghouse ID Manufacturer Model No. | Grain Loading (gr/dscf) | Flow Rate Acfm Dscfm | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM Emissions | |
|--|--|-------------------------------|----------------------------|----------------------------------|-----------------------|--|---------------------------|--------|
| | | | | | | | (lb/hr) | (TPY) |
| Kiln/Cooler/ Raw Mill Main Stack | 331.BF01 Pending Pending | * | 486,000 392,367 | Pending | Pending | 147.00 | 53.10 | 175.00 |
| Dust Bin Kiln Dust | 331.BF02 Pending Pending | 0.01 | 6,800 4,175 | Pending | Pending | 1.18 | 0.36 | 1.41 |
| Blend Silo | 341.BF01 Pending Pending | 0.01 | 6,250 5,189 | Pending | Pending | 1.64 - | 0.44 | 1.95 |
| Raw Meal Preheat Tower | 351.BF01 Pending Pending | 0.01 | 6,200 5,147 | Pending | Pending | 1.46 | 0.44 | 1.74 |
| Raw Meal Preheat Tower | 351.BF02 Pending Pending | 0.01 | 3,000 2,491 | Pending | Pending | 0.71 | 0.21 | 0.84 |
| Raw Meal Preheat Tower | 351-BF03 Pending Pending | 0.01 | 10,400 8,634 | Pending | Pending | 2.45 | 0.74 | 2.92 |
| Total | | | | | | 154.44 | 55.29 | 183.86 |

Notes:

- (*) PM Emissions Limit is 0.125 lbs/ton of kiln feed.
- Grain loading of 0.01 gr/dscf proposed permit limits for all new baghouses except main stack and assume PM-10 = 84% of PM for all baghouses
 [Requested by Permittee in application Received November 14, 2000]
- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above, except 331.BF01 which exhausts to the main/common stack, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
 [Rule 62-297.620(4), F.A.C.]
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- All the above units are subject to 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry.

B.23 SO₂, NO_x, CO, VOC, and SAM Emission Limits: The emissions from the Raw Mill/Pyroprocessing system shall not exceed the limits shown in the following table:

| Pollutant | Allowable Emissions | | Emissions Limits in lbs./ton of clinker | | Monitors |
|-----------------|---------------------------------|-----------------------|---|--|----------|
| | 12-month rolling average in TPY | Lbs./hr 24-hr average | 24 hr avg. @208 TPH of clinker production (5) | 24-hr average @250 TPH of clinker production | |
| SO ₂ | 806 | 320 | 1.54 | 1.28 | CEM |
| NO _x | 1953 | 720 | 3.46 | 2.88 | CEM |
| CO | 1457 | 576 | 2.76 | 2.30 | Process |
| VOC | 155 | 40 | 0.19 | 0.16 | CEM |
| SAM | 8.68 | 2.24 | 0.009 | 0.009 | - |

Notes:

- The 12-month rolling average in TPY would be the average of the daily values for the current month and the preceding 11 months. The averages shall be based on the operating days or hours, and shall exclude days or hours in which the plant is not operating.
- The averaging time for CO corresponds to the required length of sampling for the initial and subsequent emission tests.

[Rules 62-4.070(3) and 62-212.400, F.A.C.]

B.24 PM/PM-10 and Dioxins/Furans Emissions:

| Pollutant | Allowable Emissions | | Emissions | | |
|--------------------|---------------------|---------|-----------|---------------------------|----------------|
| | TPY | lbs./hr | Limit | Unit | Averaging Time |
| PM | 175 | 53.1 | 0.125 | lbs./ton of dry kiln feed | 3 hours |
| PM ₁₀ | 147 | 42.0 | 0.105 | lbs./ton of dry kiln feed | 3 hours |
| Dioxins/ Furans | | | 0.40 | ng TEQ/dscm | 3 hours |

Notes:

- The averaging times for PM and PM10 correspond to the required length of sampling for the initial and subsequent emissions tests.

[Rules 62-4.070(3) and 62-212.400, F.A.C.]

B.25 Sulfur Dioxide Emissions: Emissions of SO₂ shall not exceed 1.2 lb/MMBtu heat input when solid fuel is fired, or 0.8 lb/MMBtu heat input when liquid fuel is fired, based on a 24 hour average.

[Miami-Dade County Code, Section 24-17(2)(a)]

B.26 Mercury and Lead into the Pyroprocessing System Limited: The baseline potential emissions for mercury and lead, as stated in the Application received June 30, 1998, are 30 lbs/year and 94 lbs/year, respectively. An increase in mercury and lead emissions of 200 and 1,200 pounds, respectively, above the previously stated baseline emissions per consecutive 12-month period shall subject this facility to Prevention of Significant Deterioration (PSD) Review.
[Rules 62-4.070(3) and 62-212.400, F.A.C.]

B.27 Pursuant to 40 CFR 63.1343 Standards for Kilns and In-line Kiln/raw Mills

(a) *General.* The provisions in this section apply to each in-line kiln/raw mill.

(c) No owner or operator of an inline kiln/raw mill shall cause to be discharged into the atmosphere from these affected sources any gases which:

- (1) Contain particulate matter in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln.
- (2) Exhibit opacity greater than 20 percent.
- (3) Contain D/F in excess of:
 - (i) 0.20 ng per dscm (8.7×10^{-11} gr per dscf)(TEQ) corrected to seven percent oxygen; or
 - (ii) 0.40 ng per dscm (1.7×10^{-10} gr per dscf)(TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204° C (400° F) or less.

[40 CFR 63.1343]

B.28 Engineering Design Capacities For The Raw Mill And Pyroprocessing Unit:

| Sources | Maximum Capacity (MMBtu/hr) |
|---------------------|--------------------------------|
| Raw Mill Heat Input | 105 |
| Calciner Heat Input | 385 |
| Kiln Heat Input | 290 |
| Total Heat Input | 675 |

[Application received November 14, 2000]

B.29 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| Emissions Point | Baghouse Id. No. | Visible Emissions Limit | Permit/Rule Applicability |
|---|------------------|-------------------------|---------------------------|
| Main Dust Collector exhausts to Main/Common Stack | 331.BF01 | 10%* | 40 CFR 63.1342 |
| Cement Kiln Dust Bin | 331.BF02 | 10% | 40 CFR 63.1348 |
| Blending & Storage System | 341.BF01 | 10% | 40 CFR 63.1348 |
| | 351.BF01 | 10% | 40 CFR 63.1348 |
| | 351.BF02 | 10% | 40 CFR 63.1348 |
| | 351.BF03 | 10% | 40 CFR 63.1348 |

Note:

- (*) 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.
 [40 CFR 63.1345]

EMISSIONS UNIT NO. 006 - RAW MATERIAL HANDLING

Operational Requirements

B.30 Hours of Operation: This emissions unit may not operate in excess of 7,884 hours per year, except for baghouse 232.BF01 for the lime/gypsum silos (existing silos) which shall not exceed 4,000 hours of operation per year.

[Requested by permittee in application received November 14, 2000]

B.31 Raw Material Handling System Throughput Specification: The maximum dry throughput rate is shown in the following table:

| Source Description | Throughput Maximum (TPY) |
|------------------------------|--------------------------|
| Raw Material Handling System | 3,260,000 (dry) |

Emissions Limitations and Performance Standards

B.32 Design Specifications and Particulate Matter Emissions Limits: The Particulate Matter emissions from the Raw Material Handling system are controlled by baghouses with the following or equivalent design specifications:

| System | Baghouse ID Manufacturer Model No. | Grain Loading (gr/dscf) | Flow Rate Acfm Dscfm | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM Emissions | |
|-------------------|--|-------------------------------|----------------------------|-------------------------------------|-----------------------|--|---------------------------|-------|
| | | | | | | | (lb/hr) | (TPY) |
| Lime/Gyp Silos | 232.BF01 Pending Pending | 0.01 | 5,170 5,170 | Pending | Pending | 0.74 | 0.44 | 0.89 |
| Additives | 311.BF01 Pending Pending | 0.01 | 11,000 11,000 | Pending | Pending | 3.12 | 0.94 | 3.72 |
| Additives | 311.BF02 Pending Pending | 0.01 | 6,050 4,840 | Pending | Pending | 1.37 | 0.41 | 1.64 |
| Additives | 311.BF03 Pending Pending | 0.01 | 10,000 10,000 | Pending | Pending | 2.84 | 0.86 | 3.38 |
| Additives | 311.BF04 Pending Pending | 0.01 | 10,000 10,000 | Pending | Pending | 2.84 | 0.86 | 3.38 |
| Total | | | | | | 10.91 | 3.51 | 13.01 |

Notes:

- Grain loading of 0.01 gr/dscf proposed permit limits for all baghouses listed above and assume PM-10 = 84% of PM.
 [Requested by Permittee in application Received November 14, 2000]
- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
 [Rule 62-297.620(4), F.A.C.]
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.

B.33 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|-------------------|------------------|----------------------------|-----------------------|
| Lime/Gyp Silos | 232.BF01 | 10% | 40 CFR 63.1348 |
| Additives | 311.BF01 | | |
| Additives | 311.BF02 | | |
| Additives | 311.BF03 | | |
| Additives | 311.BF04 | | |

Tarmac America, Inc.
 Permit Number: 0250020-010-AC

C.0 Emissions Unit Specific Testing, Monitoring, Notification, Recordkeeping, and Reporting Requirements

C.1 Test Methods and Procedures: The permittee shall conduct testing/monitoring on all emissions units as indicated below:

| System | Unit ID | Pollutant | EPA Test Method | Frequency |
|--|----------|-----------|-----------------|-------------------|
| EU 001 Coal Handling | | | | |
| Coal Main – exhausts to main stack | 461.BF01 | PM | 5 | Initial & Annual |
| | | Opacity | 9 | Initial & 5 years |
| Dump Hopper (Transfer) | 241.BF01 | PM | 5 | Initial & Annual |
| | | Opacity | 9 | Initial & Annual |
| Conveyors (2) (Transfer) & Coal and Petroleum Coke Feed Bins | 241.BF02 | | | |
| Coke/Petroleum Coke (Transfer) | 461.BF02 | | | |
| Surge Bin (Feeder) | 461.BF03 | | | |
| EU 002 Clinker Handling & Storage | | | | |
| Clinker Transfer Burner Building | 441.BF01 | PM | 5 | Initial & Annual |
| | | Opacity | 9 | Initial & 5 years |
| Clinker Silo | 481.BF01 | | | |
| Clinker Transfer | 481.BF02 | | | |
| Clinker Bins | 481.BF03 | | | |
| EU 003 Finish Mills | | | | |
| Finish Mill No. 3 | F-330 | PM | 5 | Initial & Annual |
| | F-332 | Opacity | 9 | Initial & 5 years |
| | F-313 | | | |
| Finish Mill No. 4 <i>Belt conveyor/ Separator</i> | F-432 | | | |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-605 | | | |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-603 | | | |
| Finish Mill No. 4 <i>Ball Mill/Mill Sweep</i> | F-430 | | | |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-604 | | | |
| Finish Mill No. 6 <i>Main</i> | 531.BF01 | PM | 5 | Initial & Annual |
| | | Opacity | 9 | Initial & Annual |
| Finish Mill No. 6 <i>Sweep</i> | 531.BF02 | | | |
| EU 004 Cement Storage, Packhouse, & Loadout | | | | |
| Cement Silos 1-6 | F-511 | PM | 5 | Initial & Annual |
| | | Opacity | 9 | Initial & 5 years |
| Cement Silos 7-9 | F-512 | | | |
| Cement Silo 10 | F-513 | | | |
| Cement Silo 11 | F-514 | | | |
| Cement Silo 12 | F-515 | | | |
| Bulk Loadout Unit 1 (Rail/Truck) | B-110 | | | |

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Permit Number: 0250020-010-AC

| | | | | |
|---|----------|---------------|------------|---------------------------------------|
| Bulk Loadout Unit 2 (Truck) | B-210 | PM Opacity | 5 | Initial & Annual Initial & 5 years |
| Bulk Loadout Unit 3 Line 1 | B-372 | | 9 | |
| Bulk Loadout Unit 3 Line 2 | B-374 | | | |
| Bulk Loadout Unit 3 Line 3 | B-382 | | | |
| Packhouse | Pending | | | |
| EU005 Raw Mill and Pyroprocessing System | | | | |
| Kiln/Cooler/Raw Mill Main/Common Stack | 331.BF01 | PM | 5 | Initial & Annual |
| | | PM10 | 5 | Initial & Annual |
| | | Opacity | 9 | Initial & 5 years |
| | | SO2 | 6 | Initial & 5 years |
| | | NOx | 7 or 7E | Initial & 5 years |
| | | CO | 10 | Initial & 5 years |
| | | VOC | 25 or 25A | Initial & 5 years |
| | | SAM | 5 & 8 | Initial & 5 years |
| | | Dioxins/Fuans | 23 | Initial & 30 months |
| | | Lead/Mercury | 29 or 101A | Initial & Annual |
| Dust Bin | 331.BF02 | PM | 5 | Initial & Annual |
| Kiln Dust | | Opacity | 9 | Initial & 5 years |
| Blend Silo | 341.BF01 | | | |
| Raw Meal Preheat Tower | 351.BF01 | | | |
| Raw Meal Preheat Tower | 351.BF02 | | | |
| Raw Meal Preheat Tower | 351.BF03 | | | |
| EU006 Raw Material Handling | | | | |
| Lime/Gyp Silos | 232.BF01 | PM | 5 | Initial & Annual |
| Additives | 311.BF01 | Opacity | 9 | Initial & 5 years |
| Additives | 311.BF02 | | | |
| Additives | 311.BF03 | | | |
| Additives | 311.BF04 | | | |

Notes:

- In the event that initial testing for mercury and lead result in potential annual emissions below 130 and 694 pounds, respectively, the DERM may waive the annual testing and require testing once every 5 years. Should subsequent test results indicate levels greater than those mentioned above, the facility shall revert to an annual testing schedule.
- Initial and subsequent compliance testing requirements for PM emissions, except those listed below, are waived and an alternative standard of 5% opacity is imposed. If the DERM has reason to believe that the particulate weight emissions standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.

The following emissions units require initial testing for PM emissions:
331.BF01, F-330, F-430, 531.BF01, 531.BF02

C.2 Lead/Mercury Testing: Initial and Annual tests of emissions shall be conducted for mercury and lead using either Method 29 or Method 101A. In the event that initial testing for mercury and lead result in potential annual emissions below 130 and 694 pounds, respectively, the DERM may waive the subsequent annual testing requirements.
[Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

C.3 Initial and Subsequent Performance Testing:

(a) The owner or operator of an affected emissions unit subject to 40 CFR 63, Subpart LLL, shall demonstrate initial compliance with the emissions limits of 40 CFR 63.1343, 40 CFR 63.1345, 40 CFR 63.1346, 40 CFR 63.1347 and 40 CFR 63.1348 using the test methods and procedures in paragraph 40 CFR 63.1349(b) (see Specific condition C.1 and 40 CFR 63.7). Performance test results shall be documented in complete test reports that contain the information required by paragraphs 40 CFR 63.1349(a)(1) through (a)(10), as described below, as well as all other relevant information. The plan to be followed during testing shall be made available to the DERM prior to testing, if requested.

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

(b) Performance tests to demonstrate initial compliance with 40 CFR 63, Subpart LLL, shall be conducted as specified as follows: [40 CFR 63.1349(b)(1) through (b)(3)].

(1) The owner or operator of a in-line kiln/raw mill subject to limitations on Particulate Matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs 40 CFR 63.1349(b)(1)(i) through (b)(1)(iii). The owner or operator of a clinker cooler subject to limitations on Particulate Matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs (b)(1)(i) through (b)(1)(iii). The opacity exhibited during the period of the Method 5 of Appendix A, 40 CFR Part 60 performance tests required by paragraph (b)(1)(i) shall be determined as required in paragraph (b)(1)(v).

(i) EPA Method 5 of Appendix A, 40 CFR Part 60, shall be used to determine PM emissions. Each performance test shall consist of three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition C.5). Each run shall be conducted for at least one hour, and the minimum sample volume shall be 0.85 dscm (30 dscf). The average of the three runs shall be used to determine compliance. A determination of the Particulate Matter collected in the impingers ("back half") of the Method 5 particulate sampling train is not required to demonstrate initial compliance with the PM standards of 40 CFR 63, Subpart LLL. However this shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.

(ii) Suitable methods shall be used to determine the kiln feed rate, except for fuels, for each run.

(iii) The emissions rate, E, of PM shall be computed for each run using Equation 1:

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

(Equation 1)

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

c_s = concentration of PM, kg/dscm (g/dscf).

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

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

- (v) Except as provided in paragraph 40 CFR 63.1349(b)(1)(vi) the opacity exhibited during the period of the Method 5 performance tests required by paragraph 40 CFR 63.1349(b)(1)(i) shall be determined through the use of a continuous opacity monitor (COM). The maximum six-minute average opacity during the three Method 5 test runs shall be determined during each Method 5 test run, and used to demonstrate initial compliance with the applicable opacity limits of 40 CFR 63.1343(b)(2) or 40 CFR 63.1345(a)(2).
- (2) The owner or operator of any affected source subject to limitations on opacity under 40 CFR 63, Subpart LLL, that is not subject to (b)(1) of this section shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of Appendix A, 40 CFR Part 60. The performance test shall be conducted under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition C.5). The maximum six-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3-hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1-hour if the conditions of paragraphs (b)(2)(i) through (ii) of the section apply:
- (i) There are no individual readings greater than 10 percent opacity;
- (ii) There are no more than three readings of 10 percent for the first 1-hour period.
(See Specific Condition C.4).
- (3) The owner or operator of an affected source subject to limitations on D/F emissions shall demonstrate initial compliance with the D/F emissions limit by conducting a performance test using Method 23 of Appendix A, 40 CFR Part 60.
- (i) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition C.4 and C.5). The duration of each run shall be at least three hours and the sample volume for each run shall be at least 2.5 dscm (90 dscf). The concentration shall be determined for each run and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.
- (ii) The temperature at the inlet to the PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.
- (iii) One-minute average temperatures must be calculated for each minute of each run of the test.
- (iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with Specific Condition C.13.
- (c) Except as provided in paragraph 40 CFR 63.1349(e), performance tests required under paragraphs 40 CFR 63.1349(b)(1) and (b)(2) shall be repeated annually.
- (d) Performance tests required under paragraph 40 CFR 63.1349(b)(3) shall be repeated every 30 months.
- (e) The owner or operator is required to repeat the performance tests for in-line kiln/raw mills as specified in paragraphs 40 CFR 63.1349(b)(1) and (b)(3) within 90 days of initiating any significant change in the feed or fuel from that used in the previous performance test.
- [Rules 62-204.800 and 62-297.310(7)(a)4., F.A.C.; and, 40 CFR 63.1349(a); (b)(1)(i), (ii), (iii) & (v); (b)(2); (b)(3)(i), (ii), (iii) & (iv); (c); (d); and, (e)]

C.4 Required Number of Test Runs: For mass emissions limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emissions rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emissions rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emissions rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emissions limiting standards.
[Rule 62-297.310(1), F.A.C.]

C.5 Operating Rate During Testing: Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

Emissions testing shall be performed at the kiln/cooler main stack during a period when the kiln precalciner, cooler, raw mill and preheater are operating simultaneously and under normal operating conditions. EPA-reference methods for sampling pollutants shall be as specified in 40 CFR 63, Appendix A. These emissions units shall comply with all applicable requirements of Rule 62-297.310, F.A.C. General Test Requirements and 40 CFR 63.1349, Performance Tests.

The permittee shall provide the DERM with a *protocol* that will outline the different fuel scenarios (% of total heat input) that this unit will be burning. Tarmac shall obtain the test data necessary to determine whether this kiln is capable of accommodating the burning of coal or petroleum coke and all of the other supplemental fuels specified on Specific Condition B.21 Methods of Operation - Fuels. The fuel scenarios tested shall represent the actual combustion percentage (% of total heat input) that is going to be maintained while burning supplemental fuels during normal operation. The frequency of testing shall be determined by the DERM.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

C.6 Calculation of Emissions Rate: The indicated emissions rate or concentration shall be the arithmetic average of the emissions rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

C.7 Applicable Test Procedures:

(a) Required Sampling Time:

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of Particulate Matter, and thirty (30) minutes for emissions units which have potential emissions

less than 100 tons per year of Particulate Matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

- c. The minimum observation period for opacity tests conducted by employees or agents of the DERM to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume: Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range: For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment: Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached).
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

C.8 Required Stack Sampling Facilities: When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

C.9 Frequency of Compliance Tests: The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing:

- 1. The owner or operator of an emissions unit that is subject to any emissions limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emissions limiting standard prior to obtaining a Title V operating permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the DERM shall not require submission of emissions compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
- 2. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; or 100 tons per year or more of any other regulated air pollutant; and,
 - c. Each NESHAP pollutant, if there is an applicable emissions standard.
- 3. The owner or operator shall notify the DERM, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests: When the DERM, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to

believe that any applicable emissions standard contained in a DERM rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the DERM.

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

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

C.10 **Fuel Analysis for On-specification Used Oil:** Fuel analysis shall be in accordance with 40 CFR 266.43(b)(1) & (6). A sample shall be taken from the outlet of the blend tank on the first working day (i.e., Monday - Friday; exceptions: holidays) of each month, if any used oil was placed in the blend tank the previous month; or, the sample can be taken directly from the used oil mobile collection tank after final collection and prior to the time of initial transfer; but, that sampling frequency shall be no less than quarterly and the sampling methodology shall have been established with the DERM, Miami-Miami-Dade County prior to sampling. Upon taking a sample, the sample shall be analyzed for the following constituent/property and associated unit and using the following test methods (or their latest version):

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

Note:

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

Monitoring of Operations

C.11 Determination of Process Variables:

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

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

- C.12 **Production Rate Recording:** The owner or operator shall record the daily production and the preheater-kiln system feed rate. The permittee may establish a relationship between material feed rates and production rates of clinker if material feed rates are measured more accurately than clinker production rates and the relationship is accurate within 10%.

[Rule 62-204.800(7)(b)9., F.A.C.]

C.13 Maintenance Plans:

- (a) The owner or operator of each Portland cement plant shall prepare for each affected emissions unit subject to the provisions of 40 CFR 63, Subpart LLL, a written operations and maintenance plan. The plan shall be submitted to the DERM for review and approval as part of the application for a 40 CFR Part 70 permit and shall include the following information:
 - (1) Procedures for proper operation and maintenance of the affected emissions unit and air pollution control devices in order to meet the emissions limits and operating limits of 40 CFR 63.1343 through 40 CFR 63.1348;
 - (2) Corrective actions to be taken when required by paragraph 40 CFR 63.1350(e);
 - (3) Procedures to be used during an inspection of the components of the combustion system of each in-line kiln/raw mill located at the facility at least once per year; and
 - (4) Procedures to be used to periodically monitor existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system; and each existing raw material dryer. Emissions from these units shall not exceed the 10 percent opacity standard pursuant to 40 CFR 63.1348. Such procedures must include the provisions of paragraphs 40 CFR 63.1350(a)(4)(i) through (a)(4)(iv).
 - (i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected emissions unit in accordance with Method 22 of Appendix A, 40 CFR Part 60. The test must be conducted while the affected emissions unit is in operation.
 - (ii) If no visible emissions are observed in six consecutive monthly tests for any affected emissions unit, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected emissions unit. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected emissions unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
 - (iii) If no visible emissions are observed during the semi-annual test for any affected emissions unit, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected emissions unit. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected emissions unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

- (iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of Appendix A, 40 CFR Part 60. The Method 9 test must begin within one hour of any observation of visible emissions.
- (b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with paragraph 40 CFR 63.1350(a) shall be a violation of the standard.
- (c) The owner or operator of a in-line kiln/raw mill shall monitor opacity at each point where emissions are vented from these affected sources in accordance with paragraphs 40 CFR 63.1350(c)(1) and (c)(3).
 - (1) The owner or operator shall install, calibrate, maintain, and continuously operate a continuous opacity monitor (COM) located at the outlet of the PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by Subpart A, general provisions of this 40 CFR Part 63, and according to PS-1 of Appendix B, 40 CFR Part 60.
 - (2) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 20 percent. If the average opacity for any 6-minute block period exceeds 20 percent, this shall constitute a violation of the standard.
- (d) The owner or operator of a clinker cooler shall monitor opacity at each point where emissions are vented from the clinker cooler in accordance with paragraphs 40 CFR 63.1350(d)(1) and (d)(3).
 - (1) The owner or operator shall install, calibrate, maintain, and continuously operate a COM located at the outlet of the clinker cooler PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by Subpart A, general provisions of 40 CFR Part 63, and according to PS-1 of Appendix B, 40 CFR Part 60.
 - (2) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard.
- (f) The owner or operator of an affected source subject to a limitation on D/F emissions shall monitor D/F emissions in accordance with paragraphs 40 CFR 63.1350(f)(1) through (f)(6).
 - (1) The owner or operator shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln at the inlet to, or upstream of, the kiln PM control devices.
 - (i) The recorder response range must include zero and 1.5 times either of the average temperatures established according to the requirements in 40 CFR 63.1349(b)(3)(iv).
 - (ii) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the DERM.
 - (2) The owner or operator shall monitor and continuously record the temperature of the exhaust gases from the kiln at the inlet to the kiln PMCD.
 - (3) The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.
 - (4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.
 - (5) When the operating status of the raw mill of the in line kiln/raw mill is changed from off to on, or from on to off the calculation of the three hour rolling average temperature must begin anew, without considering previous recordings.
 - (6) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.

- (g) The owner or operator of any in-line kiln/raw mill subject to a D/F emissions limit under this subpart shall conduct an inspection of the components of the combustion system of each kiln at least once per year.
- (h) The owner or operator of an affected source subject to a Particulate Matter standard under 40 CFR 63.1343 shall install, calibrate, maintain and operate a Particulate Matter continuous emissions monitoring system (PM CEMS) to measure the Particulate Matter discharged to the atmosphere. The compliance deadline for installing the PM CEMS and all requirements relating to performance of the PM CEMS and implementation of the PM CEMS requirement is deferred pending further rulemaking.

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

C.14 Raw Mill and Finish Mill Monitoring: 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 (PM control devices) of these affected sources, in accordance with the procedures of Method 22 of Appendix A, 40 CFR Part 60. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the owner or operator must:

- (1) Initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan developed in accordance with paragraphs 40 CFR 63.1350(a)(1) and (a)(2); and
- (2) Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed in accordance with Method 9 of Appendix A, 40 CFR Part 60. The duration of the Method 9 test shall be thirty minutes.

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

C.15 Continuous Opacity Monitor (COM): The owner or operator of an affected source subject to a limitation on opacity under 40 CFR 63.1348 shall monitor opacity in accordance with the operation and maintenance plan developed pursuant to paragraph 40 CFR 63.1350(a).

[Rule 62-206.800, F.A.C.; and, 40 CFR 63.1350(j)]

C.16 CO/O₂ Process Monitors: Continuous process monitors shall be installed for CO or O₂ to insure proper combustion practices and for use in determining plant operating parameters to optimize emissions of CO, NO_x, and SO₂.

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

C.17 NO_x, SO₂ & VOC Continuous Emissions Monitor System (CEMS): CEMS shall be installed, calibrated, maintained, operated, and used to determine compliance with the emissions limits for NO_x, SO₂ and VOCs. CEMS shall be installed and certified, before the initial performance test, and operated in compliance with 40 CFR 63 Subpart A General Provisions.

[Rules 62-4.070 (3) and 62-204.800, F.A.C.]

C.18 CMS Requirements:

Each CEMS shall calculate and record emissions rates in units of pounds of NO_x, SO₂, and VOCs per hour. The averaging time for each CEMS shall be a 24-hour block average for the lb/hour short-term emissions limits. Every day, the 24-hour average NO_x, SO₂ and VOC emissions rates for the previous day shall be calculated. Emissions shall be calculated in units of pounds per hour and pounds per ton of clinker. Daily averages are to be calculated as the arithmetic mean of each monitored operating hour. A monitored operating hour is each hour in which fuel is fired in the unit and at least two

emissions measurements are recorded at least 15 minutes apart. Data taken during periods of startup, or when fuel is not fired to the unit, or when the CEMS is not calibrated shall be excluded from the daily average. To the extent the monitoring system is available to record emissions data, the CEMS shall be operated and shall record data at all operating hours when fuel is fired in the unit, including periods of startup, shutdown, load change, continuous operation and malfunction.

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

- C.19 CMS Certification: The monitoring device shall meet the applicable requirements of 40 CFR 63, Appendix A General Provisions including certification of each device in accordance with Performance Specifications in 40 CFR 63.8 and Notification Requirements in 40 CFR 63.9. 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 a any CMS.

[40 CFR 63 Subpart A, General Provisions, Rule 62-4.070 (3) F.A.C., Rule 62-204.800 F.A.C.]

Notification, Recordkeeping and Reporting Requirements

- C.20 On-specification Used Oil:

- (a) The results of each sample analysis shall be submitted to the DERM within 30-days after the sample is taken.
- (b) The dates and quantities of both on-specification used oil and purchased fuel oil transferred to the 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 ending quarter.

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

- C.21 Notification requirements:

- (a) The notification provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a notice that contains all of the information required in a notification listed in 40 CFR 63.1353, the owner or operator may send the DERM a copy of the notice sent to the State to satisfy the requirements of 40 CFR 63.1353 for that notification.
- (b) Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9 as follows:
 - (1) Initial notifications as required by 40 CFR 63.9(b) through (d). For the purposes of 40 CFR 63, Subpart LLL, a Title V or 40 CFR Part 70 permit application may be used in lieu of the initial notification required under 40 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under 40 CFR Part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.
 - (2) Notification of performance tests, as required by 40 CFR 63.7 and 63.9(e).
 - (3) Notification of opacity and visible emissions observations required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 63.9(f).
 - (4) Notification, as required by 40 CFR 63.9(g), of the date that the continuous emissions monitor performance evaluation required by 40 CFR 63.8(e) of this part is scheduled to begin.
 - (5) Notification of compliance status, as required by 40 CFR 63.9(h).

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1353]

C.22 Used Oil Usage Records: In order to document compliance with the used oil limitations, the following requirements shall be adhered to as a minimum:

- (1) Recordkeeping when burning used oil shall be 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.
- (2) 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
- (3) 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.
 - 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.
 - The dates and quantities of both on and off-spec purchased used oil transferred to the facility storage tank shall be reported quarterly (i.e., Jan-Mar, April-June, July-Sept, and Oct-Dec). The report is due in the month following the ending quarter.
 - The unused portion of the used oil sample shall be retained for six months following the submittal of the analyses in case further testing is required.

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

C.23 Reporting requirements:

- (a) The reporting provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a report that contains all of the information required in a report listed in 40 CFR 63.1354, the owner or operator may send the DERM a copy of the report sent to the State to satisfy the requirements of 40 CFR 63.1354 for that report.
- (b) The owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of 40 CFR Part 63, Subpart A, as follows:
 - (1) As required by 40 CFR 63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.
 - (2) As required by 40 CFR 63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by 40 CFR 63.1349.
 - (3) As required by 40 CFR 63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance

- under 40 CFR 63.6(i) shall submit such reports by the dates specified in the written extension of compliance.
- (4) As required by 40 CFR 63.10(d)(5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and
 - (5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
 - (6) As required by 40 CFR 63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by 40 CFR 63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.
 - (7) As required by 40 CFR 63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under 40 CFR 63.7 and described in 40 CFR 63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under 40 CFR 63.8(e).
 - (8) As required by 40 CFR 63.10(e)(3), the owner or operator of an affected source equipped with a continuous monitoring system shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emissions limitation or operating parameter limit.
 - (9) The owner or operator shall submit a summary report **semiannually** which contains the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:
 - (i) All exceedances of maximum control device inlet gas temperature limits specified in 40 CFR 63.1344(a) and (b);
 - (ii) All failures to calibrate thermocouples and other temperature sensors as required under 40 CFR 63.1350(f)(7) of 40 CFR 63, Subpart LLL; and
 - (iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under 40 CFR 63.1344(c).
 - (iv) The results of any combustion system component inspections conducted within the reporting period as required under 40 CFR 63.1350(i).
 - (v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a).
 - (10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

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

C.24 Record keeping requirements:

- (a) The owner or operator shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.
- (b) The owner or operator shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3); and
 - (1) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9;
 - (2) All records of applicability determination, including supporting analyses; and
 - (3) If the owner or operator has been granted a waiver under 40 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements.

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

C.25 Test Reports:

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the DERM on the results of each such test.
- (b) The required test report shall be filed with the DERM as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the DERM to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emissions limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.

14. Data on the identification, processing and weights of all filters used.
 15. Data on the types and amounts of any chemical solutions used.
 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
 19. The detailed calculations for one run that relate the collected data to the calculated emissions rate.
 20. The applicable emissions standard, and the resulting maximum allowable emissions rate for the emissions unit, plus the test result in the same form and unit of measure.
 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the DERM or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.
- [Rules 62-213.440 and 62-297.310(8), F.A.C.]

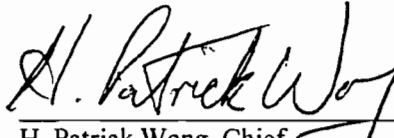
Miscellaneous

C.26 Delegation of Authority:

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

Executed in Miami-Dade County, Florida.

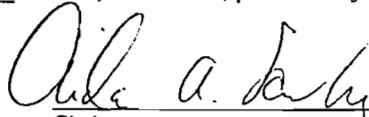
DEPARTMENT OF ENVIRONMENTAL
RESOURCES MANAGEMENT


H. Patrick Wong, Chief 5/1/2001
Air Quality Management Division Date

PW/mg

Copy: Isidore Goldman, P.E., Florida Department of Environmental Protection, West Palm Beach
Stephanie S. Brooks, PE, Brooks & Associates Inc., 5068 NW 85 Road, Coral Springs, FL 33067

FILING AND ACKNOWLEDGMENT: FILED, on this date, pursuant to § 120.52(7), F.S., with the designated DERM Clerk, receipt of which is hereby acknowledged.


Clerk 5/1/2001
Date

Attachment A

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to **Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes (F.S.)**. The permittee is placed on notice that the DERM will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the DERM.
3. As provided in **Subsections 403.087(6) and 403.722(5), F.S.**, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other DERM permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and the DERM rules, unless specifically authorized by an order from the DERM.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by the DERM rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by the DERM rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized DERM personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under the conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or the DERM rules. Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in the permit, the permittee shall immediately notify and provide the DERM with the following information:
 - (a) A description of and cause of noncompliance; and

Attachment A

GENERAL CONDITIONS CONTINUED:

- (b) The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the DERM for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the DERM, may be used by the DERM as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or the DERM rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
 10. The permittee agrees to comply with changes in the DERM rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or the DERM rules.
 11. This permit is transferable only upon the DERM approval in accordance with Rule 62-4.120 and 62-30.300, Florida Administrative Code (F.A.C.), as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the DERM.
 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
 13. The permittee shall comply with the following :
 - (a) Upon request, the permittee shall furnish all records and plans required under the DERM rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the DERM.
 - (b) The permittee shall hold at the facility or other location designated by this permit, records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by the DERM rule.
 - (c) Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.
 14. When requested by the DERM, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the DERM, such facts or information shall be submitted or corrected promptly.

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches. —
2. The ports shall be capable of being sealed when not in use.
3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.

5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)
(continued)

1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f) Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g) Sampling Equipment Support.

1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

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

TABLE 297.310-1 CALIBRATION SCHEDULE
(version dated 10/07/96)

[Note: This table is referenced in Rule 62-297.310, F.A.C.]

| ITEM | MINIMUM CALIBRATION FREQUENCY | REFERENCE INSTRUMENT | TOLERANCE |
|---------------------------------|--|---|--|
| Liquid in glass thermometer | Annually | ASTM Hg in glass ref. thermometer or equivalent, or thermometric points | +/-2% |
| Bimetallic thermometer | Quarterly | Calib. liq. in glass thermometer | 5 degrees F |
| Thermocouple | Annually | ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer | 5 degrees F |
| Barometer | Monthly | Hg barometer or NOAA station | +/-1% scale |
| Pitot Tube | When required or when damaged | By construction or measurements in wind tunnel D greater than 16" and standard pitot tube | See EPA Method 2, Fig. 2-2 & 2-3 |
| Probe Nozzles | Before each test or when nicked, dented, or corroded | Micrometer | +/-0.001" mean of at least three readings Max. deviation between readings .004" |
| Dry Gas Meter and Orifice Meter | 1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually 3. Check after each test series | Spirometer or calibrated wet test or dry gas test meter | 2% |
| | | Comparison check | 5% |

[electronic file name: 297310-1.doc]

FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant (Circle One): SO₂ NO_x TRS H₂S CO Opacity

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period ¹: _____

| Emission data summary ¹ | CMS performance summary ¹ |
|---|---|
| 1. Duration of excess emissions in reporting period due to: | 1. CMS downtime in reporting period due to: |
| a. Startup/shutdown | a. Monitor equipment malfunctions |
| b. Control equipment problems | b. Non-Monitor equipment malfunctions |
| c. Process problems | c. Quality assurance calibration |
| d. Other known causes | d. Other known causes |
| e. Unknown causes | e. Unknown causes |
| 2. Total duration of excess emissions | 2. Total CMS Downtime |
| 3. Total duration of excess emissions x (100) / [Total source operating time] | 3. [Total CMS Downtime] x (100) / [Total source operating time] |
| _____ % ² | _____ % ² |

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ Date: _____

Title: _____

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Hardy Johnson, President
 Florida Division
 Tarmac America, LLC
 455 Fairway Drive
 Deerfield Beach, Florida 33441

COMPLETE THIS SECTION ON DELIVERY

A. Signature Agent
 Addressee

[Signature]

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type

Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2. Article Number (Transfer from service label) **7001 0320 0001 3692 3098**

**U.S. Postal Service
 CERTIFIED MAIL RECEIPT**
 (Domestic Mail Only; No Insurance Coverage Provided)

7001 0320 0001 3692 3098

OFFICIAL USE

| | | | |
|---|----|--|------------------|
| Postage | \$ | | Postmark Here |
| Certified Fee | | | |
| Return Receipt Fee (Endorsement Required) | | | |
| Restricted Delivery Fee (Endorsement Required) | | | |

Mr. Hardy Johnson, President
 Florida Division
 Tarmac America, LLC
 455 Fairway Drive
 Deerfield Beach, Florida 33441



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

April 5, 2005

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Hardy Johnson
President, Florida Division
Tarmac America, LLC
455 Fairway Drive
Deerfield Beach, Florida 33441

Re: DEP File No. 0250020-016-AC
Kiln No. 5 Permit Reissuance and Modification
Titan America, Pennsuco Cement Plant

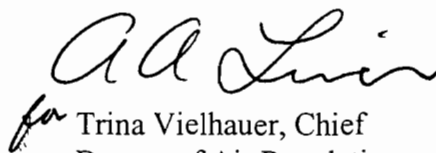
Dear Mr. Johnson:

Enclosed is one copy of the reissued and modified Air Construction Permit for the Titan America Pennsuco Cement Plant located at 11000 NW 121 Way, Medley, Miami-Dade County. The Department's Intent to Issue Air Construction Permit, the Technical Evaluation and Preliminary Determination, and the "Public Notice of Intent to Issue Air Construction Permit" are also included.

The "Public Notice" must be published one time only as soon as possible in a newspaper of general circulation in the area affected, pursuant to the requirements of Chapter 50, Florida Statutes. Proof of publication, such as a newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in denial of the permit modification.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A.A. Linero, Program Administrator, at the letterhead address. If you have any questions regarding this matter, please contact Mr. Linero at (850)921-9523.

Sincerely,


for Trina Vielhauer, Chief
Bureau of Air Regulation

TLV/aal

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

WRITTEN NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

*In the Matter of an
Application for Air Construction Permit by:*

| | |
|--|---|
| Mr. Hardy Johnson President, Florida Division Tarmac America, LLC 445 Fairway Drive Deerfield Beach, Florida 33441 | DEP File No. 0250020-016-AC Titan America Pennsuco Cement Plant Kiln 5 Permit Reissuance and Modification Miami-Dade County, Florida |
|--|---|

Facility Location: This 250 tons clinker per hour portland cement manufacturing facility is located at 11000 NW 121 Way, Medley, Dade County, Florida.

Project: On March 4, 2004 the applicant submitted an application for an air construction permit to revise the conditions established in Air Construction Permit 0250020-010-AC that was issued by the Miami-Dade Department of Environmental Resource Management. The purpose of the application was to correct physical and operating parameters of the baghouses; revise the Clinker Storage Silo Transfer System; revise the usage of the Finish Mills; and construct a new O-Sepa System on Finish Mill No.3.

On February 8, 2005, the applicant provided additional application information and requested the following further revisions: inclusion of the Coal Mill emissions in the permit limit for the Main Stack; additional 400 hours per year of operation for the Coal Mill when the Kiln/Cooler/Raw Mill is not operating; removal of two baghouses associated with the Clinker Handling System; and revision of the finish mill operation to include Finish Mill Nos. 1, 3, 4, and 6.

This facility is subject to applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C. Details of the project are provided in the application and in the enclosed "Technical Evaluation and Preliminary Determination".

Permitting Authority: Applications for processing air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-212, and 62-213 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an Air Construction Permit is required to perform the proposed work. The Department of Environmental Protection, Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination regarding this project. The Permitting Authority's physical address is: Florida Department of Environmental Protection, Bureau of Air Regulation, 111 South Magnolia Drive, Suite 4, Tallahassee, Florida, 32301. The Permitting Authority's mailing address is: Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, Mail Station #5505. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above or at the following email address: <http://www.dep.state.fl.us/air/eproducts/ards/>. A copy of the complete project file is also available at the following office: Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, 33 SW 2nd Avenue, Suite 900. Telephone is 305/372-6925; facsimile is 305/372-6954.

Notice of Intent to Issue Air Construction Permit: The Permitting Authority gives notice of its intent to issue an Air Construction Permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Air Construction Permit" (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within seven (7) days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be provided to the Permitting Authority at the above address, e-mail or facsimile. Any written comments filed will be made available for public inspection. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within fourteen (14) days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of how and when the petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require

reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of intent. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

Executed in Tallahassee, Florida.


for Trina L. Vielhauer, Chief
Bureau of Air Regulation

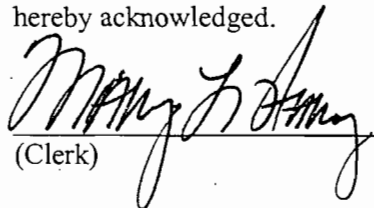
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this "Written Notice of Intent to Issue Air Construction Permit" package (including the "Technical Evaluation and Preliminary Determination", "DRAFT Air Construction Permit", and "Public Notice of Intent to Issue Air Construction Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail or electronic mail before the close of business on 4/6/05 to the persons listed below.

Hardy Johnson, Tarmac America*
Scott Quaas, Tarmac America
David A. Buff, P.E., Golder
Patrick Wong, DERM
EPA Region 4

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.


(Clerk) 4/6/05
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

DEP File No. 0250020-016-AC
Titan America – Pennsuco Cement Plant
Medley, Miami-Dade County

The Department of Environmental Protection (Department) gives notice of its intent to issue an Air Construction Permit to Titan America for the Pennsuco Cement Plant located at 11000 NW 121 Way, Medley, Miami-Dade County. A review under the rules for the Prevention of Significant Deterioration of Air Quality (PSD) and a Best Available Control Technology (BACT) determination were not required. The applicant's name and business address are Titan America, 455 Fairway Drive, Deerfield Beach, Florida 33441.

In 1999, the Miami-Dade Department of Environmental Resources Management (DERM) issued an air construction permit for the modernization of the Pennsuco Cement Plant. In 2001 DERM issued a permit that modified the original project following the purchase by Titan America of the Tarmac operations. The final permit provided for the construction of a new 250 tons per hour dry process preheater/calcliner kiln (Kiln 5), cooler, coal mill and raw mill to replace the existing wet process kilns and coolers. A new finish mill (No. 6) was authorized to replace existing Finish Mills 1 & 2. Finish Mills 3 and 4 were not affected. There is no Finish Mill No. 5.

Although the capacity of the plant was increased by the modernization, emissions per ton of product were expected to decrease compared to the original wet process. The primary reason is that substantially less fuel is required per unit of product when using the dry process versus the wet process. This is largely because there is no need to make raw material slurry and then evaporate the water. The preheater/calcliner technology offers better combustion control of the process and dry scrubbing of sulfur dioxide. The new baghouses are more efficient than previous particulate control equipment. A PSD Review and BACT determination were not required because projected net emission increases were less than the respective significant emission rates for all pollutants.

Kiln 5 and Cooler 5 started up in 2004. Kilns 2 and 3 and Coolers 2 and 3 were shut down as required. Kiln 1 and Cooler 1 was shut down in the 1980's and Kiln 4 and Cooler 4 never operated. One previously authorized slag dryer never operated and another shut down. Construction of Finish Mill No. 6 has not yet been completed.

Pollution control equipment consists of a common fabric filter system (baghouse) for particulate emissions (PM/PM₁₀) 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. Recent compliance testing indicates that emissions of all pollutants from the new process are substantially less than permitted and approximately the same as measured from recent new kilns built in Florida subject to the PSD regulations and BACT requirements.

Titan requests to modify the project by keeping Finish Mill No. 1 and making improvements to Finish Mill No. 3. Titan also requests the following changes in the permit: extension of the time to complete construction of Finish Mill No. 6; inclusion of the coal mill emissions in the limit for the main kiln/cooler/raw mill stack; 400 hours per year of operation for the coal mill when the kiln/cooler raw mill system is not operating; adjustment of baghouse particulate emission factors; final baghouse configuration for the clinker handling system.

The changes compared with previous permits relate only to emissions of PM/PM₁₀. According to Titan, there will be a non-significant potential increase of 2.3/6.0 tons per year of PM/PM₁₀ for all changes related to the modernization project and the additional changes described above. A PSD Review and BACT determination for PM/PM₁₀ are not required.

The Department will issue the FINAL Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of "Public Notice of Intent to Issue Air Construction Permit." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

(Public Notice to be Published in the Newspaper)

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station # 35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

| | | |
|--|---|--|
| Dept. of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida, 32301 Telephone: (850) 488-0114 Fax: (850) 922-6979 | Dept. of Environmental Protection Southeast District Office 400 North Congress Avenue West Palm Beach, Florida 33401 Telephone: 407/681-6600 Fax: 407/681-6755 | Miami-Dade County Department of Environmental Resources Management 33 Southwest 2 nd Avenue, Suite 900 Miami, Florida 33150-1540 Telephone: 305/372-6925 Fax: 305/372-6954 |
|--|---|--|

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, South Permitting Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/921-9523, for additional information. Key documents can be viewed at www.dep.state.fl.us/air/permitting/construction.htm by clicking on the Titan America link.

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

TITAN AMERICA, PENNSUCO CEMENT
MIAMI-DADE COUNTY, FLORIDA

Portland Cement Manufacturing Facility
Re-issuance and Modification of Modernization Project Permit

DEP File Nos. 0250020-016-AC

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

April 5, 2005

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

I. APPLICANT NAME AND ADDRESS

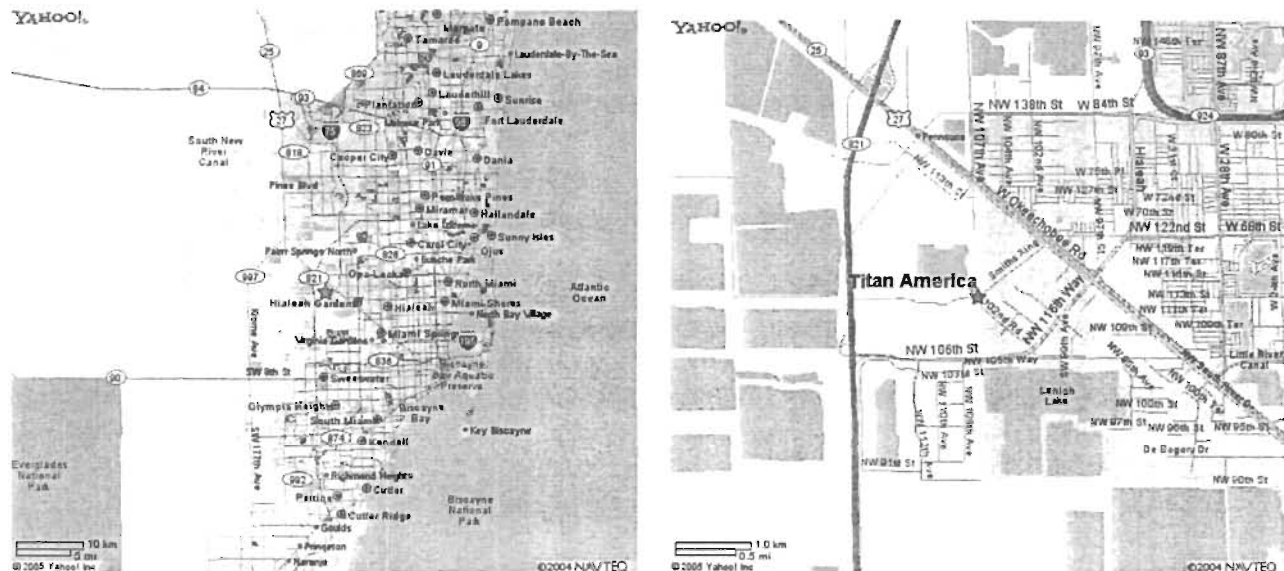
Titan America
445 Fairway Drive
Deerfield Beach, Florida 33441

Authorized Representative: Hardy Johnson, President, Florida Division of Tarmac

II. FACILITY INFORMATION

A. FACILITY LOCATION

Titan America (Titan) operates a 1, 642,000 tons per year (TPY) clinker dry-process line at the Titan Pennsuco Cement Plant at 11000 NW 121 Way, Medley, Miami-Dade County.



Location of Titan America Pennsuco Cement Plant in Medley, Miami-Dade County

This site is approximately 30 kilometers from the Everglades National Park, a Class I Prevention of Significant Deterioration (PSD) Area, and in an ozone (O₃) maintenance area in Miami-Dade County.

B. FACILITY CLASSIFICATION CODE (SIC)

Major Group No. 32, Clay, Glass, and Concrete Products
Industry Group No. 324 Cement, Hydraulic
Industry No. 3241 Cement, Hydraulic

C. FACILITY CATEGORY

The Titan America Pennsuco Cement Plant directly emits more than 100 TPY of several regulated air pollutants and has the potential to emit at least 10 TPY of at least one hazardous air pollutant (HAP) or 25 TPY of all HAPs. Therefore it is classified as a "Major Source of Air Pollution or Title V Source," per the definitions in Rule 62-212.200, F.A.C.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

This industry is listed in Table 212.400-1, "Major Facilities Categories", Section 62-212.400, F.A.C. Therefore, stack and fugitive emissions of over 100 TPY of carbon monoxide (CO), volatile organic compounds (VOC), sulfur dioxide (SO₂), nitrogen oxides (NO_x), or particulate matter (PM/PM₁₀) characterize the existing installation as a Major Facility per the definitions in Rule 62-210.200, F.A.C. and subject to applicability review pursuant to the rules for the Prevention of Significant Deterioration of Air Quality (PSD) at per Rule 62-212.400, F.A.C.

Per Table 212.400-2, "Regulated Air Pollutants – Significant Emission Rates", modifications at the facility resulting in emissions increases greater than 40 TPY of NO_x or SO₂, 7 TPY of sulfuric acid mist (SAM), 25/15 TPY of PM/PM₁₀, 3 TPY of fluorides, 1200 pounds per year (lb/yr) of lead or 200 lb/yr of mercury require review per the PSD rules and a determination for Best Available Control Technology (BACT) per Rule 62-212.400, F.A.C.

A previously approved modernization project was not subject to PSD and BACT because the differences between emission increases from the new line and emission reductions due to shutdown of the old wet process lines were less than the Significant Emission Rates given above. This is primarily due to the lower fuel requirements per unit of product characteristic of the dry processes, better particulate control equipment, and inherent dry scrubbing of sulfur dioxide in the calciner.

III. MODERNIZATION PROJECT

The Miami-Dade Department of Environmental Resources Management (DERM) issued a permit to Titan on May 1, 2001 to modify the existing wet process plant by incorporating the modern dry process technology including a preheater and calciner along with indirect firing. The 2001 permit was actually a modification and re-issuance of a permit issued in 1999 for a modernization project that was smaller in scope.

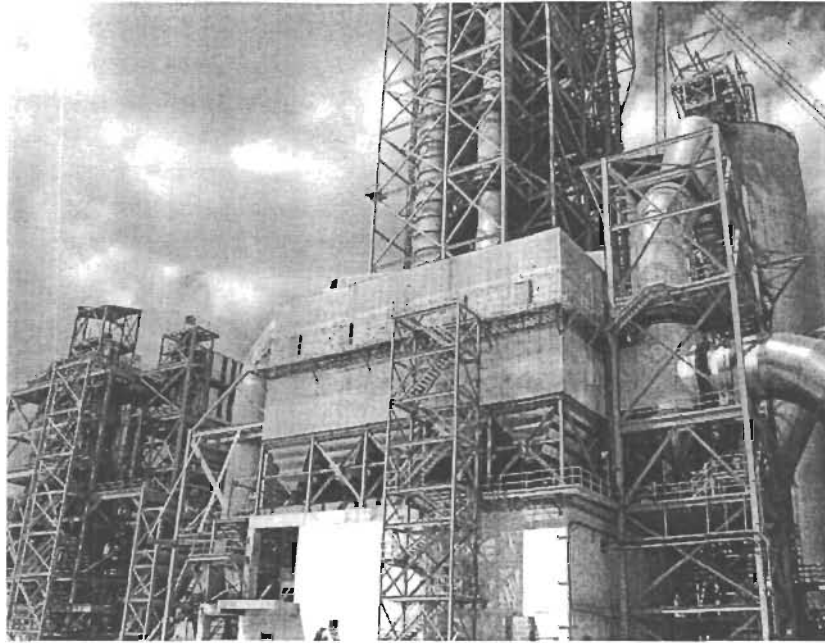
The dry process preheater/calciner (PH/C) kiln is one of the most fuel-efficient cement pyroprocessing technologies currently available. Thermal efficiencies are superior with the PH/C kiln and the amount of fuel combusted per ton of clinker produced is greatly reduced in comparison with the wet process.

The modernized cement plant was permitted to produce up to 250 tons per hour (TPH) of clinker and an annual (12-month) production rate of 1, 642,500 TPY of clinker. The major equipment at the plant includes a PH/C kiln, a clinker cooler, raw mill, finish mills, silos, conveyers, and particulate control/dust collection. The cement product is stored in silos and shipped in bags or in bulk by rail or truck.

A more complete project and process description was provided in the Technical Evaluation and Preliminary Determination prepared by DERM and dated April 28, 1999 for the original modernization project. Titan completed basic construction of the dry process kiln line in June of 2004. Compliance tests were conducted in October and November 2004. A draft Title V Permit Revision incorporating the conditions of the air construction permit was distributed in October 2004 and has not yet been finalized. The plant continues to operate under Air Construction Permit 0250014-010-AC issued on May 1, 2001.

Following is a photograph of the lower preheater and baghouse that was taken in early 2004 prior to completion of construction.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION



Titan America Modernized Dry Process Cement Plant in Medley, Florida

IV. PERMITTED EMISSION AND PRODUCTION RATES

Following are the emission limits and production rates applicable to the dry process line. The values are from the 2001 Air Construction Permit issued for the modernization project.

| Parameter | Emission Limits (production basis) | Emission or Production Limits (mass per time basis) | Emissions or Production (Tons per Year) |
|--------------------------------|---------------------------------------|--|--|
| PM | 0.125 lb/ton kiln _{ph} feed | 53.1 lb/hour | 175 |
| PM ₁₀ | 0.105 lb/ton kiln _{ph} feed | 42.0 lb/hr | 147 |
| SO ₂ | 1.28 lb/ton clinker | 320 lb/hr | 806 |
| NO _x | 2.88 lb/ton clinker | 720 lb/hr | 1,953 |
| CO | 2.3 lb/ton clinker | 576 lb/hr | 1,457 |
| VOC | 0.16 lb/ton clinker | 40 lb/hr | 155 |
| H ₂ SO ₄ | 0.09 lb/ton clinker | 2.24 lb/hr | 8.68 |
| Mercury | | | << 30 + 199 lb/yr |
| dioxin/furan | Per Subpart LLL | | |
| Lead | | | << 94 + 1,199 lb/yr |
| Clinker | | 250 TPH | 1,642,500 |
| Coal/Coke | | 30 TPH | |
| PetCoke | | 20 TPH | |

Titan America
Portland Cement Facility

File No. 0250020-016-AC
April 5, 2005

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

V. APPLICANT REQUESTS

DERM received an application from Titan on March 4, 2004 to modify the Modernization Permit issued in 2001. Over the course of the following 11 months some changes to the request were made. A final reconciliation of the changes and additional information were received by DEP on February 8, 2005. Overall, Titan requests the following changes:

- To adjust physical and operating parameters of the baghouses.
- To include the Coal Mill emissions in the permit limit for the Main Stack.
- To add 400 hours per year of operation for the Coal Mill when the Kiln/Cooler/Raw Mill is not operating.
- To remove two baghouses associated with the Clinker Handling System and add three new baghouses.
- To revise the finish mill operation to include Finish Mill No. 1 that was previously destined for shut down.
- Reflect the shut down or cancellation of previously authorized slag dryer projects.
- Improve Finish Mill No. 3 by adding a new cement separator (O-Sepa System) including a baghouse on Finish Mill No.3.

VI. INTIAL COMPLIANCE TESTING RESULTS

During the periods October 20-22, November 4-5, and November 16-19, 2004 Titan conducted emission tests as required by their air construction permit and other applicable regulations. Following are the results of those tests that were typically conducted while producing 222.5 TPH of clinker.

| Pollutant | Permit Limit | Result |
|-------------------------------------|----------------------------------|--------------------------------------|
| PM/PM ₁₀ (Raw Mill Up) | 0.125/0.105 lb/ton ph kiln feed | 0.028 lb/ton ph kiln feed |
| PM/PM ₁₀ (Raw Mill Down) | 0.125/0.105 lb/ton ph kiln feed | 0.021 lb/ton ph kiln feed |
| NO _x | 2.88 lb/ton clinker | 2.00 lb/ton clinker |
| SO ₂ | 1.28 lb/ton clinker | ~ 0 |
| CO | 2.3 lb/ton clinker | 0.51 |
| VOC | 0.16 lb/ton clinker | 0.12 lb/ton clinker |
| H ₂ SO ₄ | 0.009 lb/ton clinker | 0.005 lb/ton clinker |
| Lead (Pb) | < 94 + 1200 lb/yr | ~ 96 lb/yr (at measured rate) |
| Mercury (Hg) | < 30 + 200 lb/yr | ~ 52 lb/yr (at measured rate) |
| Dioxin/Furan (Raw Mill up) | 0.4 ng/dscm @7% O ₂ * | 0.013 ng TEQ/dscm @7% O ₂ |
| Dioxin/Furan (Raw Mill Down) | 0.2 ng/dscm @7% O ₂ + | 0.010 ng TEQ/dscm @7% O ₂ |

* Standard Baghouse Inlet Temperature < 400 F⁰

+ Standard Baghouse Inlet Temperature > 400 F⁰

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

All of the tests indicated compliance with the permitted limits. Following are some items of note:

- PM/PM₁₀ is extremely low especially considering that the Titan configuration treats kiln and cooler emissions together rather than through separate stacks.
- NO_x emissions are very low. For example, they are approximately equal to emissions at Suwannee American Cement where NO_x emissions are controlled by a selective non-catalytic reduction (SNCR) system.
- SO₂ emissions were significant prior to the modernization, but are now virtually zero due to the effective dry scrubbing mechanism in the calciner.
- CO emissions are very low especially for a process that depends on an aggressive reducing atmosphere to control NO_x emissions. This is due to the long retention calciner time to complete char combustion and burn out CO.
- The dioxin/furan results are the lowest measured to date.

VII. PROJECT EMISSION INCREASES AND DECREASES

Titan updated the previous contemporaneous emissions calculations that had been submitted in 1998 in support of the modernization project. Following is a recap of the actual emission decreases and the potential emission increases in tons per year (TPY). As previously mentioned, the most recent request by Tarmac affects only PM/PM₁₀.

| Pollutant | Increases Dry Process at Proposed Capacity | Decreases Wet Process Actual Emissions | Net Increases (Decreases) | PSD Significant Emission Rate |
|--------------------------------|--|--|------------------------------|----------------------------------|
| PM | 368 | 366 | 2 | 25 |
| PM ₁₀ | 321 | 315 | 6 | 15 |
| SO ₂ | 806 | 1,432 | (626) | 40 |
| NO _x | 1,953 | 2,284 | (331) | 40 |
| CO | 1,457 | 1,368 | 89 | 100 |
| VOC | 155 | 131 | 25 | 40 |
| H ₂ SO ₄ | 8.9 | 257 | (248) | 7 |
| Hg | 0.0149 | 0.0236 | (0.0087) | 0.1 |
| Pb | 0.0465 | 0.0393 | 0.0071 | 0.6 |

Actual emissions are likely to be much lower for PM/PM₁₀, CO, and SO₂ based on the emission test results discussed in the previous section. NO_x emissions are likely to be significantly less than estimated above. Hg emissions are likely to be somewhat greater than estimated above. However they will not exceed the significant emission rate of 200 lb/year.

In the big picture, the changes in PM/PM₁₀ resulting from the most recent request (to keep Finish Mill 1 and shut down the slag drying operation) are minimal. Titan has also implemented fugitive emission controls consisting tree planting, extensive sodding, use of water application equipment on roads, etc. Overall the facility presents a cleaner look that complements the good control of the actual cement production line.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

XI. CONCLUSION

Based on the data reviewed by the Department, Titan has demonstrated that it can consistently comply with the permitted emissions rates. Compliance was generally demonstrated with a good margin of safety.

The requested changes in PM/PM₁₀ relating to the baghouses, finish mills, shut down of slag drying, etc. do not significantly change the very favorable emission reductions seen to-date. For example, the actual emissions from the kiln/raw mill/cooler main stack are at least 100 tons per year less than permitted based on the recent testing.

The Department has reasonable assurance that the changes requested by Titan will not cause or contribute to a violation of any ambient air quality standards or allowable increments.

The modernization permit will be re-issued and modified to: complete construction and startup of Finish Mill No. 6; provide time for Titan to submit and DEP to act on a Title V Revision/Renewal application; and reflect the changes requested by Titan. The expiration date will be October 31, 2005.

PERMITTEE:

Titan America
455 Fairway Drive
Deerfield Beach, Florida 33441

| | |
|------------|------------------------------|
| Permit No. | 0250020-016-AC |
| Project: | Modify Modernization Project |
| SIC: | 3241 Cement, Hydraulic |
| Expires: | October 31, 2005 |

Authorized Representative:
Hardy Johnson, President
Florida Division, Tarmac America

PROJECT AND LOCATION:

Re-issuance and modification of Air Construction Permit 0250020-010-AC issued on May 1, 2001 for modernization of the Titan America Pennsuko Cement Plant. This air construction permit reflects the final configuration and operating parameters of baghouses, finish mills and the coal mill.

The Titan America Pennsuko Cement Plant is located at 11000 NW 121 Way, Medley, Dade County. UTM coordinates are Zone 17; 562.8 km E; 2861.7 km N.

STATEMENT OF BASIS:

This air construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to construct/operate the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached appendices made a part of this permit:

Appendix GC Construction Permit General Conditions

Michael G. Cooke, Director
Division of Air Resource
Management

SECTION I. GENERAL INFORMATION

FACILITY DESCRIPTION

This facility consists of a dry process portland cement manufacturing plant which includes a coal handling system; raw feed system; kilns; coolers; finish mills; clinker and cement storage and handling systems; and a cement distribution system. The facility also consists of a non-metallic mineral processing plant, and ready-mix concrete block and batch plants, located adjacent to the portland cement manufacturing plant.

EMISSIONS UNITS

This permit addresses the following emissions units. Emission Units shown as stricken-through are no longer permitted to operate.

| EMISSION UNIT NO. | | EMISSION UNIT DESCRIPTION |
|-----------------------|-----------------------|--|
| Permit 0250020-016-AC | Permit 0250020-010-AC | |
| 003 | - | Coal Handling |
| 004 | - | Kiln No. 2 |
| 005 | - | Cooler No. 2 |
| 006 | - | Kiln No. 3 |
| 007 | - | Cooler No. 3 |
| 008 | - | Clinker Handling and Storage for Kiln No. 2 |
| 009 | - | Clinker Handling and Storage for Kiln No. 3 |
| 010 | - | Finish Mill No. 1 |
| 011 | - | Finish Mill No. 2 |
| 012 | 003 | Finish Mill No. 3 |
| 013 | 003 | Finish Mill No. 4 |
| 014 | 004 | Cement Storage Silos 1 through 12 |
| 015 | 004 | Cement Distribution, Rail and Truck Loadout |
| 016 | 004 | Cement Packhouse |
| 020 | - | Slag Dryer |
| 021 | - | Insufflation |
| 026 | 001 | Coal Handling System |
| 027 | 002 | Clinker Handling and Storage |
| 028 | 005 | Raw Mill and Pyroprocessing System |
| 029 | 006 | Raw Material Handling |
| 030 | 003 | Finish Mill No. 6 |

REGULATORY CLASSIFICATION

Because potential emissions of at least one regulated pollutant exceed 100 tons per year, the existing facility is a Title V Source and major source of air pollution in accordance with Chapter 62-213, F.A.C. Regulated pollutants include pollutants such as nitrogen oxides (NO_x), particulate matter (PM/PM₁₀), and sulfur dioxide (SO₂).

In addition, this facility is a major source of hazardous air pollutants (HAPs), based upon potential emissions of hydrogen chlorides.

RELEVANT DOCUMENTS

The construction permit application 0250020-016-AC was received March 4, 2004. The last round of additional application information was received on February 8, 2005.

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

This permit supersedes construction permit 0250020-010-AC, dated May 1, 2001. The specific conditions of the attached air construction permit 0250020-010-AC are incorporated into this air construction permit except for the changes indicated in each of the sections that follow.

Section II, Facility-Wide Specific Conditions A.1 through A.33 in Permit 0250020-010-AC dated May 1, 2001 are adopted in their entirety except for the amendments shown below:

1. Permitting Authority:

For this permit, the permitting authority is the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, and phone number (850)488-0114.

2. Completion of Construction: The permit expiration date is October 31, 2005.

3. Application for Title V Permit Revision: The Applicant's Title V Renewal application due April 25, 2005 shall include all operations described in this air construction permit.

4. Permanent Shut Down of Certain Equipment: The following equipment has been permanently shut down or was never built, or never operated. It shall remain permanently shut down as a condition of the operation of the plant modernization and operation of Kiln No. 5 and associated equipment.

- Kilns 1, 2, 3, and 4
- Coolers 1, 2, 3, and 4
- Finish Mills 2 and 5
- Clinker Handling and Storage for Kilns 2 and 3
- All slag dryer
- Insufflation of cement kiln dust

[Applicant Request, Section 62-212.400, F.A.C. To Avoid Exceeding Significant Emissions Rates]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Section III, Emission Units Specific Conditions B.0 through B.33 in Permit 0250020-010-AC dated May 1, 2001 are adopted in their entirety and modified as shown below. Additions are highlighted, and deletions are shown by strikethroughs.

B.0. Operational Requirements, Emissions Limitations and Performance Standards Attachments
"40CFR63, Subpart A" is incorporated by reference. These emissions unit shall comply with the 40.CFR.63 Subpart.LLL - National Emissions Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry for Major Sources of HAPs; and 40.CFR.63, Subpart A - General Provisions for Subpart LLL - Portland Cement Plants.

EMISSIONS UNIT NO. 026004 - COAL HANDLING SYSTEM

Operational Requirements

B.1 Hours of Operation: ~~These process~~ This emissions units may not operate in excess of 7,884 hours per year except the railcar fuel dump hopper, coal and petcoke feed bins and transfer equipment (and baghouses 2461.BF01130 and 2461.BF02230) which may not exceed 4,000 hours per year. The coal mill may be operated for 400 of its allowed 7,884 hours per year when the Kiln/Cooler/Raw Mill is not operating;

[Requested by permittee in application received November 14, 2000 Applicant request; Permit 0250020-010-AC]

B.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 190,000 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.

[Rule 62-210.200 & 62-4.070(3) F.A.C., established by permittee in application received November 14, 2000 Applicant request; Permit 0250020-010-AC; Rule 62-4.070(3), F.A.C.]

B.3 Particulate and Fugitive Emissions: Particulate and fugitive emissions from coal handling facilities shall be minimized by following the procedures listed below:

- (1) All conveyers and transfer points shall be enclosed or covered to preclude particulate emissions (except those directly associated with coal stacking/reclaiming).
- (2) Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion.
- (3) 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.

[Rule 62-296.320(4)(c), F.A.C.; 62-4.070(3); Permit 0250020-010-AC]

Emissions Limitations and Performance Standards

B.4 Design Specifications and Particulate Matter Emissions Limits:

- a. The baghouses for the coal handling system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits listed in the following table:

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

| Coal Handling System Process Unit | Baghouse ID Manufacturer Model No. | Grain Loading Limit (gr/dscf) | Flow Rate acfm (dscfm) | Cloth Area (ft²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM/PM₁₀ Emissions (lb/hr) | Limits (TPY) |
|--|---|--------------------------------------|-------------------------------|------------------------------------|---------------------------|--|---|---------------------|
| Dump Hopper (Transfer) | 2461-BF13004 FLS Airtech 36TAX10FM | 0.0095 0.01 | 14002,700 (1339)2,700 | Pending 469 | Pending 3.0:1 | 0.39 | 0.1123 | 0.2246 |
| Conveyors (2) (Transfer) & Coal and Petroleum Coke Feed Bins | 2461-BF23002 FLS Airtech 36TAX10FM | 0.0095 0.01 | 14006,400 (1339)6,400 | Pending 469 | Pending 3.0:1 | 0.92 | 0.1155 | 0.22 1.10 |
| Coal Mill * | 461-BF30004 Pending Pending | 0.01 | 54,500 (45,245) 43,600 | Pending | Pending | 12.37 | 3.8874 | 0.78 14.73 |
| Coke/Petroleum Coke (Transfer) Surge Bin (Feeder) | 461-BF75002 FLS Airtech 800/7 | 0.0095 0.01 | 294800 (243)665 | 75 Pending | 3.9:1 Pending | 0.19 | 0.026 | 0.0822 |
| Coal (Transfer) Surge Bin (Feeder) | 461-BF65003 FLS Airtech 800/7 | 0.0095 0.01 | 294800 (243)665 | 75 Pending | 3.9:1 Pending | 0.19 | 0.026 | 0.0822 |
| Coal Mill Feed | 461-BF350 | 0.01 | 5,500 (5,261) | 1575 Pending | 3.5:1 Pending | | 0.45 | 1.78 |
| Total | | | | | | 14.06 | 4.59 4.64 | 3.15 16.73 |

*The emission limit of 0.125 lb/ton of dry clinker for the Main Stack for the Raw Mill and Pyroprocessing includes emission from the Coal Mill which are also vented to the atmosphere through the Main Stack. So that Tarmac may operate the coal mill when the Raw Mill and Pyroprocessing are down, 400 hours of emissions (1.78 TPY) from the Coal Mill operating alone are included here. The emissions associated with the additional 7484 hours of operation for the coal mill are included with the potential emissions for the Main Stack.

Notes:

- b.** All of the above process units equipment, except for the dump hopper with baghouse 2461-BF13004, are subject to 40 CFR 60, Subpart Y, NSPS for Coal Preparation Plants.
- c.** The pending information listed in this table will be submitted to the DERM Air Facilities Section within 30 days of issuance of this final permit, at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- Emissions of Particulate Matter from each of the baghouses on the coal handling system shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf). Assume PM 10 = 84% of PM for all baghouses. [Requested by Permittee in application received November 14, 2000.]
- d.** Initial and annual compliance testing requirements for PM emissions from all emissions points listed above, except 461-BF30004 serving the Coal Mill, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.

[Rule 62-297.620(4), F.A.C.; Permit 0250020-010-AC; Applicant request to Escape BACT]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

B.5 Coal Handling Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|--|-------------------------|--|--|
| Dump Hopper (Transfer) | 2461-BF13001 | 20% with PM testing 5% w/out PM testing | Rule 62-296.320(4)(b)1, F.A.C. Rule 62-297.620(4), F.A.C. |
| Conveyors (2) Coal & Petroleum Coke Feed Bins (shared with conveyors) | 2461-BF23002 | 20% with PM testing 5% w/out PM testing | 40 CFR 60, Subpart Y Rule 62-297.620(4), F.A.C. |
| Coal Mill Dust Collector* | 461-BF30001 | 10% ^(*) | 40 CFR 63.1345 |
| Coke/Coal Surge Bins | 461-BF75002 | 20% with PM testing 5% w/out PM testing | 40 CFR 60, Subpart Y Rule 62-297.620(4), F.A.C. |
| | 461-BF65003 | 20% with PM testing 5% w/out PM testing | 40 CFR 60, Subpart Y Rule 62-297.620(4), F.A.C. |
| Coal Mill Feed | 461-BF350 | 20% with PM testing 5% w/out PM testing | 40 CFR 60, Subpart Y Rule 62-297.620(4), F.A.C. |

Note: *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. [40 CFR 63.1345(a)(2)]

EMISSIONS UNIT NO. 027002 – CLINKER HANDLING & STORAGE SYSTEM

Operational Requirements

B.6 Hours of Operation: These process This emissions units may not operate in excess of the following:

| Process Unit | Baghouse ID No. | Hours Per Year |
|--|------------------------|-----------------------|
| Clinker Silos 21-23 & 26-28 | F633 | 8,760 |
| Clinker transfer conveyors from cooler | 441-BF54001 | 7,884 |
| Clinker Silos | 481-BF14001 | 7,884 |
| Clinker Transfer Conveyors | 481-BF54002 | 8,760 |
| Clinker Off-spec Bins | 481-BF33003 | 8,760 |
| Clinker transfer | 481-BF640 | 8,760 |
| Clinker transfer | 481-BF730 | 8,760 |
| Clinker transfer | 481-BF930 | 8,760 |
| Clinker transfer | K347* | 0 |
| Clinker transfer | K447* | 0 |

*Clinker transfer baghouses K347 and K447 have been removed.

[Requested by permittee in application received November 14, 2000 Applicant request; Permit 0250020-010-AC]

B.7 Clinker Handling & Storage Throughput Limits: The clinker handling and storage maximum hourly and annual throughput rates shall not exceed 320 TPH on a 24-hour block average or 1,942,500 TPY, respectively. [Applicant request; Permit 0250020-010-AC; Rules 62-4-070(3)]
[Requested by permittee in application received November 14, 2000 Applicant request;]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Emissions Limitations and Performance Standards

B.8 Design Specifications and Particulate Matter Emissions Limits:

a. The baghouses for the clinker handling and storage system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

| System Process Units | Baghouse ID Manufacturer Model No. | Grain Loading Limit (gr/dscf) | Flow Rate acfm (dscfm) | Cloth Area (ft²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM/PM₁₀ Emissions Limits (lb/hr) (TPY) | |
|--|---|--------------------------------------|-------------------------------|------------------------------------|---------------------------|--|--|------------|
| Clinker Silos 21-23 & 26-28 | F633 | 0.01 (gr/acf) | 6,000 | | | | 0.51 | 2.25 |
| Clinker Transfer conveyors Burner Building from cooler | 441.BF54001 FLS Airtech 100C10 | 0.0095 0.01 | 4,600(3,421)2,494 | 1302 Pending | 3.5:1 Pending | 0.71 | 0.281 | 1.10 0.84 |
| Clinker Silos | 481.BF14001 FLS Airtech 196C10 | 0.0095 0.01 | 1012,000 (8,924)8,315 | 2552 Pending | 4.7:1 Pending | 2.36 | 0.731 | 2.861 |
| Clinker Transfer Conveyors | 481.BF54002 FLS Airtech 100C10 | 0.0095 0.01 | 4,700(3,495)2,494 | 1302 Pending | 3.6:1 Pending | 0.79 | 0.281 | 1.25 0.94 |
| Clinker Off-spec Bins | 481.BF33003 FLS Airtech 100C10 | 0.0095 0.01 | 6,100(4,536)4,157 | 1302 Pending | 4.7:1 Pending | 1.31 | 0.376 | 1.62 1.56 |
| Clinker transfer | 481.BF640 | 0.0095 | 4,700 (3,495) | 1302 | 3.6:1 | | 0.28 | 1.25 |
| Clinker transfer | 481.BF730 | 0.0095 | 18,700 (13,906) | 3958 | 4.7:1 | | 1.13 | 4.96 |
| Clinker transfer | 481.BF930 | 0.0095 | 15,000 (11,155) | 3958 | 3.8:1 | | 0.91 | 3.98 |
| Total | | | | | | 5.17 | 4.50 1.50 | 19.26 6.15 |

Notes:

- b.** All the above silos and bins equipment are subject to 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry.
 - The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
 - Grain loading of 0.01 gr/dscf proposed permit limits for all the above baghouses and assume PM₁₀₋₁₀ = 84% of PM for all baghouses. [Requested by Permittee in application Received November 14, 2000]
- c.** Initial and annual compliance testing requirements for PM emissions from all emissions points listed above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. [Rule 62-297.620(4), F.A.C.]

[Permit 0250020-010-AC; Applicant request to Escape BACT]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

B.9 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| System Process Unit | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|--|------------------|--|--|
| Clinker Silos 21-23 & 26-28 | F633 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Rule 62-297.620(4), F.A.C. |
| Clinker Transfer conveyors Burner Building from cooler | 441.BF54004 | 10% with PM testing 5% w/out PM testing | Permit 0250020-010-AC 40 CFR 63.1348 |
| Clinker Silos | 481.BF14004 | 10% with PM testing 5% w/out PM testing | Permit 0250020-010-AC 40 CFR 63.1348 |
| Clinker Transfer Conveyors | 481.BF54002 | 10% with PM testing 5% w/out PM testing | Permit 0250020-010-AC 40 CFR 63.1348 |
| Clinker Off-spec Bins | 481-BF33003 | 10% with PM testing 5% w/out PM testing | Permit 0250020-010-AC 40 CFR 63.1348 |
| Clinker transfer | 481.BF640 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Rule 62-297.620(4), F.A.C. |
| Clinker transfer | 481 BF730 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Rule 62-297.620(4), F.A.C. |
| Clinker transfer | 481 BF930 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Rule 62-297.620(4), F.A.C. |

[Permit 0250020-010-AC; Rule 62-4.070(3), F.A.C.; 40 CFR 63.1348]

EMISSIONS UNITS NOS. 003 010, 012, 013, 014 and 030 – FINISH MILLS

Operational Requirements

B.10 Hours of Operation: These emissions units may operate continuously, i.e., 7,884 8,760 hours per year. [Requested by permittee in application received November 14, 2000 Applicant request received February 8, 2005.]

B.11 Finish Mill Process Rates: The maximum total hourly process rate of cement is 334359.0 TPH on a 24-hour block average. This is a total of the individual process rates listed below:

| Finish Mill | Baghouses | Process Rate (TPH) |
|-------------|--------------------------------------|--------------------|
| No. 1 | F113/F130/F330 | 25 |
| No. 3 | 533.BF340 F-313 / F-330 / F-332 | 84 |
| No. 4 | F-430/ F-432 / F-603 / F-604 / F-605 | 140 |
| No. 6 | 531.BF01 / 531.BF02 | 110 |
| Total | | 334359 |

The owner or operator shall record all hourly process rates, and maintain records for a minimum of 5 years.

[Applicant request received February 8, 2005; Permit 0250020-010-AC; Rules 62-4.070(3); and 62-213.440, F.A.C.] [Established by Permittee in application received November 14, 2000.]

Emissions Limitations and Performance Standards

B.12 Design Specifications and Particulate Matter Emissions Limits:

- a. The baghouses for the finish mills have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

| <u>System Emissions Unit</u> | <u>Baghouse ID Manufacturer Model No.</u> | <u>Grain Loading Limit (gr/acf)</u> | <u>Flow Rate acfm dscfm</u> | <u>Cloth Area (ft²)</u> | <u>Air to Cloth Ratio</u> | <u>Potential PM-10 Emissions (TPY)</u> | <u>Potential PM/PM₁₀ Emissions Limits</u> | |
|--|--|-------------------------------------|--------------------------------------|------------------------------------|---------------------------|--|--|----------------|
| | | | | | | | <u>(lb/hr)</u> | <u>(TPY)</u> |
| Finish Mill No. 1 | F-113 Mikropul 16FF-10-20 | 0.01 | 11,800 | 2,100 | 5.6 | | 1.01 | 3.99 |
| Finish Mill No. 1 | F-130 Norblo 468 AMT | 0.01 | 12,000 | 1,977 | 6.1 | | 1.03 | 4.05 |
| Finish Mill No. 3 | F-330 Norblo 702 AMT | 0.01 | 20,000 | 9,477 | 2.1 | 6.34 | 1.71 | 6.76 7.51 |
| Finish Mill No. 3 | F-332 Norblo 390 AMT | 0.01 | 13,500 | 5,465 | 2.5 | 4.26 | 1.16 | 4.56 5.07 |
| Finish Mill No. 3 <i>O-Sepa Cement Separator</i> | 533.BF340 F-313 Mikropul 196S-10-20 | 0.0095 gr/dscf 0.01 | 77,800 (65,307 dscfm) 8,000 | 2,300 Pending | 3.5 Pending | 2.52 | 5.32 0.69 | 20.96 3.00 |
| Finish Mill No. 4 <i>Belt conveyor/ Separator</i> | F-432 Fuller 5 zone #48 | 0.01 | 17,000 | 2,510 | 6.8 | 5.36 | 1.46 | 5.74 6.38 |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-605 Mikropul 645-10-30 | 0.01 | 4,000 | 753 | 5.3 | 1.26 | 0.34 | 1.35 1.50 |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-603 Mikropul 121S-10-20 | 0.01 | 8,000 | 1,424 | 5.6 | 2.52 | 0.69 | 2.70 3.00 |
| Finish Mill No. 4 <i>Ball Mill/Mill Sweep</i> | F-430 Fuller 6-zone #96 | 0.01 | 30,000 | 6,028 | 5.0 | 9.46 | 2.57 | 10.14 11.26 |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-604 Mikropul 121S-10-20 | 0.01 | 8,000 | 1,424 | 5.6 | 2.52 | 0.69 | 2.70 3.00 |
| Finish Mill No. 6 <i>Main</i> | 531.BF01 Pending Pending | 0.0095 0.01 (gr/dscf) | 97,300 (80,905 dscfm) | Pending | Pending | 25.51 | 6.5993 | 25.97 30.37 |
| Finish Mill No. 6 <i>Sweep</i> | 531.BF02 Pending Pending | 0.0095 0.01 (gr/dscf) | 25,900 (21,536 dscfm) | Pending | Pending | 6.79 | 1.7585 | 6.91 8.09 |
| Total | | | | | | 66.52 | 18.09 24.31 | 79.19 95.85 |

Notes:

- Finish Mill Nos. 3 & 6 Emission Limits of 0.01 gr/acf; lb/hr; were requested by Permittee in application received November 14, 2000.

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

b. Initial testing to demonstrate compliance with the PM limits established above, shall be conducted only for units F-330, 533.BF340, F-430, 531.BF01, and 531.BF02. All subsequent compliance testing for PM emissions from the emission points in the table above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.

c. The pending information listed in this table will be submitted to the DERM Air Facilities Section within 30 days of issuance of this final permit, at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.

- Emissions Limits for Finish Mill No. 4 are based on PSD-FL-236 dated July 1, 1998; and Permittee request in application received November 14, 2000.

- Finish Mill Nos. 3 & 4 are existing systems. Finish Mill No. 6 is a new system.

[Applicant request to Escape BACT; Permit 0250020-010-AC; and Rule 62-297.620(4), F.A.C.]

B.13 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| Emission Unit | Baghouse Id. No. | Visible Emissions Limits | Rule Applicability |
|-------------------|--------------------|--|--|
| Finish Mill No. 1 | F-113 | 10% | 40 CFR 63.1347 Rule 62-297.620(4), F.A.C. |
| | F-130 | | |
| Finish Mill No. 3 | 533.BF340 F-313 | 10% with initial PM testing 5% thereafter | 40 CFR 63.1347 Rule 62-297.620(4), F.A.C. |
| | F-330 | 10% with initial PM testing 5% thereafter | 40 CFR 63.1347 Rule 62-297.620(4), F.A.C. |
| | F-332 | 5% | Rule 62-297.620(4), F.A.C. |
| Finish Mill No. 4 | F-430 | 5% | PSD-FL-236 |
| | F-432 | | |
| | F-603 | | |
| | F-604 | | |
| | F-605 | | |
| Finish Mill No. 6 | 531.BF01 | 10% with initial PM testing 5% thereafter | 40 CFR 63.1347 Rule 62-297.620(4), F.A.C. |
| | 531.BF02 | | |

[Applicant request; Permit 0250020-010-AC; and Permit PSD-FL-236]

EMISSIONS UNITS NOS. 004014/016/015- CEMENT STORAGE SILOS/ PACKHOUSE/ LOADOUT

Operational Requirements

B.14. Hours of Operation: These emissions units may operate continuously, i.e., 8,760 hours per year, except for the packhouse which shall not exceed 4,000 hours of operation per year.

[Requested by applicant permittee in application received November 14, 2000; Permit 0250020-010-AC]

B.15. 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 85 TPH on a 24-hour block average. [Permit AC13-21098 dated November 2, 1979; and Permit 0250020-010-AC]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

B.16. Design Specifications and Particulate Matter Emissions Limits:

a. The baghouses for the Cement Storage/Packhouse/Loadout system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the amounts shown in the following table:

| System | Baghouse ID Manufacturer Model No. | Grain Loading Limit (gr/acf) | Flow Rate acfm (dscfm) | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | PM/PM10 Emissions Limits | |
|--|--|---------------------------------------|---------------------------------|-------------------------------------|--------------------------|--|-----------------------------|--------------|
| | | | | | | | (lbs/hr) | (TPY) |
| Cement Silos 1-6 | F-511 Fuller 2 zone #78 | 0.01 | 18,000 | 1,625 | 11.1 | 5.68 | 1.54 | 6.76 |
| Cement Silos 7-9 | F-512 Norblo 156 AMT | 0.01 | 10,000 | 2,142 | 4.7 | 3.15 | 0.86 | 3.75 |
| Cement Silo 10 | F-513 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 1.58 | 0.43 | 1.88 |
| Cement Silo 11 | F-514 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 1.58 | 0.43 | 1.88 |
| Cement Silo 12 | F-515 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 1.58 | 0.43 | 1.88 |
| Bulk Loadout Unit 1 (Rail/Truck) | B-110 Norblo 120 AMT | 0.01 | 3,000 | 1,650 | 1.8 | 0.95 | 0.26 | 1.13 |
| Bulk Loadout Unit 2 (Truck) | B-210 Norblo 120 AMT | 0.01 | 3,000 | 1,650 | 1.8 | 0.95 | 0.26 | 1.13 |
| Bulk Loadout Unit 3 Line 1 | B-372 Mikropul 36S-8-30-C | 0.01 | 2,000 | 340 | 5.9 | 0.63 | 0.17 | 0.75 |
| Bulk Loadout Unit 3 Line 2 | B-374 Mikropul 36S-8-30-C | 0.01 | 2,000 | 340 | 5.9 | 0.63 | 0.17 | 0.75 |
| Bulk Loadout Unit 3 Line 3 | B-382 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 1.58 | 0.43 | 1.88 |
| Packhouse ^(a) | B-621 | 0.01 | 23,400 (23,400) | Pending | Pending | 3.37 | 1.19 | 5.20 |
| Total | | | | | | 21.68 | 6.99 | 25.80 |

Notes: ^(a) Emissions reflect permit limits established in Permit No. PSD-FL-028 dated March 19, 1980

b. Initial and annual compliance testing requirements for PM emissions from all emissions points listed above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. [Rule 62-297.620(4), F.A.C.]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

c) The pending information listed in this table will be submitted to the DERM Air Facilities Section within 30 days of issuance of this final permit, at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.

Emissions reflect permit limits established in PSD FL-028 dated March 19, 1980. [PSD FL-028 dated March 19, 1980 and Requested by Permittee in application received November 14, 2000] [PSD-FL-028 dated March 19, 1980; Applicant requests dated Requested by Permittee in application Received November 14, 2000 and February 8, 2005]

B.17. Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | | | |
|----------------------------|---------|-----|----------------|
| Cement Silos 1-6 | F-511 | 10% | 40 CFR 63.1348 |
| Cement Silos 7-9 | F-512 | 5% | PSD-FL-236 |
| Cement Silos 10, 11, 12 | F-513 | 5% | AC13-21098 |
| | F-514 | | |
| | F-515 | | |
| Bulk Loadout Unit 1 | B-110 | 10% | PSD-FL-236 |
| Bulk Loadout Unit 2 | B-210 | 10% | PSD-FL-236 |
| Bulk Loadout Unit 3 Line 1 | B-372 | 5% | AC13-21098 |
| Bulk Loadout Unit 3 Line 2 | B-374 | 5% | AC13-21098 |
| Bulk Loadout Unit 3 Line 3 | B-382 | 5% | AC13-21098 |
| Packhouse | Pending | 10% | 40 CFR 63.1348 |
| | B-621 | 5% | PSD-FL-028 |

EMISSIONS UNIT NO. 028005 – RAW MILL AND PYROPROCESSING SYSTEM

Operational Requirements

B.18 Hours of Operation: This emissions unit may not operate in excess of 7,884 hours per year except for the CF blend silo (and baghouse 341.BF35004) which may operate 8760 hours per year. [Requested by permittee in application received November 14, 2000 Applicant request, Permit 0250020-010-AC]

B.19 Raw Mill/Pyroprocessing System Unit-Production Limits: The maximum production of clinker shall not exceed 250 TPH on a 24-hour block average and 1,642,500 TPY. [Rule 62-210.200 (228)(PTE), F.A.C.; and Application received November 14, 2000; Applicant request, Permit 0250020-010-AC]

B.20 Operating Limits for In-line kiln/raw mills.

(a) The owner or operator of a in-line kiln/raw mill subject to a D/F emissions limitation under 40 CFR 63.1343 must operate the in-line kiln/raw mill such that the temperature of the gas at the inlet to the kiln Particulate Matter control device (PMCD) does not exceed the applicable temperature limit specified in the following paragraph (b). ~~The owner or operator of an in-line~~

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

kiln/raw mill subject to a D/F emission limitation under 40 CFR 63.1343 must operate the in-line kiln/raw mill such that:

- (1) When the raw mill of the in-line kiln/raw mill is operating, the applicable temperature limit for the main in-line/raw mill exhaust, specified in the following paragraph (b), and established during the performance test when the raw mill was operating is not exceeded.
 - (2) When the raw mill of the in-line kiln/raw mill is not operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in the following paragraph (b), and established during the performance test when the raw mill was not operating, is not exceeded.
- (b) The temperature limit for affected sources meeting the limits of paragraph (a) above is determined in accordance with the following: the run average temperature must be calculated for each run, and the average of the run average temperature must be determined and included in the performance test report and will determine the applicable temperature limit.
- (c), (d), and (e) are deleted because the owner or operator do not employ carbon injection to control dioxin/furan.

[40 CFR 63.1344(a) & (b), and 63.1349(b)(3)(iv); Permit 0250020-010-AC]

B.21 Methods of Operation – Fuels:

| | Allowable Fuels |
|--|---|
| Raw Mill and Pyroprocessing System Unit | 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.* |

Note:

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

| <u>Constituent/Property</u> | <u>Allowable Level</u> |
|-----------------------------|-------------------------|
| Arsenic | 5 ppm maximum |
| Cadmium | 2 ppm maximum |
| Chromium | 10 ppm maximum |
| Lead | 100 ppm maximum |
| Total Halogens | <1000 4000 ppm maximum* |
| PCBs | <50 ppm maximum |
| Flash Point | 100 °F minimum |

The above parameters shall be as determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

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 three years.

[40 CFR 279.72; Permit 0250020-010-AC]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

{*Permitting note: 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. }

Emissions Limitations and Performance Standards

B.22 Design Specifications and Particulate Matter Emissions Limits:

- a. The Particulate Matter emissions from the Raw Mill/Pyroprocessing system are controlled by baghouses with the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table on the following page:
- b. Grain loading of ~~0.0095~~ 0.01 gr/dscf proposed permit limits for all new baghouses emissions points listed in table above except main stack and assume $PM_{10-10} = 84\%$ of PM for main stack and 100% for all baghouses other emissions points listed in table above.
[Requested by Permittee in application Received November 14, 2000 Applicant request to Escape BACT; 40 CFR 63.1343 and 63.1345; Permit 0250020-010-AC]
- c. Initial and annual compliance testing requirements for PM emissions limits from all emissions points listed in table above, except limit for baghouse 331-BF200 01 which exhausts to the main/common stack, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. [Rule 62-297.620(4), F.A.C.; Permit 0250020-010-AC]
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- d. All the above process units are also subject to 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry.

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Particulate Matter from Raw Mill/Pyroprocessing

| Raw Mill/ Pyroprocessing System Process Unit | Baghouse ID Manufacturer Model No. | Grain Loading Limit gr/dscf | Flow Rate acfm (dscfm) | Cloth Area ft ² | Air to Cloth Ratio | Potential PM ₁₀₋₁₀ Emissions Limit TPY | Potential PM Emissions Limits | |
|--|---|--------------------------------------|---------------------------------|-------------------------------|--------------------------|---|--|------------------|
| | | | | | | | lb/hr | TPY |
| Kiln/Cooler/ Raw Mill (and Coal Mill when operated simultaneously) Main Stack | 331.BF20004 FLS Airtech M5C690D16(16) | 0.125* | 515,000 | 173,397 Pending | 3.0:1 Pending | 147.00 | 50.0 (instant- aneous) 53.10 (44.4 annual average for 7884 hrs/year) | 175.00 |
| | | | 486,000 (360,637) 392,367 | | | | | |
| Kiln Dust Bin Kiln Dust | 331.BF74002 FLS Airtech 100C10 | 0.0095 0.01 | 4,250 | 1302 Pending | 3.3:1 Pending | 0.95 1.18 | 0.24 0.36 | 0.95 1.41 |
| | | | 6,800 (2,953) 4,175 | | | | | |
| CE Blend Silo | 341.BF35004 FLS Airtech 64C10 | 0.0095 0.01 | 3,760 | 833 Pending | 4.5:1 Pending | 1.11 1.64 | 0.25 0.44 | 1.11 1.95 |
| | | | 6,250 (3,112) 5,189 | | | | | |
| Raw Meal Preheat/ Calciner Tower | 351.BF41004 FLS Airtech 64C10 | 0.0095 0.01 | 4,000 | 833 Pending | 4.8:1 Pending | 1.06 1.46 | 0.27 0.44 | 1.06 1.74 |
| | | | 6,200 (3,310) 5,147 | | | | | |
| Raw Meal Preheat/ Calciner Tower | 351.BF44002 FLS Airtech 100C10 | 0.0095 0.01 | 4,760 | 1320 Pending | 3.7:1 Pending | 1.26 0.71 | 0.32 0.21 | 1.26 0.84 |
| | | | 3,000 (3,939) 2,491 | | | | | |
| Raw Meal Preheat/ Calciner Tower | 351.BF47003 FLS Airtech 100C10 | 0.0095 0.01 | 4,100 | 1302 Pending | 3.2:1 Pending | 1.09 2.45 | 0.28 0.74 | 1.09 2.92 |
| | | | 10,400 (3,409) 8,634 | | | | | |
| Kiln Dust Truck Loadout | 331.BF645 | 0.0095 | 3,500 (2,910) | | | 0.93 | 0.24 | 0.93 |
| Total | | | | | | 153.41 154.44 | 51.60 55.29 | 181.41 183.86 |

Notes: (*) Main Stack PM Emissions Limit is 0.125 lbs/ton of kiln feed.

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

B.23 SO₂, NO_x, CO, VOC, and SAM Emission Limits: The emissions from the Raw Mill/Pyroprocessing system shall not exceed the limits shown in the following table:

| Pollutant | Allowable Emissions | | Emissions Limits in lbs./ton of clinker | | Monitors |
|--------------------|--|-----------------------|---|--|----------|
| | 12-month rolling average in TPY ⁽ⁱ⁾ | Lbs./hr 24-hr average | 24-hr avg. @208 TPH of clinker production (S) | 24-hr average @250 TPH of clinker production | |
| SO ₂ | 806 | 320 | 1.54 | 1.28 | CEM |
| NO _x | 1953 | 720 | 3.46 | 2.88 | CEM |
| CO ⁽ⁱⁱ⁾ | 1457 | 576 | 2.76 | 2.30 | Process |
| VOC | 155 | 40 | 0.19 | 0.16 | CEM |
| SAM | 8.68 | 2.24 | 0.009 | 0.009 | - |

Notes:

- ⁽ⁱ⁾ The 12-month rolling average in TPY would be the average of the daily values for the current month and the preceding 11 months. The averages shall be based on the operating days or hours, and shall exclude days or hours in which the plant is not operating.
- ⁽ⁱⁱ⁾ The averaging time for CO corresponds to the required length of sampling for the initial and subsequent emission tests.

[Rules 62-4.070(3) and 62-212.400, F.A.C.; Permit 0250020-010-AC]

B.24 PM/PM₁₀ and Dioxins/Furans Main Stack Emissions:

| Pollutant | Allowable Emissions | | Emissions | | |
|------------------|---------------------|---------|---|---------------------------|----------------|
| | TPY | lbs./hr | Limit | Unit | Averaging Time |
| PM | 175 | 53.1 | 0.125 | lbs./ton of dry kiln feed | 3 hours |
| PM ₁₀ | 147 | 42.0 | 0.105 | lbs./ton of dry kiln feed | 3 hours |
| Dioxins/Furans | | | 0.20 (or 0.40 when the average of the performance test run average PM control device inlet temperature is 204°C or less [Corrected to 7%O ₂ .] | ng TEQ/dscm | 3 hours |

Notes: The averaging times for PM and PM₁₀ correspond to the required length of sampling for the initial and subsequent emissions tests.

[Rules 62-4.070(3) and 62-212.400, F.A.C.; 40 CFR 63.1343; Permit 0250020-010-AC]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

B.25. Sulfur Dioxide Emissions: Emissions of SO₂ shall not exceed 1.2 lb/MMBtu heat input when solid fuel is fired, or 0.8 lb/MMBtu heat input when liquid fuel is fired, based on a 24 hour average.

[Miami-Dade County Code, Section 24-17(2)(a); Permit 0250020-010-AC]

B.26. Mercury and Lead into the Pyroprocessing System Limited: The baseline potential emissions for mercury and lead, as stated in the Application received June 30, 1998, are 30 lbs/year and 94 lbs/year, respectively. An increase in mercury and lead emissions of 200 and 1,200 pounds, respectively, above the previously stated baseline emissions per consecutive 12-month period shall subject this facility to Prevention of Significant Deterioration (PSD) Review. [Rules 62-4.070(3) and 62-212.400, F.A.C.; Permit 0250020-010-AC]

B.27. Pursuant to 40 CFR 63.1343 Standards for Kilns and In-line Kiln/raw Mills:

(a) *General*. The provisions in this section apply to each in-line kiln/raw mill.

(b) No owner or operator of a inline kiln/raw mill shall cause to be discharged into the atmosphere from these affected sources any gases which:

- (1) Contain particulate matter (PM) in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln.
- (2) Exhibit opacity greater than 20 percent.
- (3) Contain D/F in excess of:
 - (i) 0.20 ng per dscm (8.7×10^{-11} gr per dscf)(TEQ) corrected to seven percent oxygen; or
 - (ii) 0.40 ng per dscm (1.7×10^{-10} gr per dscf)(TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

[40 CFR 63.1343(a) & (b); Permit 0250020-010-AC]

B.28 Engineering Design Capacities For The Raw Mill And Pyroprocessing System Unit:

| Process Units Sources | Maximum Capacity (MMBtu/hr heat input) |
|-------------------------------|--|
| Raw Mill Heat Input | 105 |
| Preheater/Calciner Heat Input | 385 |
| Kiln Heat Input | 290 |
| Total System Heat Input | 675 |

[Application received November 14, 2000 Applicant Request; Permit 0250020-010-AC]

B.29 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| Emissions Point | Baghouse Id. No. | Visible Emissions Limit | Permit/Rule Applicability |
|---|------------------|--|---|
| Main Dust Collector exhausts to Main/Common Stack | 331.BF01200 | 10%* | 40 CFR 63.1342 |
| Cement Kiln Dust Bin | 331.BF02740 | | |
| Blending & Storage System | 341.BF01350 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 <u>Rule 62-297.620(4), F.A.C.</u> |
| | 351.BF02410 | | |
| | 351.BF02440 | | |
| | 351.BF03470 | | |

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Note: (*) 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. The raw mill is also limited to 10% opacity. [40 CFR 63.1345(a)(2) and 63.1347; Permit 0250020-010-AC; Permit application 0250020-016-AC]

EMISSIONS UNIT NO. 029006 – RAW MATERIAL HANDLING

Operational Requirements

B.30. Hours of Operation: This emissions unit may not operate in excess of 7,884 hours per year, except for baghouse 232.BF01 for the lime/gypsum silos (existing silos) which shall not exceed 4,000 hours of operation per year. [Requested by permittee in application received November 14, 2000 Applicant request; Permit 0250020-010-AC]

B.31. Raw Material Handling System Throughput Specification: The maximum dry throughput rate is shown in the following table:

| | |
|------------------------------|--------------------------|
| Source Description | Throughput Maximum (TPY) |
| Raw Material Handling System | 3,260,000 (dry) |

The owner or operator shall record all throughput rates on a rolling 12-month basis, and maintain records for a minimum of 5 years. [Applicant request; Permit 0250020-010-AC; Rules 62-4.070(3), and 62-213.440, F.A.C.]

Emissions Limitations and Performance Standards

B.32. Design Specifications and Particulate Matter Emissions Limits:

a. The Particulate Matter emissions from the Raw Material Handling system are controlled by baghouses with the following or equivalent design specifications:

| System Process Units | Baghouse ID Manufacturer Model No. | Grain Loading Limit gr/dscf | Flow Rate acfm (dscfm) | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM/PM ₁₀ Emissions Limits | |
|----------------------|------------------------------------|-----------------------------|----------------------------------|-------------------------------|--------------------|---------------------------------|--|----------------|
| | | | | | | | (lb/hr) | (TPY) |
| Lime/Gyp Silos | 232.BF01 Pending Pending | 0.0095 0.01 | 5,170 (5,170) | Pending | Pending | 0.74 | 0.42 0.44 | 0.84 0.89 |
| Additives Silo 1 | 311.BF65001 Pending Pending | 0.0095 0.01 | 8,500 11,000 (8,130 11,000) | Pending | Pending | 3.12 | 0.66 0.94 | 2.61 3.72 |
| Additives Silo 2 | 311.BF75002 Pending Pending | 0.0095 0.01 | 7,750 6,050 (7,413 4,840) | Pending | Pending | 1.37 | 0.60 0.41 | 2.38 1.64 |
| Additives Silo 3 | 311.BF47003 Pending Pending | 0.0095 0.01 | 10,800 10,000 (10,039 10,000) | Pending | Pending | 2.84 | 0.82 0.86 | 3.22 3.38 |
| Additives Silo 4 | 311.BF95004 Pending Pending | 0.0095 0.01 | 11,700 10,000 (10,876 10,000) | Pending | Pending | 2.84 | 0.89 0.86 | 3.49 3.38 |
| Total | | | | | | 10.91 | 3.39 3.51 | 12.54 13.01 |

Notes: Grain loading of 0.01 gr/dscf proposed permit limits for all baghouses listed above and assume PM-10 = 84% of PM. [Requested by Permittee in application Received November 14, 2000]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

b. Initial and annual compliance testing requirements for PM emissions from all emissions points listed above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. [Rule 62-297.620(4), F.A.C.]

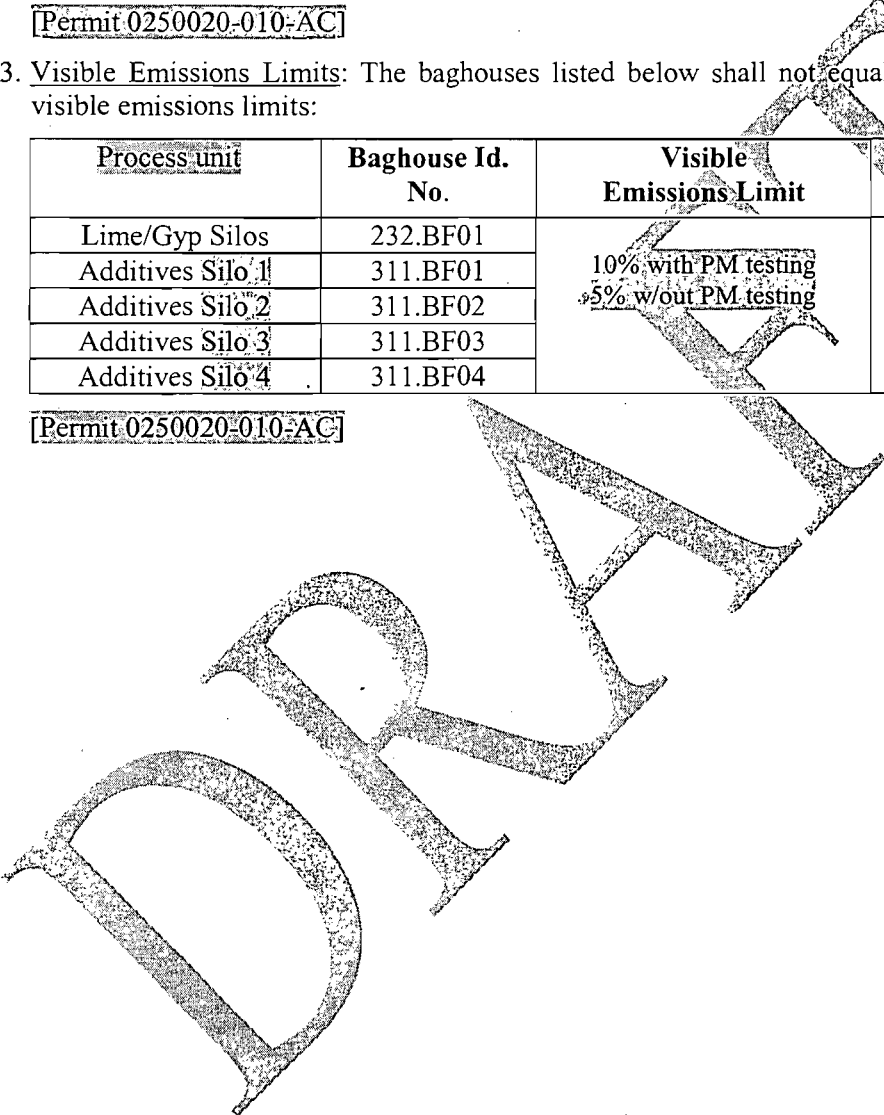
c. The pending information listed in this table will be submitted to the DERM Air Facilities Section ~~within 30 days of issuance of this final permit, at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.~~

~~[Permit 0250020-010-AC]~~

B.33. Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| <u>Process unit</u> | <u>Baghouse Id. No.</u> | <u>Visible Emissions Limit</u> | <u>Rule Applicability</u> |
|---------------------|-------------------------|--|--|
| Lime/Gyp Silos | 232.BF01 | 10% with PM testing 5% w/out PM testing | 40 CFR 63.1348 Rule 62-297.620(4), F.A.C. |
| Additives Silo 1 | 311.BF01 | | |
| Additives Silo 2 | 311.BF02 | | |
| Additives Silo 3 | 311.BF03 | | |
| Additives Silo 4 | 311.BF04 | | |

~~[Permit 0250020-010-AC]~~



SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Section III, Emissions Units Specific Conditions C.0 through C.26 in Permit 0250020-010-AC dated May 1, 2001 are adopted in their entirety. Certain conditions of that permit are modified as shown below. Additions are highlighted, and deletions are shown by ~~strikethroughs~~.

C. COMMON CONDITIONS

These emissions units shall comply with the 40 CFR 63 Subpart LLL – National Emissions Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry for Major Sources of HAPs; and 40 CFR 63, Subpart A – General Provisions for Subpart LLL – Portland Cement Plants

C.0 Emissions Unit Specific Testing, Monitoring, Notification, Recordkeeping, and Reporting Requirements

C.1. Test Methods and Procedures: The permittee shall conduct testing/monitoring on all emissions units as indicated below:

| System | Unit ID | Pollutant | EPA Test Method | Frequency |
|--|--------------|---------------|-----------------|--|
| EU 02601 Coal Handling | | | | |
| Coal Mill Main—exhausts to main stack (if not operated simultaneously with Kiln/Cooler/Raw Mill) | 461.BF30001 | PM Opacity | 5 9 | Initial & Annual ^(b) Initial & Annual 5-years |
| Dump Hopper (Transfer) | 2461.BF13001 | PM Opacity | 5 9 | Initial ^(b) & Annual ^(b) Initial & Annual |
| Conveyors (2) (Transfer) & Coal and Petroleum Coke Feed Bins | 2461.BF23002 | | | |
| Coke/Petroleum Coke (Transfer) | 461.BF75002 | | | |
| Surge Bin (Feeder) | 461.BF65003 | | | |
| Coal (Transfer) | 461.BF650 | | | |
| Surge Bin (Feeder) | 461.BF650 | | | |
| Coal Mill Feed | 461.BF350 | | | |
| EU 0027 Clinker Handling & Storage | | | | |
| Clinker Silos 21-23 & 26-28 | F633 | PM Opacity | 5 9 | Initial ^(b) & Annual ^(b) Initial & Annual 5-years |
| Clinker Transfer conveyors from cooler Burner Building | 441.BF54001 | | | |
| Clinker Silos | 481.BF14001 | | | |
| Clinker Transfer Conveyors | 481.BF54002 | | | |
| Clinker Off-spec Bins | 481.BF33003 | | | |
| Clinker transfer | 481.BF640 | | | |
| Clinker transfer | 481.BF730 | | | |
| Clinker transfer | 481.BF930 | | | |

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

| EUs 003 012 and 013 Finish Mills | | | | |
|---|-----------|---------------|--------|--|
| Finish Mill No. 1 | F113 | PM | 5 | Initial ^(b) & Annual ^(b) |
| | F130 | Opacity | 9 | Initial & Annual 5 years |
| Finish Mill No. 3 | F-330 | PM | 5 | Initial & Annual ^(b) |
| | | Opacity | 9 | Initial & Annual 5 years |
| | F-332 | PM | 5 | Initial ^(b) & Annual ^(b) |
| | | Opacity | 9 | Initial & Annual 5 years |
| Finish Mill No. 4 | 533.BF340 | PM | 5 | Initial & Annual ^(b) |
| | F-313 | Opacity | 9 | Initial & Annual 5 years |
| Finish Mill No. 4 <i>Belt conveyor/ Separator</i> | F-432 | PM Opacity | 5 9 | Initial ^(b) & Annual ^(b) Initial & Annual 5 years |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-605 | | | |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-603 | | | |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-604 | | | |
| Finish Mill No. 4 <i>Ball Mill/Mill Sweep</i> | F-430 | PM | 5 | Initial & Annual ^(b) |
| Finish Mill No. 6 <i>Main</i> | 531.BF01 | Opacity | 9 | Initial & Annual 5 years |
| Finish Mill No. 6 <i>Sweep</i> | 531.BF02 | | | |
| EUs 004 014, 015, and 016 Cement Storage, Packhouse, & Loadout | | | | |
| Cement Silos 1-6 | F-511 | PM Opacity | 5 9 | Initial ^(b) & Annual ^(b) Initial & Annual 5 years |
| Cement Silos 7-9 | F-512 | | | |
| Cement Silo 10 | F-513 | | | |
| Cement Silo 11 | F-514 | | | |
| Cement Silo 12 | F-515 | | | |
| Bulk Loadout Unit 1 (Rail/Truck) | B-110 | | | |
| Bulk Loadout Unit 2 (Truck) | B-210 | | | |
| Bulk Loadout Unit 3 Line 1 | B-372 | | | |
| Bulk Loadout Unit 3 Line 2 | B-374 | | | |
| Bulk Loadout Unit 3 Line 3 | B-382 | | | |
| Packhouse | Pending | | | |

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

| EU 02805 Raw Mill and Pyroprocessing System | | | | |
|--|---------------|----------------|------------|--|
| Kiln/Cooler/Raw Mill (and Coal Mill when operated simultaneously) Main/Common Stack | 331.BF20004 | PM | 5 | Initial & Annual |
| | | PM10 | 5 | Initial & Annual |
| | | Opacity | 9 | Initial & 5 years |
| | | SO2 | 6 | Initial & 5 years |
| | | NOx | 7 or 7E | Initial & 5 years |
| | | CO | 10 | Initial & 5 years |
| | | VOC | 25 or 25A | Initial & 5 years |
| | | SAM | 5 & 8 | Initial & 5 years |
| | | Dioxins/Furans | 23 | Initial & 30 months |
| | | Lead/Mercury | 29 or 101A | Initial & Annual ^(a) |
| | Kiln Dust Bin | 331.BF74002 | | |
| Kiln Dust | | | | |
| CF Blend Silo | 341.BF35004 | | | |
| Raw Meal Preheat/Calciner Tower | 351.BF41004 | PM | 5 | Initial ^(b) & Annual ^(b) |
| Raw Meal Preheat/Calciner Tower | 351.BF44002 | Opacity | 9 | Initial & Annual 5-years |
| Raw Meal Preheat/Calciner Tower | 351.BF47003 | | | |
| Kiln Dust Truck Loadout | 331.BF645 | | | |
| EU 02906 Raw Material Handling | | | | |
| Lime/Gyp Silos | 232.BF01 | | | |
| Additives Silo 1 | 311.BF65004 | PM | 5 | Initial ^(b) & Annual ^(b) |
| Additives Silo 2 | 311.BF75002 | Opacity | 9 | Initial & Annual 5-years |
| Additives Silo 3 | 311.BF47003 | | | |
| Additives Silo 4 | 311.BF95004 | | | |

Notes:

- ^(a) In the event that initial testing for mercury and lead result in potential annual emissions below 130 and 694 pounds, respectively, the DERM may waive the annual testing and require testing once every 5 years. Should subsequent test results indicate levels greater than those mentioned above, the facility shall revert to an annual testing schedule.
- ^(b) Initial and subsequent compliance testing requirements for PM emissions, except those listed below, are waived and an alternative standard of 5% opacity is imposed. If the DERM has reason to believe that the particulate weight emissions standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. The following emissions units require initial testing for PM emissions: 331.BF20004, F-330, 533.BF340 F-430, 531.BF01, 531.BF02

[Permit No. 0250020-010-AC, Rule 62-297.310(7), F.A.C.]

C.2 through C.9. No Changes in these conditions.

C.10. **Fuel Analysis for On-specification Used Oil:** Fuel analysis shall be in accordance with 40 CFR 266.43(b)(1) & (6). A sample shall be taken from the outlet of the blend tank on the first working day (i.e., Monday-Friday; exceptions: holidays) of each month, if any used oil was placed in the blend tank the previous month; or, the sample can be taken directly from the used oil mobile collection tank after final collection and prior to the time of initial transfer; but, that sampling frequency shall be no less than quarterly and the sampling methodology shall have been established with the DERM, Miami-Miami-Dade County prior to sampling. Upon taking a sample, the sample shall be analyzed for the following constituent/property and associated unit and using the following test methods (or their latest version):

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

| Constituent/Property | Unit | Test Method |
|-----------------------------|-------------|--|
| Arsenic | ppm | EPA SW-846 (3040-7130) |
| Cadmium | ppm | EPA SW-846 (3040-7130) |
| Chromium | ppm | EPA SW-846 (3040-7130) |
| Lead | ppm | EPA SW-846 (3040-7130) |
| Total Halogens | ppm | ASTM E442 |
| PCBs | ppm | ASTM D4059 |
| Sulfur | % by weight | ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 & ASTM D129-91 |
| Flash Point | °F | ASTM D93 |
| Heat of Combustion | Btu/gal | ASTM D240-76 |
| Density | Lbs/gal | ASTM D1298-80 |

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

C.11 through C.26. No Changes in these conditions.

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APPENDIX GC
General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - (a) Have access to and copy and records that must be kept under the conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of non-compliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

APPENDIX GC
General Conditions

- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- (a) Determination of Best Available Control Technology (not applicable to project);
 - (b) Determination of Prevention of Significant Deterioration (not applicable to project); and
 - (c) Compliance with New Source Performance Standards (X) and
 - (d) Compliance with National Emissions Standards for Hazardous Air Pollutants (X).
- G.14 The permittee shall comply with the following:
- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.



May 1, 2001

CERTIFIED MAIL: 7000 0600 0027 7981 5918
RETURN RECEIPT REQUESTED

ENVIRONMENTAL RESOURCES MANAGEMENT
AIR QUALITY MANAGEMENT DIVISION
33 S.W. 2nd AVENUE
SUITE 900
MIAMI, FLORIDA 33130-1540
TELEPHONE: (305) 372-6925
FAX: (305) 372-6954

PERMITTEE:

Tarmac America, Inc.
455 Fairway Drive
Deerfield Beach, FL 33441

Permit No. 0250020-010-AC
Issue Date: May 1, 2001
Expiration Date: October 31, 2003

Authorized Representative:
Hardy Johnson
President, Florida Division

PROJECT AND LOCATION:

Project:

The project encompasses the construction of a dry process modernization plant to include a new preheater/calcliner/kiln, cooler, coal mill and raw mill. This new process will replace the existing wet kiln and cooler systems. A new finish mill (No. 6) will be constructed to operate with units 3 & 4. Finish Mill units 1 & 2 will be shut down.

The project will result in an increase in production at the facility while maintaining air pollution emissions at or below the levels allowed in the construction Permit Number 0250020-008-AC, dated October 21, 1999. The facility will accomplish this increase in production while maintaining emissions through adjusting facility operating hours and increasing production efficiency.

Facility Description: Portland Cement Plant (SIC # 3241)
Facility Name: Tarmac-Pennsuco Cement
Location: 11000 NW 121 Way, Medley, Florida 33178
Lat./Long.: 25° 52' 30" N / 80° 22' 30" W
UTM: Zone 17; 562.8 Km. E; 2861.7 Km. N

This is Permit Number 0250020-010-AC to construct an air pollution source issued by the **Miami-Dade County Department of Environmental Resources Management (DERM)** pursuant to Chapter 24, Code of Miami-Dade County and Chapter 403.087, Florida Statutes (F.S.).

The Florida Department of Environmental Protection (FDEP) has permitting jurisdiction under Section 403.087, Florida Statutes (F.S.). However, in accordance with Section 403.182, F.S., the FDEP recognizes the DERM as the approved local air pollution control program of Miami-Dade County. Through a Specific Operating Agreement, the FDEP delegated to the DERM the authority to issue or deny permits for this type of air pollution source located in Miami-Dade County.

NOTICE OF RIGHTS:

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to **Section 120.68, F.S.**, by the filing of a Notice of Appeal pursuant to **Rule 9.110, Florida Rules of Appellate Procedure**, with the Clerk of the Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, at 33 SW 2nd Avenue, Suite 900, Miami, Florida 33130-1540 and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Order is filed with the Clerk of the DERM.

STATEMENT OF BASIS:

This permit is issued under the provisions of **Chapter 24, Code of Miami-Dade County, Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, and 62-204 through 62-297**, and in conformance with all existing regulations of the FDEP and the DERM rules. The above named owner or operator is hereby authorized to perform the work or construct the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the DERM and made a part hereof and specifically described in this permit.

Attached appendices and Tables made a part of this permit:

Appendix A – General Conditions
Appendix SS-1 – Stack Sampling Facilities
Table 297.310-1 – Calibration Schedule Table
Figure 1, Summary Report, Gaseous and Opacity Excess Emission and Monitoring System Performance

SECTION I. FACILITY INFORMATION

SUBSECTION A. FACILITY DESCRIPTION

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

DERM issued a construction permit 0250020-008-AC to this facility on October 21, 1999 to modernize the existing operation. On November 14, 2000 the facility submitted a modified construction permit application to construct a new preheater/calcliner/kiln, cooler, coal mill and raw mill to replace existing kilns and coolers system. In addition, a new finish mill (No. 6) will be constructed to operate with units 3 & 4. Finish Mill units 1 & 2 will be shut down when the existing operation ceases.

The project will result in an increase in production at the facility while maintaining air pollution emissions at or below the levels allowed in the construction permit dated October 21, 1999. The facility will have a capacity of 250 tons per hour of clinker production and annual production will be limited (on a rolling 12-month average) to 1,642,500 tons per year of clinker production. The facility will accomplish this increase in production while maintaining emissions, through adjusting facility operating hours and increasing production efficiency.

EMISSIONS UNITS

This permit addresses the following emissions units:

| EMISSIONS UNIT NO. | SYSTEM | EMISSIONS UNITS DESCRIPTION |
|--------------------|-------------------------------------|--|
| 001 | Coal Handling | Coal Feed Bin, Pet Coke Feed Bin, Coal Mill (Pet Coke- Coal) Handling and Storage (Fugitive) |
| 002 | Clinker Handling and Storage | Clinker Transfer from Burner Building, Clinker Silo, Clinker Transfer and Clinker Bins |
| 003 | Finish Mill | Finish Mill # 3, 4, & 6 |
| 004 | Cement Storage, Packhouse & Loadout | Cement Silos 1-12, Packhouse & Bulk Loadout Units #1-3 |
| 005 | Raw Mill and Pyroprocessing unit | Raw Mill, and Pyroprocessing consists of the Preheater/Calcliner, Kiln, and Cooler |
| 006 | Raw Material Handling | Limestone/gypsum and additive storage silos and handling |

SUBSECTION B. REGULATORY CLASSIFICATION

The Tarmac America Pennsuco Cement Plant directly emits more than 100 tons per year (TPY) of several regulated air pollutants and emits over 10 TPY of at least one hazardous air pollutant. Therefore it is classified as a "Major Source of Air Pollution or Title V Source," per the definitions in **Rule 62-204.200, F.A.C.**

This industry is listed in Table 62-212.400-1 of Chapter 62-212, F.A.C., "Major Facility Categories." Therefore, stack and fugitive emissions of over 100 TPY of carbon monoxide, volatile organic compounds, sulfur dioxide, nitrogen oxides, or particulate matter characterize the installation as a major facility per the definitions in Rule 62-210.200, F.A.C.

The Brownfield facility is also subject to 40 CFR 63, Subpart LLL, Portland Cement Manufacturing Plant, and 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants.

SIGNIFICANT DATES:

Permit Number 0250020-008-AC was issued on April 28, 1999.

Permit Number 0250020-009-AV was issued on October 26, 2000.

Permit Application and Attachments Received: November 14, 2000.

Additional information requested by DERM on December 13, 2000 and January 25, 2001.

Additional information received from applicant on January 3, 2001 and February 1, 2001.

SECTION II. FACILITY-WIDE CONDITIONS

ADMINISTRATIVE

- A.1 Regulating Agencies: All documents related to applications for permits to operate, reports, tests, minor modifications and notifications shall be submitted to the Air Facilities Section of the Miami-Dade County Department of Environmental Resources Management (DERM), Suite 900, 33 Southwest Second Avenue, Miami, Florida 33130-1540.
- A.2 Specific and General Conditions: The owner or operator shall be subject to the specific and general conditions of this permit and the owner or operator shall be aware of, and operate under, the attached General Conditions, attached as Appendix A of this permit. General Conditions are binding and enforceable pursuant to Chapter 403, F.S.
[F.A.C. Rule 62-4.160]
- A.3 Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
- A.4 Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C.
[Rule 62-210.900, F.A.C.]
- A.5 Expiration: This air construction permit shall expire on October 31, 2003. The permittee may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, prior to 60 days before the expiration of the permit. However, the permittee shall promptly notify the DERM of any delays in completion of the project, which would affect the startup day by more than 90 days.
[Rule 62-210.300(1), F.A.C., 62-4.090, F.A.C.]
- A.6 Other Permits: This air pollution permit does not preclude the owner or operator from obtaining any other types of required permits, licenses or certifications from the DERM or other departments or agencies.
- A.7 Title V Permit is Required: This permit authorizes construction and/or installation of the permitted emissions units and initial operation to determine compliance with the FDEP and the DERM rules. An application for a Title V operation permit must be submitted to the Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, **90 days before the expiration date of this permit, but no later than 180 days after commencing operation**. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, and such additional information as the DERM may by law require.
[F.A.C. Rule 62-4.030, 62-4.050, and 62-213.420(1)(a)2]

- A.8 Applicable Regulations: Unless otherwise indicated, the construction of a dry process Portland Cement Plant and associated equipment shall be in accordance with the capacities and specifications stated in the application. This facility is subject to all applicable provisions of Chapter 24 Code of Miami-Dade County, Chapter 403, F.S. and Florida Administrative Code Chapters 62-4; 62-103; 62-204, 62-210, 62-212, 62-213, 62-296, 62-297; and the Code of Federal Regulations Section 40, Part 60. Specifically, this facility is subject to National Emissions Standards for Hazardous Air Pollutants for Portland Cement Plant, 40 CFR 63, Subpart LLL. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations.
[Rule 62-210.300, F.A.C.]

EMISSIONS LIMITING STANDARDS

- A.9 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% opacity). The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1, F.A.C.]

A.10 Unconfined Emissions of Particulate Matter

- (a) The owner or operators shall not cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any source whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emissions.
- (b) Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.
Reasonable precautions may include, but are not limited to the following:
1. Paving and maintenance of roads, parking areas and yards.
 2. Applying water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
 3. Applying asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
 4. Removing particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
 5. Confining abrasive blasting where possible.
 6. Landscaping and planting of vegetation.
 7. Using hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
 8. Enclosing or covering of conveyor systems.
 9. Storing all materials, coal and petroleum coke at the plant under roof on compacted clay or concrete, or in enclosed vessels.
 10. Locating water supply lines, hoses and sprinklers near all unenclosed materials to prevent unconfined particulate matter emissions.

11. Installing tire wash for bulk transport trucks leaving the plant, to remove particulate matter from vehicle tires before traveling on the facility's access roadways.
- (c) In determining what constitutes reasonable precautions for a particular source, the DERM shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.
- [Rule 62-296.320(4)(c), F.A.C.; 62-4.070(3)]

A.11 General Pollutant Emissions Limiting Standards:

- (a) No person shall 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 DERM.
- [Rule 62-296.320 (1)(a), F.A.C.]
- (b) 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.]

NOTE: An objectionable odor is defined in Rule 62-210.200(203), F.A.C., as any odor present in the outdoor atmosphere, which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.

OPERATION AND MAINTENANCE

- A.12 Final Construction Schedule: The permittee shall provide to the DERM a final construction schedule after selection of the contractor and before commencement of construction.
- [Rule 62-4.070(3), F.A.C.]
- A.13. The existing kiln No. 3 shall be permanently shut down no later than 180 days from the startup date of emissions unit No. 005 (Raw Mill and Pyroprocessing Unit). The shutdown date of kiln No.3 shall not be extended for any reason. The operation/shutdown of kiln No. 3 shall comply with the following conditions:
- Operation of kiln No. 3 shall not result in an exceedance of any 12-month rolling average ton per year emissions limit specified in condition B.23 and B.24 of this permit.
 - Shut down of kiln No. 3 shall commence within 48-hours of introduction of kiln feed to the preheater/calculator, and shut down shall be completed within 5 days of commencement of such action. This schedule shall be followed each time kiln feed is introduced to the preheater/calculator.
 - Simultaneous operation of kiln No. 3 and emissions unit No. 005 for the purpose of clinker production is prohibited, except during the duration of the shut down of kiln No. 3 (5 days).
 - Dates of introduction of kiln feed to the preheater/calculator, and the dates of commencement and completion of kiln No. 3 shutdown must be recorded and reported to the DERM Air Facilities Section within 15 days of each mentioned action.
 - A log of hourly clinker production from kiln No. 3 and emissions unit No. 005 for the 180 days after the startup of emissions unit No. 5 shall be maintained at the facility. These records must be submitted to the DERM Air Facilities Section on a weekly basis.
- [Rule 62-4.070(3), F.A.C.]

*NOTE: Startup is defined as the setting in operation of an affected source for any purpose.
Shutdown is defined as the cessation of operation of an affected source for any purpose.
[40 CFR 63.2, Definitions]*

- A.14 Changes/Modifications: The owner or operator shall submit to the DERM, Air Facilities Section, for review and obtain approval for any changes in, or modifications to the method of operation; process or pollution control equipment; increase in hours of operation; equipment capacities; or any change which would result in an increase in potential/actual emissions. Depending on the size and scope of the modification, it may be necessary to submit an application for, and obtain an air construction permit prior to making the desired change.
[Rule 62-4.030, 62-210.300 and 62-4.070(3), F.A.C.]
- A.15 Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the owner or operator shall notify the DERM, Air Facilities Section as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include, pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and applicable rules.
[Rule 62-4.130, F.A.C.]
- A.16 Circumvention: The owner or operator shall not circumvent any air pollution control equipment or allow the emission of air pollutants without this equipment operating properly.
[Rules 62-210.650, F.A.C.]
- A.17 Excess Emissions Requirements: The following excess emissions provisions can not be used to vary any NSPS or NESHAP requirements from any subpart of 40 CFR 60 or 40 CFR 63.
- (a) Excess emissions resulting from start-up, shutdown or malfunction of these emissions units shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24 hour period unless specifically authorized by the DERM, Air Facilities Section for longer duration.
[Rule 62-210.700(1), F.A.C.]
 - (b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

MONITORING OF OPERATIONS

A.18 Determination of Process Variables:

- (a) Required Equipment. The permittee shall install, operate, and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emissions limiting standards.
[Rule 62-297.310 (5), F.A.C.]
- (b) Accuracy of Equipment. Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]

TEST REQUIREMENTS

- A.19 Test Performance: DERM shall be notified of startup date in writing by the facility within 15 days of initial startup. Within 60 days after achieving the maximum production rate at which this facility will be operated, but no later than 180 days after initial startup, the owner or operator shall conduct performance tests, pursuant to 40 CFR 63.1349, Performance Tests, Rule 62-296.310 F.A.C., 40 CFR 63, Appendix A and 40 CFR 51, Appendix M. In the event that the facility fails any initial or annual performance test, a retest shall be conducted within 30 days of the test date of the failed test. No other test method shall be used unless approval from the DERM has been received in writing. Unless otherwise stated in the applicable emissions limiting standard rule, testing of emissions shall be conducted with the emissions unit(s) operating at permitted capacity pursuant to Rule 62-297.310(2) F.A.C.
[Rules 62-204.800, 62-297.310, 62-297.400, 62-297.401, and 62-4.070(3) F.A.C.]

*NOTE: Startup is defined as the setting in operation of an affected source for any purpose.
[40 CFR 63.2, Definitions]*

- A.20 Clinker Production Rate Determination: Prior to any emission testing to demonstrate compliance with any emission limit, the permittee shall determine the clinker production rate for the test according to a factor based on the preheater/precalciner feed rate. The permittee shall notify the DERM of the preheater/precalciner 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.
[Rule 62-4.070(3), F.A.C.]
- A.21 Test Procedures/Test Reports: All test procedures and test reports shall meet all applicable requirements of the Florida Administrative Code Chapter 62-297.
[Rule 62-297.310 (4), F.A.C.]
- A.22 Test Notification: Unless otherwise specified in this permit, the DERM, Air Facilities Section shall be notified in writing of expected compliance test dates (when required) at least fifteen (15) days prior to compliance testing. The notification shall include the following information: the date, time, and location of each test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner.
[Rule 62-297.310(7)(a)9, F.A.C.]

- A.23 Special Compliance Tests: When the DERM, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emissions standard contained in Rule 62-204 through 62-297, F.A.C. or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the facility to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions units and to provide a report on the results of said tests to the DERM., Air Facilities Section.
[Rule 62-297.310(7)(b), F.A.C.]
- A.24 Stack Testing Facilities: The owner or operator shall install stack-testing facilities in accordance with Rule 62-297.310(6), F.A.C.
- A.25 Exceptions and Approval of Alternate Procedures and Requirements: An Alternate Sampling Procedure (ASP) may be requested from the Bureau of Monitoring and Mobile Sources of the Florida Department of Environmental Protection in accordance with the procedures specified in Rule 62-297.620, F.A.C.

REPORTS AND RECORDS

- A.26 Duration of Record Keeping: Upon request, the permittee shall furnish all records and plans required under DERM and FDEP rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the DERM. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five years from the date of the sample, measurement, report, or application unless otherwise specified by DERM or FDEP rule.
[Rules 62-4.160(14)(a)&(b) and 62-213.440(1)(b)2.b., F.A.C.]
- A.27 Emissions Compliance Stack Test Reports
- (a) A *test report* indicating the results of the required compliance tests shall be filed with the DERM, Air Facilities Section as soon as practical, but no later than 45 days after the last sampling run is completed.
[Rule 62-297.310, F.A.C.]
- (b) The *test report* shall provide sufficient detail on the tested emissions unit and the procedures used to allow the DERM to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed, other than for EPA Method 9 Test, in Rule 62-297.310 (8), F.A.C.
[Rule 62-297.310, F.A.C.]
- A.28 Excess Emissions Report: If excess emissions occur, the owner or operator shall notify the Air Facilities Section of the DERM, within (1) working day (excluding weekends and legal holidays) of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the DERM may request a written summary report of the incident.
[Rules 62-4.130 and 62-210.700(6), F.A.C.]
- A.29 Excess Emissions Report - Malfunctions: In case of excess emissions resulting from malfunctions, each owner or operator shall notify the DERM in accordance with Rule 62-4.130, F.A.C. In addition, a full written report on the malfunctions shall be submitted in a quarterly report.
[Rule 62-210.700(6), F.A.C.]

A.30 Annual Operating Report for Air Pollutant Emitting Facility: Before March 1st of each year, the owner or operator shall submit to the DERM this required report [DEP Form No. 62-210.900(5)], which summarizes operations for the previous calendar year.

[Rule 62-210.370(3), F.A.C.]

A.31 Central File Requirements: This facility shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit. Operators shall keep a daily Operation and Maintenance log to include, at a minimum, the following information:

- The data collected from in-stack monitoring instruments
- The records on daily feed rates and clinker production rate
- The amount and type of fuel burned
- Calibration logs for all instruments
- Maintenance/repair logs for any work performed on equipment or instrument which is subject to this permit;
- The following fuel records shall be maintained for a minimum of five (5) years and made available upon request:
 1. Coal/Petroleum Coke
 - (a) The coal/petroleum coke usage rate in tons per hour on a 24-hour basis;
 - (b) The average sulfur content and heating value (Btu/lb) of each coal shipment based upon supplier analysis or analysis of a sample representative of the shipment (trainload).
 2. Liquid Fuels
 - (a) The fuel type (number) and usage rate in gal per day;
 - (b) Records of the sulfur content and heating value (Btu/gal) of each oil shipment based upon supplier analysis or analysis of a sample representative of the shipment.
 3. Natural Gas
 - (a) The fuel usage rate in MMBtu per day;

All measurements, records, and any other data required to be maintained by Tarmac shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These data shall be made available to the DERM upon request. DERM shall be notified in writing at least 15 days prior to the testing (auditing) of any emission measurement instrument required to be operated by these specific conditions in order to allow witnessing by authorized personnel.

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

Tarmac America, Inc.
Permit Number: 0250020-010-AC

OTHER REQUIREMENTS

A.32 Used Oil and Grease: Used oil and grease burned at this facility shall not be a hazardous waste as defined by 40 CFR Part 261.3 or Rule 62-730.030, F.A.C. It shall not include fuels or blended fuels consisting in whole or in part of hazardous waste or which include mixture of any solid waste generated from the treatment, storage, or disposal of hazardous waste. These fuels shall be burned in compliance with Section 403.769(3), Florida Statutes.

A.33 Other Regulations: The owner or operator shall comply with applicable provisions of Rule 62-710, Used Oil Management and 40 CFR Parts 279, Standards for the Management of Used Oil.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

THIS SECTION ADDRESSES THE FOLLOWING EMISSIONS UNITS

| EMISSIONS UNIT NO. | SYSTEM | EMISSIONS UNITS DESCRIPTION |
|---------------------------|-------------------------------------|--|
| 001 | Coal Handling | Coal Feed Bin, Pet Coke Feed Bin, Coal Mill (Pet Coke- Coal) Handling and Storage (Fugitive) |
| 002 | Clinker Handling and Storage | Clinker Transfer from Burner Building, Clinker Silo, Clinker Transfer and Clinker Bins |
| 003 | Finish Mill | Finish Mill # 3, 4, & 6 |
| 004 | Cement Storage, Packhouse & Loadout | Cement Silos 1-12, Packhouse, Bulk Loadout Units #1-3 |
| 005 | Raw Mill and Pyroprocessing System | Raw Mill, and Pyroprocessing consists of the Preheater/Calciner, Kiln, and Cooler |
| 006 | Raw Material Handling | Limestone/gypsum and additive storage silos and handling |

B.0 Operational Requirements, Emissions Limitations and Performance Standards
Attachment "40 CFR 63, Subpart A" is incorporated by reference.

EMISSIONS UNIT NO. 001 - COAL HANDLING

Operational Requirements

- B.1 Hours of Operation:** This emissions unit may not operate in excess of 7,884 hours per year except baghouses 241.BF01 and 241.BF02 which may not exceed 4,000 hours per year.
 [Requested by permittee in application received November 14, 2000]
- B.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 190,000 TPY. The maximum petroleum coke usage rate shall not exceed 20 TPH on a 24-hour block average.
 [Rule 62-210.200 & 62-4.070(3) F.A.C., established by permittee in application received November 14, 2000]
- B.3 Particulate and Fugitive Emissions:** Particulate and fugitive emissions from coal handling facilities shall be minimized by following the procedures listed below:
- (1) All conveyers and transfer points shall be enclosed or covered to preclude particulate emissions (except those directly associated with coal stacking/reclaiming).
 - (2) Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion.
 - (3) 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.
 [Rule 62-296.320(4)(c), F.A.C.; 62-4.070(3)]

Emissions Limitations and Performance Standards

B.4 Design Specifications and Particulate Matter Emissions Limits: The baghouses for the coal handling system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits listed in the following table:

| System | Baghouse ID Manufacturer Model No. | Grain Loading (gr/dscf) | Flow Rate acfm dscfm | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM Emissions | |
|--|--|-------------------------------|------------------------------|-------------------------------------|--------------------------|--|---------------------------|------------------|
| | | | | | | | (lb/hr) | (TPY) |
| Dump Hopper (Transfer) | 241-BF01 Pending Pending | 0.01 | 2,700 2,700 | Pending | Pending | 0.39 | 0.23 | 0.46 |
| Conveyors (2) (Transfer) & Coal and Petroleum Coke Feed Bins | 241-BF02 Pending Pending | 0.01 | 6,400 6,400 | Pending | Pending | 0.92 | 0.55 | 1.10 |
| Coal Mill | 461-BF01 Pending Pending | 0.01 | 54,500 43,600 | Pending | Pending | 12.37 | 3.74 | 14.73 |
| Coke/Petroleum Coke (Transfer) Surge Bin (Feeder) | 461-BF02 Pending Pending 461-BF03 Pending Pending | 0.01 0.01 | 800 665 800 665 | Pending Pending | Pending Pending | 0.19 0.19 | 0.06 0.06 | 0.22 0.22 |
| Total | | | | | | 14.06 | 4.64 | 16.73 |

Notes:

- All the above equipment except for 241-BF01 are subject to 40 CFR 60, Subpart Y, NSPS for Coal Preparation Plants.
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- Emissions of Particulate Matter from each of the baghouses on the coal handling system shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf). Assume PM-10 = 84% of PM for all baghouses.
 [Requested by Permittee in application received November 14, 2000.]
- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above, except 461-BF01 serving the Coal Mill, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
 [Rule 62-297.620(4), F.A.C.]

B.5 Coal Handling Visible Emissions Limits The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|---|-------------------------|--------------------------------|--------------------------------|
| Dump Hopper (Transfer) | 241.BF01 | 20% | Rule 62-296.320(4)(b)1, F.A.C. |
| Conveyors (2) Coal & Petroleum Coke Feed Bins (shared with conveyors) | 241.BF02 | 20% | 40 CFR 60, Subpart Y |
| Coal Mill Dust Collector | 461.BF01 | 10% ^(*) | 40 CFR 63.1345 |
| Coke/Coal Surge Bins | 461.BF02 | 20% | 40 CFR 60, Subpart Y |
| | 461.BF03 | 20% | 40 CFR 60, Subpart Y- |

Note:

- (*) 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.
 [40 CFR 63.1345]

EMISSIONS UNIT NO. 002 - CLINKER HANDLING & STORAGE SYSTEM

Operational Requirements

B.6 Hours of Operation: This emissions unit may not operate in excess of the following:

| Baghouse ID No. | Hours Per Year |
|-----------------|----------------|
| 441.BF01 | 7,884 |
| 481.BF01 | 7,884 |
| 481.BF02 | 8,760 |
| 481.BF03 | 8,760 |

[Requested by permittee in application received November 14, 2000]

B.7 Clinker Handling & Storage Throughput Limits: The clinker handling and storage maximum hourly and annual throughput rates shall not exceed 320 TPH on a 24-hour block average or 1,942,500 TPY, respectively.

[Requested by Permittee in application Received November 14, 2000]

Emissions Limitations and Performance Standards

B.8 Design Specifications and Particulate Matter Emissions Limits: The baghouses for the clinker handling and storage system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

| System | Baghouse ID Manufacturer Model No. | Grain Loading (gr/dscf) | Flow Rate Acfm Dscfm | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM Emissions | |
|-------------------------------------|--|-------------------------------|----------------------------|-------------------------------------|--------------------------|--|---------------------------|-------|
| | | | | | | | (lb/hr) | (TPY) |
| Clinker Transfer Burner Building | 441.BF01 Pending Pending | 0.01 | 3,000 2,494 | Pending | Pending | 0.71 | 0.21 | 0.84 |
| Clinker Silo | 481.BF01 Pending Pending | 0.01 | 10,000 8,315 | Pending | Pending | 2.36 | 0.71 | 2.81 |
| Clinker Transfer | 481.BF02 Pending Pending | 0.01 | 3,000 2,494 | Pending | Pending | 0.79 | 0.21 | 0.94 |
| Clinker Bins | 481-BF03 Pending Pending | 0.01 | 5,000 4,157 | Pending | Pending | 1.31 | 0.36 | 1.56 |
| Total | | | | | | 5.17 | 1.50 | 6.15 |

Notes:

- All the above equipment are subject to 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry.
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- Grain loading of 0.01 gr/dscf proposed permit limits for all the above baghouses and assume PM-10 = 84% of PM for all baghouses.
 [Requested by Permittee in application Received November 14, 2000]
- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
 [Rule 62-297.620(4), F.A.C.]

B.9 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|----------------------------------|-------------------------|--------------------------------|---------------------------|
| Clinker Transfer Burner Building | 441.BF01 | 10% | 40 CFR 63.1348 |
| Clinker Silo | 481.BF01 | 10% | 40 CFR 63.1348 |
| Clinker Transfer | 481.BF02 | 10% | 40 CFR 63.1348 |
| Clinker Bins | 481.BF03 | 10% | 40 CFR 63.1348 |

EMISSIONS UNIT NO. 003 – FINISH MILLS

Operational Requirements

B.10 Hours of Operation: This emissions unit may operate continuously, i.e., 8,760 hours per year.
 [Requested by permittee in application received November 14, 2000]

B.11 Finish Mill Process Rates: The maximum total hourly process rate of cement is 334.0 TPH on a 24-hour block average. This is a total of the individual process rates listed below:

| Finish Mill | Baghouse | Process Rate (TPH) |
|--------------------|-------------------------------|---------------------------|
| No. 3 | F-313/F-330/F-332 | 84 |
| No. 4 | F-430/F-432/F-603/F-604/F-605 | 140 |
| No. 6 | 531.BF01/531.BF02 | 110 |
| Total | | 334 |

[Established by Permittee in application received November 14, 2000.]

Emissions Limitations and Performance Standards

B.12 Design Specifications and Particulate Matter Emissions Limits: The baghouses for the finish mills have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

| System | Baghouse ID Manufacturer Model No. | Grain Loading (gr/acf) | Flow Rate acfm dscfm | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM Emissions | |
|--|--|------------------------------|-------------------------------|----------------------------------|--------------------------|--|---------------------------|-------|
| | | | | | | | (lb/hr) | (TPY) |
| Finish Mill No. 3 | F-330 Norblo 702 AMT | 0.01 | 20,000 | 9,477 | 2.1 | 6.31 | 1.71 | 7.51 |
| Finish Mill No. 3 | F-332 Norblo 390 AMT | 0.01 | 13,500 | 5,465 | 2.5 | 4.26 | 1.16 | 5.07 |
| Finish Mill No. 3 | F-313 Mikropul 196S-10-20 | 0.01 | 8,000 | 2,300 | 3.5 | 2.52 | 0.69 | 3.00 |
| Finish Mill No. 4 <i>Belt conveyor/ Separator</i> | F-432 Fuller 5 zone #48 | 0.01 | 17,000 | 2,510 | 6.8 | 5.36 | 1.46 | 6.38 |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-605 Mikropul 645-10-30 | 0.01 | 4,000 | 753 | 5.3 | 1.26 | 0.34 | 1.50 |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-603 Mikropul 121S-10-20 | 0.01 | 8,000 | 1,424 | 5.6 | 2.52 | 0.69 | 3.00 |
| Finish Mill No. 4 <i>Ball Mill/Mill Sweep</i> | F-430 Fuller 6 zone #96 | 0.01 | 30,000 | 6,028 | 5.0 | 9.46 | 2.57 | 11.26 |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-604 Mikropul 121S-10-20 | 0.01 | 8,000 | 1,424 | 5.6 | 2.52 | 0.69 | 3.00 |
| Finish Mill No. 6 <i>Main</i> | 531.BF01 Pending Pending | 0.01 (dscf) | 97,300 80,905 | Pending | Pending | 25.51 | 6.93 | 30.37 |
| Finish Mill No. 6 <i>Sweep</i> | 531.BF02 Pending Pending | 0.01 (dscf) | 25,900 21,536 | Pending | Pending | 6.79 | 1.85 | 8.09 |
| Total | | | | | | 66.52 | 18.09 | 79.19 |

Notes:

- Finish Mill Nos. 3 & 6 Emission Limits of 0.01 gr/acf; lb/hr; were requested by Permittee in application received November 14, 2000.
- Initial testing to demonstrate compliance with the PM limits established above, shall be conducted only for units F-330, F-430, 531.BF01, and 531.BF02. All subsequent compliance testing for PM emissions from the emission points in the table above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
 [Rule 62-297.620(4), F.A.C.]

Notes cont'd:

- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
 - Emissions Limits for Finish Mill No. 4 are based on PSD-FL-236 dated July 1, 1998 and Permittee request in application received November 14, 2000.
 - Finish Mill Nos. 3 & 4 are existing systems. Finish Mill No. 6 is a new system.

B.13 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | Baghouse Id. No. | Visible Emissions Limits | Rule Applicability |
|-------------------|-------------------------|---------------------------------|---------------------------|
| Finish Mill No. 3 | F-313 | 10% | 40 CFR 63.1347 |
| | F-330 | | |
| | F-332 | | |
| Finish Mill No. 4 | F-430 | 5% | PSD-FL-236 |
| | F-432 | | |
| | F-603 | | |
| | F-604 | | |
| | F-605 | | |
| Finish Mill No. 6 | 531.BF01 | 10% | 40 CFR 63.1347 |
| | 531.BF02 | | |

EMISSIONS UNIT NO. 004 - CEMENT STORAGE/ PACKHOUSE/ LOADOUT

Operational Requirements

B.14 Hours of Operation: This emissions unit may operate continuously, i.e., 8,760 hours per year, except for the packhouse which shall not exceed 4,000 hours of operation per year.
 [Requested by permittee in application received November 14, 2000.]

B.15 Cement Storage Silos/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 85 TPH on a 24-hour block average.
 [AC 13-21098 dated November 2, 1979]

Emissions Limitations and Performance Standards

B.16 Design Specifications and Particulate Matter Emissions Limits The baghouses for the Cement Storage/Packhouse/Loadout system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the amounts shown in the following table: .

| System | Baghouse ID Manufacturer Model No. | Grain Loading (gr/acf) | Flow Rate Acfm Dscfm | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM Emissions | |
|--|--|------------------------------|----------------------------|-------------------------------------|-----------------------|--|---------------------------|-------|
| | | | | | | | (lb/hr) | (TPY) |
| Cement Silos 1-6 | F-511 Fuller 2 zone #78 | 0.01 | 18,000 | 1,625 | 11.1 | 5.68 | 1.54 | 6.76 |
| Cement Silos 7-9 | F-512 Norblo 156 AMT | 0.01 | 10,000 | 2,142 | 4.7 | 3.15 | 0.86 | 3.75 |
| Cement Silo 10 | F-513 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 1.58 | 0.43 | 1.88 |
| Cement Silo 11 | F-514 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 1.58 | 0.43 | 1.88 |
| Cement Silo 12 | F-515 Mikropul 121S-10-20B | 0.01 | 5,000 | 1,424 | 3.5 | 1.58 | 0.43 | 1.88 |
| Bulk Loadout Unit 1 (Rail/Truck) | B-110 Norblo 120 AMT | 0.01 | 3,000 | 1,650 | 1.8 | 0.95 | 0.26 | 1.13 |
| Bulk Loadout Unit 2 (Truck) | B-210 Norblo 120 AMT | 0.01 | 3,000 | 1,650 | 1.8 | 0.95 | 0.26 | 1.13 |
| Bulk Loadout Unit 3 Line 1 | B-372 Mikropul 36S-8-30-C | 0.01 | 2,000 | 340 | 5.9 | 0.63 | 0.17 | 0.75 |
| Bulk Loadout Unit 3 Line 2 | B-374 Mikropul 36S-8-30-C | 0.01 | 2,000 | 340 | 5.9 | 0.63 | 0.17 | 0.75 |
| Bulk Loadout Unit 3 Line 3 | B-382 Mikropul 121S-10-20-B | 0.01 | 5,000 | 1,424 | 3.5 | 1.58 | 0.43 | 1.88 |
| Packhouse | Pending Pending Pending | 0.01 (dscf) | 23,400 23,400 | Pending | Pending | 3.37 | 2.01 | 4.01 |
| Total | | | | | | 21.68 | 6.99 | 25.80 |

Notes:

- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. [Rule 62-297.620(4), F.A.C.]

Notes cont'd:

- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- Emissions reflect permit limits established in PSD-FL-028 dated March 19, 1980. [PSD-FL-028 dated March 19, 1980 and Requested by Permittee in application Received November 14, 2000]

B.17 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|-------------------------------|-------------------------|--------------------------------|---------------------------|
| Cement Silos 1-6 | F-511 | 10% | 40 CFR 63.1348 |
| Cement Silos 7-9 | F-512 | 5% | PSD-FL-236 |
| Cement Silos 10,11, 12 | F-513 | 5% | AC13-21098 |
| | F-514 | | |
| | F-515 | | |
| Bulk Loadout Unit 1 | B-110 | 10% | PSD-FL-236 |
| Bulk Loadout Unit 2 | B-210 | 10% | PSD-FL-236 |
| Bulk Loadout Unit 3 Line 1 | B-372 | 5% | AC13-21098 |
| Bulk Loadout Unit 3 Line 2 | B-374 | 5% | AC13-21098 |
| Bulk Loadout Unit 3 Line 3 | B-382 | 5% | AC13-21098 |
| Packhouse | Pending | 10% | 40 CFR 63.1348 |

EMISSIONS UNIT NO. 005 - RAW MILL/PYROPROCESSING SYSTEM

Operational Requirements

- B.18 Hours of Operation: This emissions unit may not operate in excess of 7,884 hours per year except for 341.BF01 which may operate 8760 hours per year.
[Requested by permittee in application received November 14, 2000]
- B.19 Raw Mill/Pyroprocessing Unit Production Limits: The maximum production of clinker shall not exceed 250 TPH on a 24-hour block average and 1,642,500 TPY.
[Rule 62-210.200 (228)(PTE), F.A.C.; and Application received November 14, 2000]
- B.20 Operating Limits for In-line kiln/raw mills:
- (a) The owner or operator of a in-line kiln/raw mill subject to a D/F emissions limitation under 40 CFR 63.1343 must operate the in-line kiln/raw mill such that the temperature of the gas at the inlet to the kiln Particulate Matter control device (PMCD) does not exceed the applicable temperature limit specified in the following paragraph.
 - (b) The temperature limit for affected sources meeting the limits above is determined in accordance with the following: the run average temperature must be calculated for each run, and the average of the run average temperature must be determined and included in the performance test report and will determine the applicable temperature limit.
 - (c) The owner or operator of an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must operate the carbon injection system in accordance with paragraphs (c)(1) and (c)(2) of this section.
 - (1) The three-hour rolling average activated carbon injection rate shall be equal to or greater than the activated carbon injection rate determined in accordance with §63.1349(b)(3)(vi).
 - (2) The owner or operator shall either:
 - (i) Maintain the minimum activated carbon injection carrier gas flow rate, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c) of this part, or
 - (ii) Maintain the minimum activated carbon injection carrier gas pressure drop, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c).
 - (d) Except as provided in paragraph (e) of this section, the owner or operator of an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must specify and use the brand and type of activated carbon used during the performance test until a subsequent performance test is conducted, unless the site-specific performance test plan contains documentation of key parameters that affect adsorption and the owner or operator establishes limits based on those parameters, and the limits on these parameters are maintained.
 - (e) The owner or operator of an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique may substitute, at any time, a different brand or type of activated carbon provided that the replacement has equivalent or improved properties compared to the activated carbon specified in the site-specific performance test plan and used in the performance test. The owner or operator must maintain documentation that the substitute activated carbon will provide the same or better level of control as the original activated carbon.
- [40 CFR 63.1344]

B.21 Methods of Operation – Fuels:

| | Allowable Fuels |
|--|---|
| RawMill and Pyroprocessing Unit | 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.* |

Note:

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

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

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

Emissions Limitations and Performance Standards

B.22 Design Specifications and Particulate Matter Emissions Limits: The Particulate Matter emissions from the Raw Mill/Pyroprocessing system are controlled by baghouses with the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

| System | Baghouse ID Manufacturer Model No. | Grain Loading (gr/dscf) | Flow Rate Acfm Dscfm | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM Emissions | |
|--|--|-------------------------------|----------------------------|----------------------------------|-----------------------|--|---------------------------|--------|
| | | | | | | | (lb/hr) | (TPY) |
| Kiln/Cooler/ Raw Mill Main Stack | 331.BF01 Pending Pending | * | 486,000 392,367 | Pending | Pending | 147.00 | 53.10 | 175.00 |
| Dust Bin Kiln Dust | 331.BF02 Pending Pending | 0.01 | 6,800 4,175 | Pending | Pending | 1.18 | 0.36 | 1.41 |
| Blend Silo | 341.BF01 Pending Pending | 0.01 | 6,250 5,189 | Pending | Pending | 1.64 — | 0.44 | 1.95 |
| Raw Meal Preheat Tower | 351.BF01 Pending Pending | 0.01 | 6,200 5,147 | Pending | Pending | 1.46 | 0.44 | 1.74 |
| Raw Meal Preheat Tower | 351.BF02 Pending Pending | 0.01 | 3,000 2,491 | Pending | Pending | 0.71 | 0.21 | 0.84 |
| Raw Meal Preheat Tower | 351-BF03 Pending Pending | 0.01 | 10,400 8,634 | Pending | Pending | 2.45 | 0.74 | 2.92 |
| Total | | | | | | 154.44 | 55.29 | 183.86 |

Notes:

- (*) PM Emissions Limit is 0.125 lbs/ton of kiln feed.
- Grain loading of 0.01 gr/dscf proposed permit limits for all new baghouses except main stack and assume PM-10 = 84% of PM for all baghouses
[Requested by Permittee in application Received November 14, 2000]
- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above, except 331.BF01 which exhausts to the main/common stack, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
[Rule 62-297.620(4), F.A.C.]
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- All the above units are subject to 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry.

B.23 SO₂, NO_x, CO, VOC, and SAM Emission Limits: The emissions from the Raw Mill/Pyroprocessing system shall not exceed the limits shown in the following table:

| Pollutant | Allowable Emissions | | Emissions Limits in lbs./ton of clinker | | Monitors |
|-----------------|---------------------------------|-----------------------|---|--|----------|
| | 12-month rolling average in TPY | Lbs./hr 24-hr average | 24 hr avg. @208 TPH of clinker production (5) | 24-hr average @250 TPH of clinker production | |
| SO ₂ | 806 | 320 | 1.54 | 1.28 | CEM |
| NO _x | 1953 | 720 | 3.46 | 2.88 | CEM |
| CO | 1457 | 576 | 2.76 | 2.30 | Process |
| VOC | 155 | 40 | 0.19 | 0.16 | CEM |
| SAM | 8.68 | 2.24 | 0.009 | 0.009 | - |

Notes:

- The 12-month rolling average in TPY would be the average of the daily values for the current month and the preceding 11 months. The averages shall be based on the operating days or hours, and shall exclude days or hours in which the plant is not operating.
- The averaging time for CO corresponds to the required length of sampling for the initial and subsequent emission tests.

[Rules 62-4.070(3) and 62-212.400, F.A.C.]

B.24 PM/PM-10 and Dioxins/Furans Emissions:

| Pollutant | Allowable Emissions | | Emissions | | |
|--------------------|---------------------|---------|-----------|---------------------------|----------------|
| | TPY | lbs./hr | Limit | Unit | Averaging Time |
| PM | 175 | 53.1 | 0.125 | lbs./ton of dry kiln feed | 3 hours |
| PM ₁₀ | 147 | 42.0 | 0.105 | lbs./ton of dry kiln feed | 3 hours |
| Dioxins/ Furans | | | 0.40 | ng TEQ/dscm | 3 hours |

Notes:

- The averaging times for PM and PM10 correspond to the required length of sampling for the initial and subsequent emissions tests:

[Rules 62-4.070(3) and 62-212.400, F.A.C.]

B.25 Sulfur Dioxide Emissions: Emissions of SO₂ shall not exceed 1.2 lb/MMBtu heat input when solid fuel is fired, or 0.8 lb/MMBtu heat input when liquid fuel is fired, based on a 24 hour average.

[Miami-Dade County Code, Section 24-17(2)(a)]

B.26 Mercury and Lead into the Pyroprocessing System Limited: The baseline potential emissions for mercury and lead, as stated in the Application received June 30, 1998, are 30 lbs/year and 94 lbs/year, respectively. An increase in mercury and lead emissions of 200 and 1,200 pounds, respectively, above the previously stated baseline emissions per consecutive 12-month period shall subject this facility to Prevention of Significant Deterioration (PSD) Review.
 [Rules 62-4.070(3) and 62-212.400, F.A.C.]

B.27 Pursuant to 40 CFR 63.1343 Standards for Kilns and In-line Kiln/raw Mills

- (a) *General:* The provisions in this section apply to each in-line kiln/raw mill.
- (c) No owner or operator of an inline kiln/raw mill shall cause to be discharged into the atmosphere from these affected sources any gases which:
- (1) Contain particulate matter in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln.
 - (2) Exhibit opacity greater than 20 percent.
 - (3) Contain D/F in excess of:
 - (i) 0.20 ng per dscm (8.7×10^{-11} gr per dscf)(TEQ) corrected to seven percent oxygen; or
 - (ii) 0.40 ng per dscm (1.7×10^{-10} gr per dscf)(TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204° C (400° F) or less.

[40 CFR 63.1343]

B.28 Engineering Design Capacities For The Raw Mill And Pyroprocessing Unit:

| Sources | Maximum Capacity (MMBtu/hr) |
|---------------------|-----------------------------|
| Raw Mill Heat Input | 105 |
| Calciner Heat Input | 385 |
| Kiln Heat Input | 290 |
| Total Heat Input | 675 |

[Application received November 14, 2000]

B.29 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| Emissions Point | Baghouse Id. No. | Visible Emissions Limit | Permit/Rule Applicability |
|---|------------------|-------------------------|---------------------------|
| Main Dust Collector exhausts to Main/Common Stack | 331.BF01 | 10%* | 40 CFR 63.1342 |
| Cement Kiln Dust Bin | 331.BF02 | 10% | 40 CFR 63.1348 |
| Blending & Storage System | 341.BF01 | 10% | 40 CFR 63.1348 |
| | 351.BF01 | 10% | 40 CFR 63.1348 |
| | 351.BF02 | 10% | 40 CFR 63.1348 |
| | 351.BF03 | 10% | 40 CFR 63.1348 |

Note:

- (*) 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.
 [40 CFR 63.1345]

EMISSIONS UNIT NO. 006 - RAW MATERIAL HANDLING

Operational Requirements

B.30 Hours of Operation: This emissions unit may not operate in excess of 7,884 hours per year, except for baghouse 232.BF01 for the lime/gypsum silos (existing silos) which shall not exceed 4,000 hours of operation per year.
 [Requested by permittee in application received November 14, 2000]

B.31 Raw Material Handling System Throughput Specification: The maximum dry throughput rate is shown in the following table:

| Source Description | Throughput Maximum (TPY) |
|------------------------------|--------------------------|
| Raw Material Handling System | 3,260,000 (dry) |

Emissions Limitations and Performance Standards

B.32 Design Specifications and Particulate Matter Emissions Limits: The Particulate Matter emissions from the Raw Material Handling system are controlled by baghouses with the following or equivalent design specifications:

| System | Baghouse ID Manufacturer Model No. | Grain Loading (gr/dscf) | Flow Rate Acfm Dscfm | Cloth Area (ft ²) | Air to Cloth Ratio | Potential PM-10 Emissions (TPY) | Potential PM Emissions | |
|-------------------|--|-------------------------------|----------------------------|-------------------------------------|-----------------------|--|---------------------------|--------------|
| | | | | | | | (lb/hr) | (TPY) |
| Lime/Gyp Silos | 232.BF01 Pending Pending | 0.01 | 5,170 5,170 | Pending | Pending | 0.74 | 0.44 | 0.89 |
| Additives | 311.BF01 Pending Pending | 0.01 | 11,000 11,000 | Pending | Pending | 3.12 | 0.94 | 3.72 |
| Additives | 311.BF02 Pending Pending | 0.01 | 6,050 4,840 | Pending | Pending | 1.37 | 0.41 | 1.64 |
| Additives | 311.BF03 Pending Pending | 0.01 | 10,000 10,000 | Pending | Pending | 2.84 | 0.86 | 3.38 |
| Additives | 311.BF04 Pending Pending | 0.01 | 10,000 10,000 | Pending | Pending | 2.84 | 0.86 | 3.38 |
| Total | | | | | | 10.91 | 3.51 | 13.01 |

Notes:

- Grain loading of 0.01 gr/dscf proposed permit limits for all baghouses listed above and assume PM-10 = 84% of PM.
 [Requested by Permittee in application Received November 14, 2000]
- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
 [Rule 62-297.620(4), F.A.C.]
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.

B.33 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

| | Baghouse Id. No. | Visible Emissions Limit | Rule Applicability |
|-------------------|------------------|----------------------------|-----------------------|
| Lime/Gyp Silos | 232.BF01 | 10% | 40 CFR 63.1348 |
| Additives | 311.BF01 | | |
| Additives | 311.BF02 | | |
| Additives | 311.BF03 | | |
| Additives | 311.BF04 | | |

Tarmac America, Inc.
Permit Number: 0250020-010-AC

C.0 Emissions Unit Specific Testing, Monitoring, Notification, Recordkeeping, and Reporting Requirements

C.1 Test Methods and Procedures: The permittee shall conduct testing/monitoring on all emissions units as indicated below:

| System | Unit ID | Pollutant | BPA Test Method | Frequency |
|--|----------------------|---------------|-----------------|---------------------------------------|
| EU 001 Coal Handling | | | | |
| Coal Main – exhausts to main stack | 461.BF01 | PM Opacity | 5 | Initial & Annual Initial & 5 years |
| | | | 9 | |
| Dump Hopper (Transfer) | 241.BF01 | PM Opacity | 5 | Initial & Annual Initial & Annual |
| Conveyors (2) (Transfer) & Coal and Petroleum Coke Feed Bins | 241.BF02 | | 9 | |
| Coke/Petroleum Coke (Transfer) Surge Bin (Feeder) | 461.BF02 461.BF03 | | | |
| EU 002 Clinker Handling & Storage | | | | |
| Clinker Transfer Burner Building | 441.BF01 | PM Opacity | 5 | Initial & Annual Initial & 5 years |
| Clinker Silo | 481.BF01 | | 9 | |
| Clinker Transfer | 481.BF02 | | | |
| Clinker Bins | 481.BF03 | | | |
| EU 003 Finish Mills | | | | |
| Finish Mill No. 3 | F-330 | PM Opacity | 5 | Initial & Annual Initial & 5 years |
| | F-332 | | 9 | |
| | F-313 | | | |
| Finish Mill No. 4 <i>Belt conveyor/ Separator</i> | F-432 | | | |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-605 | | | |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-603 | | | |
| Finish Mill No. 4 <i>Ball Mill/Mill Sweep</i> | F-430 | | | |
| Finish Mill No. 4 <i>Clinker/Gypsum Conveyor</i> | F-604 | | | |
| Finish Mill No. 6 <i>Main</i> | 531.BF01 | PM Opacity | 5 | Initial & Annual Initial & Annual |
| | | | 9 | |
| Finish Mill No. 6 <i>Sweep</i> | 531.BF02 | | | |
| EU 004 Cement Storage, Packhouse, & Loadout | | | | |
| Cement Silos 1-6 | F-511 | PM Opacity | 5 | Initial & Annual Initial & 5 years |
| Cement Silos 7-9 | F-512 | | 9 | |
| Cement Silo 10 | F-513 | | | |
| Cement Silo 11 | F-514 | | | |
| Cement Silo 12 | F-515 | | | |
| Bulk Loadout Unit 1 (Rail/Truck) | B-110 | | | |

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|--|----------|---------------|------------|---------------------------------------|
| Bulk Loadout Unit 2 (Truck) | B-210 | PM Opacity | 5 | Initial & Annual Initial & 5 years |
| Bulk Loadout Unit 3 Line 1 | B-372 | | 9 | |
| Bulk Loadout Unit 3 Line 2 | B-374 | | | |
| Bulk Loadout Unit 3 Line 3 | B-382 | | | |
| Packhouse | Pending | | | |
| EU 005 Raw Mill and Pyroprocessing System | | | | |
| Kiln/Cooler/Raw Mill <i>Main/Common Stack</i> | 331.BF01 | PM | 5 | Initial & Annual |
| | | PM10 | 5 | Initial & Annual |
| | | Opacity | 9 | Initial & 5 years |
| | | SO2 | 6 | Initial & 5 years |
| | | NOx | 7 or 7E | Initial & 5 years |
| | | CO | 10 | Initial & 5 years |
| | | VOC | 25 or 25A | Initial & 5 years |
| | | SAM | 5 & 8 | Initial & 5 years |
| | | Dioxins/Fuans | 23 | Initial & 30 months |
| | | Lead/Mercury | 29 or 101A | Initial & Annual |
| Dust Bin Kiln Dust | 331.BF02 | PM | 5 | Initial & Annual |
| | | Opacity | 9 | Initial & 5 years |
| Blend Silo | 341.BF01 | | | |
| Raw Meal Preheat Tower | 351.BF01 | | | |
| Raw Meal Preheat Tower | 351.BF02 | | | |
| Raw Meal Preheat Tower | 351.BF03 | | | |
| EU 006 Raw Material Handling | | | | |
| Lime/Gyp Silos | 232.BF01 | PM | 5 | Initial & Annual |
| Additives | 311.BF01 | Opacity | 9 | Initial & 5 years |
| Additives | 311.BF02 | | | |
| Additives | 311.BF03 | | | |
| Additives | 311.BF04 | | | |

Notes:

- In the event that initial testing for mercury and lead result in potential annual emissions below 130 and 694 pounds, respectively, the DERM may waive the annual testing and require testing once every 5 years. Should subsequent test results indicate levels greater than those mentioned above, the facility shall revert to an annual testing schedule.
- Initial and subsequent compliance testing requirements for PM emissions, except those listed below, are waived and an alternative standard of 5% opacity is imposed. If the DERM has reason to believe that the particulate weight emissions standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.

The following emissions units require initial testing for PM emissions:

331.BF01, F-330, F-430, 531.BF01, 531.BF02

C.2 Lead/Mercury Testing: Initial and Annual tests of emissions shall be conducted for mercury and lead using either Method 29 or Method 101A. In the event that initial testing for mercury and lead result in potential annual emissions below 130 and 694 pounds, respectively, the DERM may waive the subsequent annual testing requirements.

[Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

C.3 Initial and Subsequent Performance Testing:

(a) The owner or operator of an affected emissions unit subject to 40 CFR 63, Subpart LLL, shall demonstrate initial compliance with the emissions limits of 40 CFR 63.1343, 40 CFR 63.1345, 40 CFR 63.1346, 40 CFR 63.1347 and 40 CFR 63.1348 using the test methods and procedures in paragraph 40 CFR 63.1349(b) (see Specific condition C.1 and 40 CFR 63.7). Performance test results shall be documented in complete test reports that contain the information required by paragraphs 40 CFR 63.1349(a)(1) through (a)(10), as described below, as well as all other relevant information. The plan to be followed during testing shall be made available to the DERM prior to testing, if requested.

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

(b) Performance tests to demonstrate initial compliance with 40 CFR 63, Subpart LLL, shall be conducted as specified as follows: [40 CFR 63.1349(b)(1) through (b)(3)].

- (1) The owner or operator of a in-line kiln/raw mill subject to limitations on Particulate Matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs 40 CFR 63.1349(b)(1)(i) through (b)(1)(iii). The owner or operator of a clinker cooler subject to limitations on Particulate Matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs (b)(1)(i) through (b)(1)(iii). The opacity exhibited during the period of the Method 5 of Appendix A, 40 CFR Part 60 performance tests required by paragraph (b)(1)(i) shall be determined as required in paragraph (b)(1)(v).
- (i) EPA Method 5 of Appendix A, 40 CFR Part 60, shall be used to determine PM emissions. Each performance test shall consist of three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition C.5). Each run shall be conducted for at least one hour, and the minimum sample volume shall be 0.85 dscm (30 dscf). The average of the three runs shall be used to determine compliance. A determination of the Particulate Matter collected in the impingers ("back half") of the Method 5 particulate sampling train is not required to demonstrate initial compliance with the PM standards of 40 CFR 63, Subpart LLL. However this shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.
- (ii) Suitable methods shall be used to determine the kiln feed rate, except for fuels, for each run.
- (iii) The emissions rate, E, of PM shall be computed for each run using Equation 1:

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

(Equation 1)

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

c_s = concentration of PM, kg/dscm (g/dscf).

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

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

- (v) Except as provided in paragraph 40 CFR 63.1349(b)(1)(vi) the opacity exhibited during the period of the Method 5 performance tests required by paragraph 40 CFR 63.1349(b)(1)(i) shall be determined through the use of a continuous opacity monitor (COM). The maximum six-minute average opacity during the three Method 5 test runs shall be determined during each Method 5 test run, and used to demonstrate initial compliance with the applicable opacity limits of 40 CFR 63.1343(b)(2) or 40 CFR 63.1345(a)(2).
- (2) The owner or operator of any affected source subject to limitations on opacity under 40 CFR 63, Subpart LLL, that is not subject to (b)(1) of this section shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of Appendix A, 40 CFR Part 60. The performance test shall be conducted under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition C.5). The maximum six-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3-hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1-hour if the conditions of paragraphs (b)(2)(i) through (ii) of the section apply:
 - (i) There are no individual readings greater than 10 percent opacity;
 - (ii) There are no more than three readings of 10 percent for the first 1-hour period.
(See Specific Condition C.4).
- (3) The owner or operator of an affected source subject to limitations on D/F emissions shall demonstrate initial compliance with the D/F emissions limit by conducting a performance test using Method 23 of Appendix A, 40 CFR Part 60.
 - (i) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition C.4 and C.5). The duration of each run shall be at least three hours and the sample volume for each run shall be at least 2.5 dscm (90 dscf). The concentration shall be determined for each run and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.
 - (ii) The temperature at the inlet to the PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.
 - (iii) One-minute average temperatures must be calculated for each minute of each run of the test.
 - (iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with Specific Condition C.13.
- (c) Except as provided in paragraph 40 CFR 63.1349(e), performance tests required under paragraphs 40 CFR 63.1349(b)(1) and (b)(2) shall be repeated annually.
- (d) Performance tests required under paragraph 40 CFR 63.1349(b)(3) shall be repeated every 30 months.
- (e) The owner or operator is required to repeat the performance tests for in-line kiln/raw mills as specified in paragraphs 40 CFR 63.1349(b)(1) and (b)(3) within 90 days of initiating any significant change in the feed or fuel from that used in the previous performance test.
[Rules 62-204.800 and 62-297.310(7)(a)4., F.A.C.; and, 40 CFR 63.1349(a); (b)(1)(i), (ii), (iii) & (v); (b)(2); (b)(3)(i), (ii), (iii) & (iv); (c); (d); and, (e)]

C.4 Required Number of Test Runs: For mass emissions limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emissions rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emissions rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emissions rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emissions limiting standards.

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

C.5 Operating Rate During Testing: Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

Emissions testing shall be performed at the kiln/cooler main stack during a period when the kiln precalciner, cooler, raw mill and preheater are operating simultaneously and under normal operating conditions. EPA-reference methods for sampling pollutants shall be as specified in 40 CFR 63, Appendix A. These emissions units shall comply with all applicable requirements of Rule 62-297.310, F.A.C. General Test Requirements and 40 CFR 63.1349, Performance Tests.

The permittee shall provide the DERM with a *protocol* that will outline the different fuel scenarios (% of total heat input) that this unit will be burning. Tarmac shall obtain the test data necessary to determine whether this kiln is capable of accommodating the burning of coal or petroleum coke and all of the other supplemental fuels specified on Specific Condition B.21 Methods of Operation - Fuels. The fuel scenarios tested shall represent the actual combustion percentage (% of total heat input) that is going to be maintained while burning supplemental fuels during normal operation. The frequency of testing shall be determined by the DERM.

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

C.6 Calculation of Emissions Rate: The indicated emissions rate or concentration shall be the arithmetic average of the emissions rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

C.7 Applicable Test Procedures:

(a) Required Sampling Time:

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of Particulate Matter, and thirty (30) minutes for emissions units which have potential emissions

less than 100 tons per year of Particulate Matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

- c. The minimum observation period for opacity tests conducted by employees or agents of the DERM to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume: Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range: For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment: Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached).
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

C.8 Required Stack Sampling Facilities: When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

C.9 Frequency of Compliance Tests: The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing:

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

believe that any applicable emissions standard contained in a DERM rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the DERM.

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

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

- C.10 Fuel Analysis for On-specification Used Oil: Fuel analysis shall be in accordance with 40 CFR 266.43(b)(1) & (6). A sample shall be taken from the outlet of the blend tank on the first working day (i.e., Monday - Friday; exceptions: holidays) of each month, if any used oil was placed in the blend tank the previous month; or, the sample can be taken directly from the used oil mobile collection tank after final collection and prior to the time of initial transfer; but, that sampling frequency shall be no less than quarterly and the sampling methodology shall have been established with the DERM, Miami-Miami-Dade County prior to sampling. Upon taking a sample, the sample shall be analyzed for the following constituent/property and associated unit and using the following test methods (or their latest version):

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

Note:

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

Monitoring of Operations

C.11 Determination of Process Variables:

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

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

- C.12 Production Rate Recording: The owner or operator shall record the daily production and the preheater-kiln system feed rate. The permittee may establish a relationship between material feed rates and production rates of clinker if material feed rates are measured more accurately than clinker production rates and the relationship is accurate within 10%.

[Rule 62-204.800(7)(b)9., F.A.C.]

C.13 Maintenance Plans:

- (a) The owner or operator of each Portland cement plant shall prepare for each affected emissions unit subject to the provisions of 40 CFR 63, Subpart LLL, a written operations and maintenance plan. The plan shall be submitted to the DERM for review and approval as part of the application for a 40 CFR Part 70 permit and shall include the following information:
 - (1) Procedures for proper operation and maintenance of the affected emissions unit and air pollution control devices in order to meet the emissions limits and operating limits of 40 CFR 63.1343 through 40 CFR 63.1348;
 - (2) Corrective actions to be taken when required by paragraph 40 CFR 63.1350(e);
 - (3) Procedures to be used during an inspection of the components of the combustion system of each in-line kiln/raw mill located at the facility at least once per year; and
 - (4) Procedures to be used to periodically monitor existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system; and each existing raw material dryer. Emissions from these units shall not exceed the 10 percent opacity standard pursuant to 40 CFR 63.1348. Such procedures must include the provisions of paragraphs 40 CFR 63.1350(a)(4)(i) through (a)(4)(iv).
 - (i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected emissions unit in accordance with Method 22 of Appendix A, 40 CFR Part 60. The test must be conducted while the affected emissions unit is in operation.
 - (ii) If no visible emissions are observed in six consecutive monthly tests for any affected emissions unit, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected emissions unit. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected emissions unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
 - (iii) If no visible emissions are observed during the semi-annual test for any affected emissions unit, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected emissions unit. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected emissions unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

- (iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of Appendix A, 40 CFR Part 60. The Method 9 test must begin within one hour of any observation of visible emissions.
- (b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with paragraph 40 CFR 63.1350(a) shall be a violation of the standard.
- (c) The owner or operator of a in-line kiln/raw mill shall monitor opacity at each point where emissions are vented from these affected sources in accordance with paragraphs 40 CFR 63.1350(c)(1) and (c)(3).
 - (1) The owner or operator shall install, calibrate, maintain, and continuously operate a continuous opacity monitor (COM) located at the outlet of the PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by Subpart A, general provisions of this 40 CFR Part 63, and according to PS-1 of Appendix B, 40 CFR Part 60.
 - (2) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 20 percent. If the average opacity for any 6-minute block period exceeds 20 percent, this shall constitute a violation of the standard.
- (d) The owner or operator of a clinker cooler shall monitor opacity at each point where emissions are vented from the clinker cooler in accordance with paragraphs 40 CFR 63.1350(d)(1) and (d)(3).
 - (1) The owner or operator shall install, calibrate, maintain, and continuously operate a COM located at the outlet of the clinker cooler PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by Subpart A, general provisions of 40 CFR Part 63, and according to PS-1 of Appendix B, 40 CFR Part 60.
 - (2) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard.
- (f) The owner or operator of an affected source subject to a limitation on D/F emissions shall monitor D/F emissions in accordance with paragraphs 40 CFR 63.1350(f)(1) through (f)(6).
 - (1) The owner or operator shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln at the inlet to, or upstream of, the kiln PM control devices.
 - (i) The recorder response range must include zero and 1.5 times either of the average temperatures established according to the requirements in 40 CFR 63.1349(b)(3)(iv).
 - (ii) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the DERM.
 - (2) The owner or operator shall monitor and continuously record the temperature of the exhaust gases from the kiln at the inlet to the kiln PMCD.
 - (3) The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.
 - (4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.
 - (5) When the operating status of the raw mill of the in line kiln/raw mill is changed from off to on, or from on to off the calculation of the three hour rolling average temperature must begin anew, without considering previous recordings.
 - (6) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.

(g) The owner or operator of any in-line kiln/raw mill subject to a D/F emissions limit under this subpart shall conduct an inspection of the components of the combustion system of each kiln at least once per year.

(h) The owner or operator of an affected source subject to a Particulate Matter standard under 40 CFR 63.1343 shall install, calibrate, maintain and operate a Particulate Matter continuous emissions monitoring system (PM CEMS) to measure the Particulate Matter discharged to the atmosphere. The compliance deadline for installing the PM CEMS and all requirements relating to performance of the PM CEMS and implementation of the PM CEMS requirement is deferred pending further rulemaking.

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

C.14 Raw Mill and Finish Mill Monitoring: 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 (PM control devices) of these affected sources, in accordance with the procedures of Method 22 of Appendix A, 40 CFR Part 60. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the owner or operator must:

(1) Initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan developed in accordance with paragraphs 40 CFR 63.1350(a)(1) and (a)(2); and

(2) Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed in accordance with Method 9 of Appendix A, 40 CFR Part 60. The duration of the Method 9 test shall be thirty minutes.

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

C.15 Continuous Opacity Monitor (COM): The owner or operator of an affected source subject to a limitation on opacity under 40 CFR 63.1348 shall monitor opacity in accordance with the operation and maintenance plan developed pursuant to paragraph 40 CFR 63.1350(a).

[Rule 62-206.800, F.A.C.; and, 40 CFR 63.1350(j)]

C.16 CO/O₂ Process Monitors: Continuous process monitors shall be installed for CO or O₂ to insure proper combustion practices and for use in determining plant operating parameters to optimize emissions of CO, NO_x, and SO₂.

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

C.17 NO_x, SO₂ & VOC Continuous Emissions Monitor System (CEMS): CEMS shall be installed, calibrated, maintained, operated, and used to determine compliance with the emissions limits for NO_x, SO₂ and VOCs. CEMS shall be installed and certified, before the initial performance test, and operated in compliance with 40 CFR 63 Subpart A General Provisions.

[Rules 62-4.070 (3) and 62-204.800, F.A.C.]

C.18 CMS Requirements:

Each CEMS shall calculate and record emissions rates in units of pounds of NO_x, SO₂, and VOCs per hour. The averaging time for each CEMS shall be a 24-hour block average for the lb/hour short-term emissions limits. Every day, the 24-hour average NO_x, SO₂ and VOC emissions rates for the previous day shall be calculated. Emissions shall be calculated in units of pounds per hour and pounds per ton of clinker. Daily averages are to be calculated as the arithmetic mean of each monitored operating hour. A monitored operating hour is each hour in which fuel is fired in the unit and at least two

emissions measurements are recorded at least 15 minutes apart. Data taken during periods of startup, or when fuel is not fired to the unit, or when the CEMS is not calibrated shall be excluded from the daily average. To the extent the monitoring system is available to record emissions data, the CEMS shall be operated and shall record data at all operating hours when fuel is fired in the unit, including periods of startup, shutdown, load change, continuous operation and malfunction.

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

- C.19 CMS Certification: The monitoring device shall meet the applicable requirements of 40 CFR 63, Appendix A General Provisions including certification of each device in accordance with Performance Specifications in 40 CFR 63.8 and Notification Requirements in 40 CFR 63.9. 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 a any CMS.

[40 CFR 63 Subpart A, General Provisions, Rule 62-4.070 (3) F.A.C., Rule 62-204.800 F.A.C.]

Notification, Recordkeeping and Reporting Requirements

C.20 On-specification Used Oil:

- (a) The results of each sample analysis shall be submitted to the DERM within 30-days after the sample is taken.
- (b) The dates and quantities of both on-specification used oil and purchased fuel oil transferred to the 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 ending quarter.

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

C.21 Notification requirements:

- (a) The notification provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a notice that contains all of the information required in a notification listed in 40 CFR 63.1353, the owner or operator may send the DERM a copy of the notice sent to the State to satisfy the requirements of 40 CFR 63.1353 for that notification.
- (b) Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9 as follows:
 - (1) Initial notifications as required by 40 CFR 63.9(b) through (d). For the purposes of 40 CFR 63, Subpart LLL, a Title V or 40 CFR Part 70 permit application may be used in lieu of the initial notification required under 40 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under 40 CFR Part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.
 - (2) Notification of performance tests, as required by 40 CFR 63.7 and 63.9(e).
 - (3) Notification of opacity and visible emissions observations required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 63.9(f).
 - (4) Notification, as required by 40 CFR 63.9(g), of the date that the continuous emissions monitor performance evaluation required by 40 CFR 63.8(e) of this part is scheduled to begin.
 - (5) Notification of compliance status, as required by 40 CFR 63.9(h).

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1353]

C.22 Used Oil Usage Records: In order to document compliance with the used oil limitations, the following requirements shall be adhered to as a minimum:

- (1) Recordkeeping when burning used oil shall be 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.
- (2) 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
- (3) 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.
 - 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.
 - The dates and quantities of both on and off-spec purchased used oil transferred to the facility storage tank shall be reported quarterly (i.e., Jan-Mar, April-June, July-Sept, and Oct-Dec). The report is due in the month following the ending quarter.
 - The unused portion of the used oil sample shall be retained for six months following the submittal of the analyses in case further testing is required.

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

C.23 Reporting requirements:

- (a) The reporting provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a report that contains all of the information required in a report listed in 40 CFR 63.1354, the owner or operator may send the DERM a copy of the report sent to the State to satisfy the requirements of 40 CFR 63.1354 for that report.
- (b) The owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of 40 CFR Part 63, Subpart A, as follows:
 - (1) As required by 40 CFR 63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.
 - (2) As required by 40 CFR 63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by 40 CFR 63.1349.
 - (3) As required by 40 CFR 63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance

under 40 CFR 63.6(i) shall submit such reports by the dates specified in the written extension of compliance.

- (4) As required by 40 CFR 63.10(d)(5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and
- (5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
- (6) As required by 40 CFR 63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by 40 CFR 63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.
- (7) As required by 40 CFR 63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under 40 CFR 63.7 and described in 40 CFR 63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under 40 CFR 63.8(e).
- (8) As required by 40 CFR 63.10(e)(3), the owner or operator of an affected source equipped with a continuous monitoring system shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emissions limitation or operating parameter limit.
- (9) The owner or operator shall submit a summary report **semiannually** which contains the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:
 - (i) All exceedances of maximum control device inlet gas temperature limits specified in 40 CFR 63.1344(a) and (b);
 - (ii) All failures to calibrate thermocouples and other temperature sensors as required under 40 CFR 63.1350(f)(7) of 40 CFR 63, Subpart LLL; and
 - (iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under 40 CFR 63.1344(c).
 - (iv) The results of any combustion system component inspections conducted within the reporting period as required under 40 CFR 63.1350(i).
 - (v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a).
- (10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

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

C.24 Record keeping requirements:

- (a) The owner or operator shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.
- (b) The owner or operator shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3); and
 - (1) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9;
 - (2) All records of applicability determination, including supporting analyses; and
 - (3) If the owner or operator has been granted a waiver under 40 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements.

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

C.25 Test Reports:

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the DERM on the results of each such test.
- (b) The required test report shall be filed with the DERM as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the DERM to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emissions limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.

14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emissions rate.
20. The applicable emissions standard, and the resulting maximum allowable emissions rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the DERM or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

Miscellaneous

C.26 Delegation of Authority:

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

Executed in Miami-Dade County, Florida.

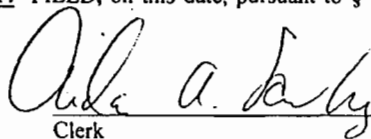
DEPARTMENT OF ENVIRONMENTAL
RESOURCES MANAGEMENT

 5/1/2001
H. Patrick Wong, Chief Date
Air Quality Management Division

PW/mg

Copy: Isidore Goldman, P.E., Florida Department of Environmental Protection, West Palm Beach
Stephanie S. Brooks, PE, Brooks & Associates Inc., 5068 NW 85 Road, Coral Springs, FL 33067

FILING AND ACKNOWLEDGMENT: FILED, on this date, pursuant to § 120.52(7), F.S., with the designated DERM Clerk, receipt of which is hereby acknowledged.

 5/1/2007
Clerk Date

Attachment A

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes (F.S.). The permittee is placed on notice that the DERM will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the DERM.
3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other DERM permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and the DERM rules, unless specifically authorized by an order from the DERM.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by the DERM rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by the DERM rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized DERM personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under the conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or the DERM rules. Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in the permit, the permittee shall immediately notify and provide the DERM with the following information:
 - (a) A description of and cause of noncompliance; and

Attachment A

GENERAL CONDITIONS CONTINUED:

- (b) The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the DERM for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the DERM, may be used by the DERM as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or the DERM rules, except where such use is prescribed by **Sections 403.111 and 403.73, F.S.** Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in the DERM rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or the DERM rules.
11. This permit is transferable only upon the DERM approval in accordance with **Rule 62-4.120 and 62-30.300, Florida Administrative Code (F.A.C.)**, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the DERM.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. The permittee shall comply with the following :
- (a) Upon request, the permittee shall furnish all records and plans required under the DERM rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the DERM.
 - (b) The permittee shall hold at the facility or other location designated by this permit, records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by the DERM rule.
 - (c) Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.
14. When requested by the DERM, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the DERM, such facts or information shall be submitted or corrected promptly.

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches. —

2. The ports shall be capable of being sealed when not in use.

3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.

4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.

5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.

2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.

3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.

4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)
(continued)

1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f) Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g) Sampling Equipment Support.

1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

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

FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant (Circle One): SO₂ NO_x TRS H₂S CO Opacity

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period ¹: _____

| Emission data summary ¹ | CMS performance summary ¹ |
|--|--|
| 1. Duration of excess emissions in reporting period due to: | 1. CMS downtime in reporting period due to: |
| a. Startup/shutdown | a. Monitor equipment malfunctions |
| b. Control equipment problems | b. Non-Monitor equipment malfunctions |
| c. Process problems | c. Quality assurance calibration |
| d. Other known causes | d. Other known causes |
| e. Unknown causes | e. Unknown causes |
| 2. Total duration of excess emissions | 2. Total CMS Downtime |
| 3. Total duration of excess emissions x (100) / [Total source operating time] % ² | 3. [Total CMS Downtime] x (100) / [Total source operating time] % ² |

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

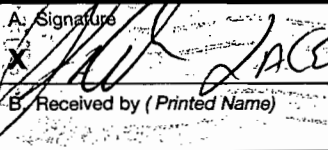
Signature: _____ Date: _____

Title: _____

TABLE 297.310-1 CALIBRATION SCHEDULE
(version dated 10/07/96)

[Note: This table is referenced in Rule 62-297.310, F.A.C.]

| ITEM | MINIMUM CALIBRATION FREQUENCY | REFERENCE INSTRUMENT | TOLERANCE |
|---------------------------------|--|---|--|
| Liquid in glass thermometer | Annually | ASTM Hg in glass ref. thermometer or equivalent, or thermometric points | +/-2% |
| Bimetallic thermometer | Quarterly | Calib. liq. in glass thermometer | 5 degrees F |
| Thermocouple | Annually | ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer | 5 degrees F |
| Barometer | Monthly | Hg barometer or NOAA station | +/-1% scale |
| Pitot Tube | When required or when damaged | By construction or measurements in wind tunnel D greater than 16" and standard pitot tube | See EPA Method 2, Fig. 2-2 & 2-3 |
| Probe Nozzles | Before each test or when nicked, dented, or corroded | Micrometer | +/-0.001" mean of at least three readings Max. deviation between readings .004" |
| Dry Gas Meter and Orifice Meter | 1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually 3. Check after each test series | Spirometer or calibrated wet test or dry gas test meter | 2% |
| | | Comparison check | 5% |

| SECTION | COMPLETE THIS SECTION ON DELIVERY |
|--|---|
| <p>Items 1, 2, and 3. Also complete PM Restricted Delivery is desired. your name and address on the reverse that we can return the card to you. Attach this card to the back of the mailpiece, or on the front, if space permits.</p> | <p>A. Signature  <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) _____</p> <p>C. Date of Delivery _____</p> |
| <p>Article Addressed to:</p> <p>Mr. Hardy Johnson, President Florida Division Tarmac America, LLC 455 Fairway Drive Deerfield Beach, Florida 33441</p> | <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p> |
| <p>2. Article Number (Transfer from service label) 7001 0320 0001 3692 2138</p> | |
| <p>PS Form 3801, August 2001 Domestic Return Receipt 102595-02-M-1540</p> | |

| U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided) | | | | | | | | | | |
|--|---|------------------|----|------------------|---------------|--|--|--|---|--|
| PETZ 269E T000 02E0 T001 0320 0001 3692 2138 | <table border="1"> <tr> <td>Postage</td> <td>\$</td> <td rowspan="4" style="text-align: center; vertical-align: middle;">Postmark Here</td> </tr> <tr> <td>Certified Fee</td> <td></td> </tr> <tr> <td>Return Receipt Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Restricted Delivery Fee (Endorsement Required)</td> <td></td> </tr> </table> | Postage | \$ | Postmark Here | Certified Fee | | Return Receipt Fee (Endorsement Required) | | Restricted Delivery Fee (Endorsement Required) | |
| Postage | \$ | Postmark Here | | | | | | | | |
| Certified Fee | | | | | | | | | | |
| Return Receipt Fee (Endorsement Required) | | | | | | | | | | |
| Restricted Delivery Fee (Endorsement Required) | | | | | | | | | | |
| <p>Total</p> | <p>Mr. Hardy Johnson, President Florida Division Tarmac America, LLC 455 Fairway Drive Deerfield Beach, Florida 33441</p> | | | | | | | | | |
| <p>PS Form 3800, January 2001 Instructions</p> | | | | | | | | | | |

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL USA 32653
Telephone (352) 336-5600
Fax (352) 336-6603
www.golder.com



February 7, 2005

RECEIVED ⁰⁵³⁷⁵¹¹

FEB 08 2005

Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road, MS #5505

BUREAU OF AIR REGULATION

Attention: Ms. Cindy Phillips, P.E.

RE: Air Construction Permit Project No.: 0250020-016-AC
Request for Revision to Air Construction Permit No.: 0250020-010-AC
Tarmac Pennusco Cement Plant, Medley, Miami-Dade County

Dear Ms. Phillips:

Based on discussions at our meeting on December 15, 2004, and subsequent phone conversations with you concerning revision of Air Construction Permit No. 0250020-010-AC, Tarmac Pennusco Cement Plant (Tarmac) is submitting the attached revisions to its pending construction permit application. The revised application reflects the following changes:

1. Revised emission rate calculation tables (see Attachment A) reflecting several facility or operational modifications as described below:
 - Emissions from the Coal Mill, Kiln, Cooler, and Raw Mill are all vented through the Main Stack, which has a PM/PM₁₀ emission limit of 0.125 lb/ton of kiln feed. Previously, however, PM/PM₁₀ emissions from the Coal Mill have been calculated separately than those for the Main Stack. Based on the results of recent compliance tests for the Main Stack (see Attachment B), PM emissions from the Main Stack, during concurrent operation of the Kiln, Cooler, Raw Mill, and Coal Mill, are well below the permit limit of 0.125 lb/ton of kiln feed. As such, Tarmac requests that the permit limit for the Main Stack include emissions from the Coal Mill. Since the emission limit for the Main Stack is a function of the kiln feed rate, and Tarmac may operate the Coal Mill when the kiln is not operating, Tarmac requests that the Coal Mill be permitted to operate an additional 400 hours per year when the Kiln/Cooler/Raw Mill is not operating. PM emissions from the Coal Mill will still be vented from the Main Stack during these 400 hours. PM/PM₁₀ emissions resulting from operation of the Coal Mill, while the Kiln/Cooler/Raw Mill is down, are presented in Table 2-1. Tables 2-4 and 2-5 have been revised to indicate that the Main Stack emissions include emissions from the Coal Mill.
 - Removal of baghouses K347 and K447 associated with the Clinker Handling System (Table 2-2).
 - Modification of the finish mill operation to include Finish Mill Nos. 1, 3, 4, and 6 (i.e., Finish Mill No. 2 has been eliminated and Finish Mill No. 6 has been added). Note that Air Construction Permit No. 0250020-010-AC allowed construction of Finish Mill No. 6, but required both Finish Mill Nos. 1 and 2 to be shutdown upon startup of Finish Mill No. 6. The specifications and emissions for Finish Mill No. 6 are the same as those contained in Permit No. 0250020-010-AC.

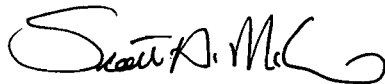


- Limitation of the operating hours of all finish mills to 7,884 hours per year each (Table 2-3).
 - Shutdown of the existing Slag Dryer (Emission Unit ID No. 020).
2. Revised Prevention of Significant Deterioration (PSD) Applicability Determination tables (see Attachment C) showing that New Source Review under PSD regulations is not triggered by this project.
 3. Revised permit application forms reflecting the facility and operational modifications described above (Attachment D).
 4. A description of the operation of the Finish Mill No. 3 O-Sepa Separator (Attachment E).

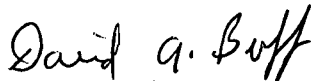
Thank you for consideration of this additional information. Please call or email me if you have any questions regarding this information at (352) 336-5600 or dbuff@golder.com.

Sincerely,

GOLDER ASSOCIATES INC.



Scott A. McCann, P.E.
Associate Engineer



David A. Buff, P.E., Q.E.P.
Principal Engineer

DB/dmw

Enclosures

cc: A.A. Linero, DEP
S. Quaas, Tarmac America
P. Wong, DERM

Y:\Projects\2005\0537511 Tarmac Medley\4\4.1\020105\020105.doc

ATTACHMENT A

EMISSION RATE CALCULATION TABLES

Table 2-1. Coal Handling System (EU ID No. 001) Potential Emission Rates

| Emission Unit | Equipment ID No. | New or Existing | Operating Hours (hr/yr) | Exhaust Flow Rate | | Temperature (°F) | Potential PM/PM ₁₀ Emission Rate ^a | | |
|---|------------------|-----------------|-------------------------|-------------------|---------|------------------|--|-------------|-------------------|
| | | | | (acfm) | (dscfm) | | (gr/dscf) | (lb/hr) | (TPY) |
| Coal transfer | 461.BF130 | New | 4,000 | 1,400 | 1,339 | 92 | 0.0095 | 0.11 | 0.22 |
| Coal transfer | 461.BF230 | New | 4,000 | 1,400 | 1,339 | 92 | 0.0095 | 0.11 | 0.22 |
| Coal mill | 461.BF300 | New | 7,884 | 54,500 | 45,245 | 176 | 0.01 | 3.88 | 0.78 ^b |
| Coal feeder | 461.BF650 | New | 7,884 | 294 | 243 | 178 | 0.0095 | 0.02 | 0.08 |
| Coal feeder | 461.BF750 | New | 7,884 | 294 | 243 | 178 | 0.0095 | 0.02 | 0.08 |
| Coal mill feed | 461.BF350 | New | 7,884 | 5,500 | 5,261 | 92 | 0.01 | 0.45 | 1.78 |
| Revised Potential Emission Rates = | | | | | | | 4.59 | 3.15 | |

^a PM₁₀ emission rate calculated as 100 percent of PM emission rate.

^b The existing emission limit for the Main Stack (see Tables 2-4 and 2-5 for emissions from the Raw Mill and Pyroprocessing) of 0.125 lb/ton of dry clinker, includes emissions from the Coal Mill which are also vented to the atmosphere through the Main Stack. So that Tarmac may operate the coal mill when the Raw Mill and Pyroprocessing are down, 400 hours of emissions from the Coal Mill operating alone are included here. The emissions associated with the additional 7,484 hours of operation for the Coal Mill are included with the potential emissions for the Main Stack.

Table 2-2. Clinker Handling and Storage System (EU ID No. 002) Potential Emission Rates

| Emission Unit | Equip. ID No. | New or Existing | Operating Hours (hr/yr) | Exhaust Flow Rate | | Temperature (°F) | Potential PM/PM ₁₀ Emission Rate ^a | | | |
|---|---------------|-----------------|-------------------------|-------------------|---------|------------------|--|----------|-------------|--------------|
| | | | | (acfm) | (dscfm) | | (gr/dscf) | (gr/acf) | (lb/hr) | (TPY) |
| Clinker Silos 21-23 & 26-28 | F633 | Existing | 8,760 | 6,000 | -- | 77 | -- | 0.01 | 0.51 | 2.25 |
| Clinker transfer | 441.BF540 | New | 7,884 | 4,600 | 3,421 | 250 | 0.0095 | -- | 0.28 | 1.10 |
| Clinker silo | 481.BF140 | New | 7,884 | 12,000 | 8,924 | 250 | 0.0095 | -- | 0.73 | 2.86 |
| Clinker transfer | 481.BF540 | New | 8,760 | 4,700 | 3,495 | 250 | 0.0095 | -- | 0.28 | 1.25 |
| Clinker bins | 481.BF330 | New | 8,760 | 6,100 | 4,536 | 250 | 0.0095 | -- | 0.37 | 1.62 |
| Clinker transfer | 481.BF640 | New | 8,760 | 4,700 | 3,495 | 250 | 0.0095 | -- | 0.28 | 1.25 |
| Clinker transfer | 481.BF730 | New | 8,760 | 18,700 | 13,906 | 250 | 0.0095 | -- | 1.13 | 4.96 |
| Clinker transfer | 481.BF930 | New | 8,760 | 15,000 | 11,155 | 250 | 0.0095 | -- | 0.91 | 3.98 |
| Revised Potential Emission Rates = | | | | | | | | | 4.50 | 19.26 |

^a PM₁₀ emission rate calculated as 100 percent of PM emission rate.

Table 2-3. Finish Mills (EU ID No. 003) Potential Emission Rates

| Emission Unit | Equipment ID No. | New or Existing | Operating Hours (hr/yr) | Exhaust Flow Rate | | Temperature (°F) | Potential PM/PM ₁₀ Emission Rate ^a | | | |
|---|------------------|-----------------|-------------------------|-------------------|---------|------------------|--|----------|--------------|--------------|
| | | | | (acfm) | (dscfm) | | (gr/dscf) | (gr/acf) | (lb/hr) | (TPY) |
| Finish Mill No. 1 Baghouse | F113 | Existing | 7,884 | 11,800 | -- | -- | -- | 0.01 | 1.01 | 3.99 |
| Finish Mill No. 1 Baghouse | F130 | Existing | 7,884 | 12,000 | -- | -- | -- | 0.01 | 1.03 | 4.05 |
| Finish Mill No. 3 Baghouse | F330 | Existing | 7,884 | 20,000 | -- | -- | -- | 0.01 | 1.71 | 6.76 |
| Finish Mill No. 3 Baghouse | F332 | Existing | 7,884 | 13,500 | -- | -- | -- | 0.01 | 1.16 | 4.56 |
| Finish Mill No. 3 Baghouse | 533.BF340 | New | 7,884 | 77,800 | 65,307 | 169 | 0.0095 | -- | 5.32 | 20.96 |
| Finish Mill No. 4 Baghouse | F432 | Existing | 7,884 | 17,000 | -- | -- | -- | 0.01 | 1.46 | 5.74 |
| Finish Mill No. 4 Baghouse | F605 | Existing | 7,884 | 4,000 | -- | -- | -- | 0.01 | 0.34 | 1.35 |
| Finish Mill No. 4 Baghouse | F603 | Existing | 7,884 | 8,000 | -- | -- | -- | 0.01 | 0.69 | 2.70 |
| Finish Mill No. 4 Baghouse | F430 | Existing | 7,884 | 30,000 | -- | -- | -- | 0.01 | 2.57 | 10.14 |
| Finish Mill No. 4 Baghouse | F604 | Existing | 7,884 | 8,000 | -- | -- | -- | 0.01 | 0.69 | 2.70 |
| Finish Mill No. 6 Baghouse | 531.BF01 | New | 7,884 | 97,300 | 80,905 | -- | 0.0095 | -- | 6.59 | 25.97 |
| Finish Mill No. 6 Baghouse | 531.BF02 | New | 7,884 | 25,900 | 21,536 | -- | 0.0095 | -- | 1.75 | 6.91 |
| Revised Potential Emission Rates = | | | | | | | | | 24.31 | 95.85 |

^a PM₁₀ emission rate calculated as 100 percent of PM emission rate.

Table 2-4. Raw Mill and Pyroprocessing Unit System (EU ID No. 005) Potential Emission Rates

| Equip. ID No. | New or Existing | Operating Hours (hr/yr) | Exhaust Flow Rate | | Temperature (°F) | Potential PM Emission Rate | | | Potential PM ₁₀ Emission Rate | |
|--|--------------------|-------------------------------|-------------------|---------|---------------------|-------------------------------|-------------------|--------------------|---|----------------------|
| | | | (acfm) | (dscfm) | | (gr/dscf) | (lb/hr) | (TPY) | (lb/hr) | (TPY) |
| 331.BF200 | New | 7,884 | 515,000 | 360,637 | 294 | ^a | 50.0 ^d | 175.0 ^d | 42.0 ^{b,d} | 147.0 ^{b,d} |
| 331.BF740 | New | 7,884 | 4,250 | 2,953 | 300 | 0.0095 | 0.24 | 0.95 | 0.24 ^c | 0.95 ^c |
| 341.BF350 | New | 8,760 | 3,760 | 3,112 | 178 | 0.0095 | 0.25 | 1.11 | 0.25 ^c | 1.11 ^c |
| 351.BF410 | New | 7,884 | 4,000 | 3,310 | 178 | 0.0095 | 0.27 | 1.06 | 0.27 ^c | 1.06 ^c |
| 351.BF440 | New | 7,884 | 4,760 | 3,939 | 178 | 0.0095 | 0.32 | 1.26 | 0.32 ^c | 1.26 ^c |
| 351.BF470 | New | 7,884 | 4,100 | 3,409 | 175 | 0.0095 | 0.28 | 1.09 | 0.28 ^c | 1.09 ^c |
| 331.BF645 | New | 7,884 | 3,500 | 2,910 | 175 | 0.0095 | 0.24 | 0.93 | 0.24 ^c | 0.93 ^c |
| Revised Potential Emission Rates = | | | | | | 51.60 | 181.41 | 43.60 | 153.41 | |
| Revised Potential Emission Rates without Kiln/Cooler/Raw Mill = | | | | | | 1.6 | 6.4 | 1.6 | 6.4 | |

^a Emission note based on an emission factor of 0.125 lb/ton of dry kiln feed. See Table 2-5.

^b PM₁₀ emission rate calculated as 84 percent of PM emission rate.

^c PM₁₀ emission rate calculated as 100 percent of PM emission rate.

^d Includes emissions from the Coal Mill(EU ID No. 001) when the Kiln/Cooler/Raw Mill and Coal Mill are operating simultaneously.

Table 2-5. Dry Kiln, Cooler, and Raw Mill (EU ID No. 005) Potential Emissions Vented From the Main Stack

| Activity Factors | | | |
|-----------------------------|----------------------------|--------------------------------|----------------------------|
| Kiln Feed (Dry KF) | | Clinker Production (CP) | |
| 24-hour Average (TPH) | Maximum Annual (TPY) | Annual Average (TPH) | Maximum Annual (TPY) |
| 400 | 2,792,250 | 208 ^b | 1,642,500 |

| Particulate Matter | | | |
|---------------------------------------|--------------------------------------|----------------------------------|-------|
| Emission Factor | | Emission Rate^c | |
| 24-Hour Average (lb/ton dry KF) | Annual Average (lb/ton dry KF) | (lb/hr) | (TPY) |
| 0.125 | 0.125 | 50.0 | 175 |

| Sulfur Dioxide | | | |
|-----------------------------------|----------------------------------|----------------------|------------------|
| Emission Factor | | Emission Rate | |
| 24-Hour Average (lb/ton CP) | Annual Average (lb/ton CP) | (lb/hr) | (TPY) |
| 1.540 | 0.981 | 320 ^a | 806 ^a |

| Nitrogen Oxides | | | |
|-----------------------------------|----------------------------------|----------------------|--------------------|
| Emission Factor | | Emission Rate | |
| 24-Hour Average (lb/ton CP) | Annual Average (lb/ton CP) | (lb/hr) | (TPY) |
| 3.46 | 2.38 | 720 ^a | 1,953 ^a |

| Carbon Monoxide | | | |
|-----------------------------------|----------------------------------|----------------------|--------------------|
| Emission Factor | | Emission Rate | |
| 24-Hour Average (lb/ton CP) | Annual Average (lb/ton CP) | (lb/hr) | (TPY) |
| 2.76 | 1.77 | 576 ^a | 1,457 ^a |

| Volatile Organic Compounds | | | |
|-----------------------------------|----------------------------------|----------------------|------------------|
| Emission Factor | | Emission Rate | |
| 24-Hour Average (lb/ton CP) | Annual Average (lb/ton CP) | (lb/hr) | (TPY) |
| 0.190 | 0.189 | 40 ^a | 155 ^a |

| Sulfuric Acid Mist | | | |
|-----------------------------------|----------------------------------|----------------------|-------|
| Emission Factor | | Emission Rate | |
| 24-Hour Average (lb/ton CP) | Annual Average (lb/ton CP) | (lb/hr) | (TPY) |
| 0.0108 | 0.0108 | 2.24 | 8.86 |

^a Permitted Limit.

^b Based on 7,884 hours per year of operation.

^c Includes Coal Mill (EU ID No. 001) emissions during concurrent operation of Kiln/Cooler/Raw Mill and Coal Mill. For emissions due to Coal Mill operating when the Kiln/Cool/Raw Mill are shut down, see Table 2-1.

Table 2-6. Raw Material Handling and Storage System (EU ID No. 006) Potential Emission Rates

| Emission Unit | Equip. ID No. | New or Existing | Operating Hours (hr/yr) | Exhaust Flow Rate | | Temperature (°F) | Potential PM/PM ₁₀ Emission Rate ^a | | | |
|---|---------------|-----------------|-------------------------|-------------------|---------|------------------|--|-------------|--------------|--|
| | | | | (acfm) | (dscfm) | | (gr/dscf) | (lb/hr) | (TPY) | |
| Lime/gyp silos | 232.BF01 | New | 4,000 | 5,170 | 5,170 | 68 | 0.0095 | 0.42 | 0.84 | |
| Additives | 311.BF650 | New | 7,884 | 8,500 | 8,130 | 92 | 0.0095 | 0.66 | 2.61 | |
| Additives | 311.BF750 | New | 7,884 | 7,750 | 7,413 | 92 | 0.0095 | 0.60 | 2.38 | |
| Additives | 321.BF470 | New | 7,884 | 10,800 | 10,039 | 108 | 0.0095 | 0.82 | 3.22 | |
| Additives | 311.BF950 | New | 7,884 | 11,700 | 10,876 | 108 | 0.0095 | 0.89 | 3.49 | |
| Revised Potential Emission Rates = | | | | | | | | 3.39 | 12.54 | |

^a PM₁₀ emission rate calculated as 100 percent of PM emission rate.

ATTACHMENT B

**SUMMARY OF STACK TEST RESULTS
FOR THE MAIN STACK**



PM/PM10 Compliance Testing
November 16-19, 2004

SUMMARY OF PARTICULATE MATTER EMISSION TEST DATA

| Plant : Titan American | | | | | | | | | | |
|------------------------------------|----------|-------------|-----------|------------------------------|-----------------------------|---------------------------|------------------------|--------------------|------------------------|----------------------------|
| Source/Unit : Kiln - Raw Mill "ON" | | | | | | | | | | |
| Date: November 17 and 18, 2004 | | | | | | | | | | |
| Run No. | Date | Time | Coal Mill | Dry Kiln Feed Rate (Tons/hr) | Stack Gas Flow Rate (SCFMD) | Stack Gas Temperature (F) | Stack Gas Moisture (%) | Particulate Matter | | |
| | | | | | | | | Conc. (gr/dscf) | Emission Rate (Lbs/Hr) | Emission Rate (lb/ton DKF) |
| 1 | 11/17/04 | 0824 - 0930 | On | 320.0 | 323,969 | 197 | 14.2 | 0.0028 | 7.71 | 0.024 |
| 2 | 11/17/04 | 1449 - 1602 | Off | 334.8 | 334,223 | 200 | 12.9 | 0.0021 | 6.00 | 0.018 |
| 3 | 11/18/04 | 1858 - 2002 | Off | 313.5 | 344,055 | 211 | 15.2 | 0.0023 | 6.92 | 0.022 |
| StdDev | | | | 10.9 | 10,044 | 7 | 1.1 | 0.0003 | 0.85 | 0.003 |
| Average | | | | 322.8 | 334,082 | 203 | 14.1 | 0.0024 | 6.88 | 0.021 |



**PM/PM10 Compliance Testing
November 16-19, 2004**

SUMMARY OF PARTICULATE MATTER EMISSION TEST DATA

| Plant : Titan American Source/Unit : Kiln - Raw Mill "OFF" Date: November 16 and 18, 2004 | | | | | | | | | | |
|---|----------|-------------|-----------|-------------------------------|-----------------------------|---------------------------|------------------------|--------------------|------------------------|----------------------------|
| Run No. | Date | Time | Coal Mill | Process Weight Rate (Tons/hr) | Stack Gas Flow Rate (SCFMD) | Stack Gas Temperature (F) | Stack Gas Moisture (%) | Particulate Matter | | |
| | | | | | | | | Conc. (gr/dscf) | Emission Rate (Lbs/Hr) | Emission Rate (lb/ton DKF) |
| 1 | 11/16/04 | 2005 - 2111 | On | 319.7 | 299,034 | 377 | 8.6 | 0.0040 | 10.23 | 0.032 |
| 2 | 11/18/04 | 0920 - 1027 | On | 314.3 | 353,523 | 352 | 8.3 | 0.0026 | 7.82 | 0.025 |
| StdDev | | | | 3.8 | 38,530 | 17 | 0.2 | 0.0010 | 1.70 | 0.005 |
| Average | | | | 317.0 | 326,278 | 365 | 8.5 | 0.0033 | 9.03 | 0.028 |

PM data extracted from: Koogler & Associates Test Report
Report Date: January 12, 2005

ATTACHMENT C

PSD APPLICABILITY DETERMINATION TABLES

Table 3-2. Future Maximum Annual Emissions From Material Handling Point Sources, Tarmac Pennsuco

| Emission Unit | Emission Source | Point ID | Baghouse ID | Emission Basis | Potential Annual PM Emission Rate (TPY) | Potential Annual PM ₁₀ Emission Rate (TPY) |
|---------------|--|-----------|--------------|--------------------------------|---|---|
| 001 | Coal Handling/Coal Mill System | 003 | 6 baghouses | See Table 2-1 | 3.15 | 3.15 |
| 002 | Clinker Handling and Storage | 008 | 8 Baghouses | See Table 2-2 | 19.26 | 19.26 |
| 003 | Finish Mill Nos. 1, 3, 4, and 6 | 010 - 013 | 12 baghouses | See Table 2-3 | 95.85 | 95.85 |
| 004 | Cement Storage, Packhouse, & Loadout | 014 - 016 | 11 Baghouses | As Permitted in 0250020-010-AC | 25.80 | 25.80 |
| 005 | Raw Mill and Pyroprocessing without Kiln/Cooler/Raw Mill | 021 | 7 Baghouses | See Table 2-4 | 6.40 | 6.40 |
| 006 | Raw Material Handling and Storage | -- | 5 Baghouses | See Table 2-6 | <u>12.54</u> | <u>12.54</u> |
| Total | | | | | 163.00 | 163.00 |

Table 3-3. Summary of Quantifiable Fugitive Emissions for the New Cement Plant, Tarmac

| Source | Estimated Annual Emissions (TPY) | | Estimated Hourly Emissions (lb/hr) ^a | |
|--|----------------------------------|------------------|---|------------------|
| | PM | PM ₁₀ | PM | PM ₁₀ |
| Coal Handling Facilities-Batch Drop | 0.32 | 0.11 | 0.28 | 0.1 |
| Coal Handling Facilities-Vehicular Traffic | 27.46 | 9.61 | 26.4 | 9.24 |
| Raw Material Blending Area ^b | <u>2.66</u> | <u>0.93</u> | <u>2.56</u> | <u>0.89</u> |
| Total | 30.44 | 10.65 | 29.24 | 10.23 |

Notes:

^a Based on average hourly emissions assuming 2,080 hr/yr actual operation.

^b See Table A-1.

Table 3-7. Net Change in Emissions and PSD Significant Emission Rates, Tarmac Cement Plant Modification

| Pollutant | PSD Baseline Emissions (TPY) | | | | | | Future Potential Emissions (TPY) | | | | Net Increase in Emissions (TPY) | PSD Significant Emission Rate (TPY) | PSD Review Applies? |
|--|------------------------------|------------|---------------------------------|------------|------------------------------------|---------|--|---------------------------------|------------------------------------|---------|---------------------------------|-------------------------------------|---------------------|
| | Kiln No. 2 | Kiln No. 3 | Material Handling Point Sources | Slag Dryer | Material Handling Fugitive Sources | Total | New Raw Mill Preheater/Calcliner/Kiln/Cooler | Material Handling Point Sources | Material Handling Fugitive Sources | Total | | | |
| Particulate Matter [PM(TSP)] | 33.15 | 112.01 | 167.87 | 9.12 | 43.96 | 366.1 | 175.0 | 163.0 | 30.44 | 368.4 | 2.3 | 25 | No |
| Particulate Matter (PM ₁₀) | 28.18 | 94.09 | 167.87 | 9.12 | 15.39 | 314.6 | 147.0 | 163.0 | 10.65 | 320.7 | 6.0 | 15 | No |
| Sulfur Dioxide | 14.38 | 1,399.76 | -- | 18.19 | -- | 1,432.3 | 806 | -- | -- | 806.0 | -626.3 | 40 | No |
| Nitrogen Dioxide | 435.09 | 1,836.06 | -- | 12.81 | -- | 2,284.0 | 1,953 | -- | -- | 1,953.0 | -331.0 | 40 | No |
| Carbon Monoxide | 52.65 | 1,312.25 | -- | 3.20 | -- | 1,368.1 | 1,457 | -- | -- | 1,457.0 | 88.9 | 100 | No |
| Volatile Organic Compounds | 7.03 | 123.13 | -- | 0.34 | -- | 130.5 | 155 | -- | -- | 155.0 | 24.5 | 40 | No |
| Sulfuric Acid Mist | 0.61 | 256.58 | -- | 0.078 | -- | 257.27 | 8.9 | -- | -- | 8.9 | -248.4 | 7 | No |
| Lead | 0.00757 | 0.03096 | -- | 0.00080 | -- | 0.0393 | 0.0465 | -- | -- | 0.0465 | 0.0071 | 0.6 | No |
| Mercury | 0.00458 | 0.01875 | -- | 0.00027 | -- | 0.0236 | 0.0149 | -- | -- | 0.0149 | -0.0087 | 0.1 | No |

NEG = Negligible.


ATTACHMENT D

REVISED PERMIT APPLICATION FORMS

(Note: Forms for all emission units for PM/PM₁₀ are provided to be complete, although some emission units are not being revised.)

APPLICATION INFORMATION

Professional Engineer Certification

| |
|--|
| 1. Professional Engineer Name: David A. Buff Registration Number: 19011 |
| 2. Professional Engineer Mailing Address... Organization/Firm: Golder Associates Inc.** Street Address: 6241 NW 23rd Street, Suite 500 City: Gainesville State: FL Zip Code: 32653-1500 |
| 3. Professional Engineer Telephone Numbers... Telephone: (352) 336 - 5600 ext. Fax: (352) 336 - 6603 |
| 4. Professional Engineer Email Address: dbuff@golder.com |
| 5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  Signature: <u>David A. Buff</u> Date: <u>2/7/05</u> (seal) |

Attach any exception to certification statement.
Board of Professional Engineers Certificate of Authorization #00001670

EMISSIONS UNIT INFORMATION

Section [1] of [5]
Coal Handling System

POLLUTANT DETAIL INFORMATION

Page [1] of [2]
Particulate Matter - Total

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

| | | |
|--|---|--|
| 1. Pollutant Emitted: PM | 2. Total Percent Efficiency of Control: | |
| 3. Potential Emissions: 31.3 lb/hour 31.0 tons/year | | 4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year | | |
| 6. Emission Factor: See note below Reference: | | 7. Emissions Method Code: 2 |
| 8. Calculation of Emissions: Includes 4.6 lb/hr and 3.15 TPY from the baghouses and 26.7 lb/hr and 27.8 TPY from fugitive PM emissions. For hourly and annual emission calculations for the baghouses, see Table 2-1 in Part B. For fugitive PM emission calculations, see Appendix A of Part B. | | |
| 9. Pollutant Potential/Estimated Fugitive Emissions Comment: Emissions from Coal Mill Baghouse are included in Main Stack emissions when operating concurrently with Kiln/Cooler/Raw Mill. | | |

EMISSIONS UNIT INFORMATION

Section [1] of [5]
Coal Handling System

POLLUTANT DETAIL INFORMATION

Page [1] of [2]
Particulate Matter - Total

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

| | |
|---|---|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.0095 gr/dscf | 4. Equivalent Allowable Emissions: 4.6 lb/hour 3.2 tons/year |
| 5. Method of Compliance: EPA Method 9 Test, except EPA Method 5 for the Coal Mill (461.BF300) | |
| 6. Allowable Emissions Comment (Description of Operating Method): Allowable in gr/dscf, applies to baghouses only, except for Coal Mill and Coal Mill feed baghouse. Allowable for these baghouses is 0.01 gr/dscf. Coal Mill allowable reflects 400 hr/yr operation when Kiln/Cooler/Raw Mill are shut down. See Table 2-1 in Part B for calculation of potential emissions. | |

Allowable Emissions Allowable Emissions 2 of 2

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: RULE | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 3.59 p^{0.62} | 4. Equivalent Allowable Emissions: 29.6 lb/hour 116.7 tons/year |
| 5. Method of Compliance: EPA Method 9 test. | |
| 6. Allowable Emissions Comment (Description of Operating Method): Applies to Coal Mill only. Calculated based on maximum 24-hour block average usage rates of 30 TPH and 190,000 TPY. However, emissions from the coal mill are controlled using a baghouse to 3.88 lb/hr and 3.15 TPY (see Table 2-1 in Part B). | |

Allowable Emissions Allowable Emissions ____ of ____

| | |
|---|---|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

EMISSIONS UNIT INFORMATION

Section [1] of [5]
Coal Handling System

POLLUTANT DETAIL INFORMATION

Page [2] of [2]
Particulate Matter – PM₁₀

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

| | | |
|--|---|--|
| 1. Pollutant Emitted: PM₁₀ | 2. Total Percent Efficiency of Control: | |
| 3. Potential Emissions: 14.0 lb/hour 12.9 tons/year | | 4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year | | |
| 6. Emission Factor: See note below Reference: | | 7. Emissions Method Code: 2 |
| 8. Calculation of Emissions: Includes 4.6 lb/hr and 3.15 TPY (same as PM) for baghouses and 9.35 lb/hr and 9.72 TPY from fugitive PM emissions. For hourly and annual emission calculations for the baghouses, see Table 2-1 in Part B. For fugitive PM emission calculations, see Appendix A of Part B. | | |
| 9. Pollutant Potential/Estimated Fugitive Emissions Comment: Emission from Coal Mill Baghouse are included in Main Stack emissions when operating concurrently with Kiln/Cooler/Raw Mill. | | |

EMISSIONS UNIT INFORMATION

Section [1] of [5]
Coal Handling System

POLLUTANT DETAIL INFORMATION

Page [2] of [2]
Particulate Matter – PM₁₀

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

| | |
|---|---|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.0095 gr/dscf | 4. Equivalent Allowable Emissions: 4.6 lb/hour 3.2 tons/year |
| 5. Method of Compliance: EPA Method 9 | |
| 6. Allowable Emissions Comment (Description of Operating Method): Allowable in gr/dscf, applies to baghouses only, except for Coal Mill and Coal Mill feed baghouse. Allowable for these baghouses is 0.01 gr/dscf. Coal Mill allowable reflects 400 hr/yr operation when Kiln/Cooler/Raw Mill are shut down. See Table 2-1 in Part B for calculation of potential emissions. | |

Allowable Emissions Allowable Emissions ____ of ____

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

Allowable Emissions Allowable Emissions ____ of ____

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [2] of [5]
Clinker Handling and Storage

Page [1] of [2]
Particulate Matter - Total

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

| | | | |
|---|--|--|--|
| 1. Pollutant Emitted: PM | | 2. Total Percent Efficiency of Control: | |
| 3. Potential Emissions: 4.50 lb/hour 19.3 tons/year | | 4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year | | | |
| 6. Emission Factor: See comment. Reference: | | 7. Emissions Method Code: 0 | |
| 8. Calculation of Emissions: Assumed as 100 percent of PM emissions. See Table 2-2 in Part B for emission calculations. | | | |
| 9. Pollutant Potential/Estimated Fugitive Emissions Comment: | | | |

EMISSIONS UNIT INFORMATION

Section **[2]** of **[5]**
 Clinker Handling and Storage

POLLUTANT DETAIL INFORMATION

Page **[1]** of **[2]**
 Particulate Matter - Total

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

| | |
|---|---|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.0095 gr/dscf | 4. Equivalent Allowable Emissions: 3.99 lb/hour 17.0 tons/year |
| 5. Method of Compliance: EPA Method 9 | |
| 6. Allowable Emissions Comment (Description of Operating Method): Allowable in gr/dscf applies to all Baghouses except F633. See Table 2-2 in Part B for potential emission calculations. | |

Allowable Emissions Allowable Emissions 2 of 2

| | |
|--|---|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.01 gr/dscf | 4. Equivalent Allowable Emissions: 0.51 lb/hour 2.25 tons/year |
| 5. Method of Compliance: EPA Method 9 | |
| 6. Allowable Emissions Comment (Description of Operating Method): Allowable in gr/dscf applies to Baghouse F633. | |

Allowable Emissions Allowable Emissions of

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

EMISSIONS UNIT INFORMATION

Section [2] of [5]
Clinker Handling and Storage

POLLUTANT DETAIL INFORMATION

Page [2] of [2]
Particulate Matter – PM₁₀

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

| | | | |
|---|--|--|--|
| 1. Pollutant Emitted: PM₁₀ | | 2. Total Percent Efficiency of Control: | |
| 3. Potential Emissions: 4.50 lb/hour 19.3 tons/year | | 4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year | | | |
| 6. Emission Factor: See comment. Reference: | | 7. Emissions Method Code: 0 | |
| 8. Calculation of Emissions: Assumed as 100 percent of PM emissions. See Table 2-2 in Part B for emission calculations. | | | |
| 9. Pollutant Potential/Estimated Fugitive Emissions Comment: | | | |

EMISSIONS UNIT INFORMATION

Section **[2]** of **[5]**
 Clinker Handling and Storage

POLLUTANT DETAIL INFORMATION

Page **[2]** of **[2]**
 Particulate Matter – PM₁₀

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

| | |
|---|---|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.0095 gr/dscf | 4. Equivalent Allowable Emissions: 3.99 lb/hour 17.0 tons/year |
| 5. Method of Compliance: EPA Method 9 | |
| 6. Allowable Emissions Comment (Description of Operating Method): Allowable in gr/dscf applies to Baghouse F633. See Table 2-2 in Part B for potential emission calculations. | |

Allowable Emissions Allowable Emissions 2 of 2

| | |
|--|---|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.01 gr/dscf | 4. Equivalent Allowable Emissions: 0.51 lb/hour 2.25 tons/year |
| 5. Method of Compliance: EPA Method 9 | |
| 6. Allowable Emissions Comment (Description of Operating Method): Allowable in gr/dscf applies to Baghouse F633. | |

Allowable Emissions Allowable Emissions ____ of ____

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

EMISSIONS UNIT INFORMATION

Section [3] of [5]
 Finish Mill Nos. 1, 3, 4, and 6

POLLUTANT DETAIL INFORMATION

Page [1] of [2]
 Particulate Matter - Total

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

| | | |
|--|---|--|
| 1. Pollutant Emitted: PM | 2. Total Percent Efficiency of Control: | |
| 3. Potential Emissions: 24.31 lb/hour 95.85 tons/year | | 4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year | | |
| 6. Emission Factor: See comment. Reference: | | 7. Emissions Method Code: 0 |
| 8. Calculation of Emissions: See Part B, Table 2-3. | | |
| 9. Pollutant Potential/Estimated Fugitive Emissions Comment: | | |

EMISSIONS UNIT INFORMATION**POLLUTANT DETAIL INFORMATION**

Section [3] of [5]
 Finish Mill Nos. 1, 3, 4, and 6

Page [1] of [2]
 Particulate Matter - Total

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.01 gr/acf | 4. Equivalent Allowable Emissions: 10.65 lb/hour 42.0 tons/year |
| 5. Method of Compliance: EPA Method 9. | |
| 6. Allowable Emissions Comment (Description of Operating Method): Applies to all baghouses except Finish Mill No. 3 Baggouse No. 533.BF340 and Finish Mill No. 6 Baggouse Nos. 531.BF01 and 531.BF02. | |

Allowable Emissions Allowable Emissions 2 of 2

| | |
|--|--|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.0095 gr/dscf | 4. Equivalent Allowable Emissions: 13.66 lb/hour 53.8 tons/year |
| 5. Method of Compliance: EPA Method 9. | |
| 6. Allowable Emissions Comment (Description of Operating Method): Permit limit applies to Finish Mill No. 3, Baggouse No. 533.BF340 and Finish Mill No. 6 Baggouse Nos. 531.BF01 and 531.BF02. | |

Allowable Emissions Allowable Emissions ____ of ____

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [3] of [5]
 Finish Mill Nos. 1, 3, 4, and 6

Page [2] of [2]
 Particulate Matter – PM₁₀

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

| | |
|--|--|
| 1. Pollutant Emitted: PM₁₀ | 2. Total Percent Efficiency of Control: |
| 3. Potential Emissions: 24.31 lb/hour 95.85 tons/year | 4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year | |
| 6. Emission Factor: See comment. Reference: | 7. Emissions Method Code: 0 |
| 8. Calculation of Emissions: See Part B, Table 2-3. | |
| 9. Pollutant Potential/Estimated Fugitive Emissions Comment: | |

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [3] of [5]
 Finish Mill Nos. 1, 3, 4, and 6

Page [2] of [2]
 Particulate Matter – PM₁₀

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.01 gr/acf | 4. Equivalent Allowable Emissions: 10.65 lb/hour 42.0 tons/year |
| 5. Method of Compliance: EPA Method 9. | |
| 6. Allowable Emissions Comment (Description of Operating Method): Applies to all baghouses except Finish Mill No. 3 Baggouse No. 533.BF340 and Finish Mill No. 6 Baggouse Nos. 531.BF01 and 531.BF02. | |

Allowable Emissions Allowable Emissions 2 of 2

| | |
|--|--|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.0095 gr/dscf | 4. Equivalent Allowable Emissions: 13.66 lb/hour 53.8 tons/year |
| 5. Method of Compliance: EPA Method 9. | |
| 6. Allowable Emissions Comment (Description of Operating Method): Permit limit applies to Finish Mill No. 3, Baggouse No. 533.BF340 and Finish Mill No. 6 Baggouse Nos. 531.BF01 and 531.BF02. | |

Allowable Emissions Allowable Emissions ____ of ____

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

EMISSIONS UNIT INFORMATION

Section [4] of [5]
Raw Mill and Pyroprocessing Unit

POLLUTANT DETAIL INFORMATION

Page [2] of [8]
Particulate Matter - Total

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

| | | | |
|---|--|--|--|
| 1. Pollutant Emitted: PM | | 2. Total Percent Efficiency of Control: | |
| 3. Potential Emissions: 51.6 lb/hour 181.4 tons/year | | 4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year | | | |
| 6. Emission Factor: See Comment Reference: | | 7. Emissions Method Code: 0 | |
| 8. Calculation of Emissions: See Part B, Tables 2-4 and 2-5. | | | |
| 9. Pollutant Potential/Estimated Fugitive Emissions Comment: Includes emissions from the Coal Mill when operating concurrently with the Kiln/Cooler/Raw Mill. | | | |

EMISSIONS UNIT INFORMATION

Section **[4]** of **[5]**
 Raw Mill and Pyroprocessing Unit

POLLUTANT DETAIL INFORMATION

Page **[2]** of **[8]**
 Particulate Matter - Total

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **4**

| | |
|--|--|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.125 lb/ton dry Kiln feed | 4. Equivalent Allowable Emissions: 50.0 lb/hour 175 tons/year |
| 5. Method of Compliance: Annual Method 5 | |
| 6. Allowable Emissions Comment (Description of Operating Method): Emission limit based on Permit No. 0250020-010-AC. Applies to emissions from Main Stack only, and includes emissions from Coal Mill (Emission Unit ID 001) when Kiln/Cooler/Raw Mill and Coal Mill are operating concurrently. | |

Allowable Emissions Allowable Emissions **2** of **4**

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: RULE | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.1 lb/ton dry Kiln feed | 4. Equivalent Allowable Emissions: 40.0 lb/hour 139.6 tons/year |
| 5. Method of Compliance: Annual EPA Method 5 | |
| 6. Allowable Emissions Comment (Description of Operating Method): MACT 40 CFR 63.1345(a)(1) for cooler only based on feed to kiln. Equivalent allowable emissions are emissions out the main stack. | |

Allowable Emissions Allowable Emissions **3** of **4**

| | |
|---|---|
| 1. Basis for Allowable Emissions Code: RULE | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.3 lb/ton dry Kiln feed | 4. Equivalent Allowable Emissions: 120.0 lb/hour 418.8 tons/year |
| 5. Method of Compliance: Annual EPA Method 5 | |
| 6. Allowable Emissions Comment (Description of Operating Method): Emission limit is MACT 40 CFR 63.1343(c)(1) for kiln only. Equivalent allowable emissions are emissions out main stack. | |

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [4] of [5]
Raw Mill and Pyroprocessing Unit

Page [2] of [8]
Particulate Matter - Total

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 4 of 4

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.0095 gr/dscf | 4. Equivalent Allowable Emissions: 1.60 lb/hour 6.4 tons/year |
| 5. Method of Compliance: Annual Method 5 | |
| 6. Allowable Emissions Comment (Description of Operating Method): Emission limit requested by applicant. Applies to emissions from baghouses other than Kiln/Cooler/Raw Mill Baghouse No. 331.BF200. See Part B, Table 2-4. | |

Allowable Emissions Allowable Emissions ___ of ___

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

Allowable Emissions Allowable Emissions __ of __

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

EMISSIONS UNIT INFORMATION

Section [4] of [5]
Raw Mill and Pyroprocessing Unit

POLLUTANT DETAIL INFORMATION

Page [3] of [8]
Particulate Matter – PM₁₀

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

| | | | |
|---|--|--|--|
| 1. Pollutant Emitted: PM₁₀ | | 2. Total Percent Efficiency of Control: | |
| 3. Potential Emissions: 43.6 lb/hour 153.4 tons/year | | 4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year | | | |
| 6. Emission Factor: Reference: | | 7. Emissions Method Code: 0 | |
| 8. Calculation of Emissions: See Part B, Table 2-4. | | | |
| 9. Pollutant Potential/Estimated Fugitive Emissions Comment: Includes emissions from the Coal Mill when operating concurrently with the Kiln/Cooler/Raw Mill. | | | |

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [4] of [5]
Raw Mill and Pyroprocessing Unit

Page [3] of [8]
Particulate Matter – PM₁₀

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.105 lb/ton dry Kiln feed | 4. Equivalent Allowable Emissions: 42.0 lb/hour 147.0 tons/year |
| 5. Method of Compliance: Annual Method 5 | |
| 6. Allowable Emissions Comment (Description of Operating Method): Emission limit based on Permit No. 0250020-010-AC. Applies to emissions from Main Stack only, and includes emissions from Coal Mill (EU ID 001) when Kiln/Cooler/Raw Mill and Coal Mill are operating concurrently. | |

Allowable Emissions Allowable Emissions 2 of 2

| | |
|---|---|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 100% of PM | 4. Equivalent Allowable Emissions: 1.6 lb/hour 6.4 tons/year |
| 5. Method of Compliance: Annual Method 9 | |
| 6. Allowable Emissions Comment (Description of Operating Method): Emission limit requested by applicant. Applies to emissions from baghouses not exhausting through Main Stack. | |

Allowable Emissions Allowable Emissions of

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

EMISSIONS UNIT INFORMATION

Section **[5]** of **[5]**
Raw Material Handling

POLLUTANT DETAIL INFORMATION

Page **[1]** of **[2]**
Particulate Matter - Total

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

| | |
|--|--|
| 1. Pollutant Emitted: PM | 2. Total Percent Efficiency of Control: |
| 3. Potential Emissions: 3.39 lb/hour 12.5 tons/year | 4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year | |
| 6. Emission Factor: 0.0095 gr/dscf Reference: Applicant Request | 7. Emissions Method Code: 0 |
| 8. Calculation of Emissions: See Part B, Table 2-6. | |
| 9. Pollutant Potential/Estimated Fugitive Emissions Comment: | |

EMISSIONS UNIT INFORMATION

Section [5] of [5]
Raw Material Handling

POLLUTANT DETAIL INFORMATION

Page [1] of [2]
Particulate Matter - Total

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions _ of _

| | |
|--|---|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.0095 gr/dscf | 4. Equivalent Allowable Emissions: 3.39 lb/hour 12.5 tons/year |
| 5. Method of Compliance: EPA Method 9 | |
| 6. Allowable Emissions Comment (Description of Operating Method): Applicant request. | |

Allowable Emissions Allowable Emissions _ of _

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

Allowable Emissions Allowable Emissions ____ of ____

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

EMISSIONS UNIT INFORMATION

Section **[5]** of **[5]**
Raw Material Handling

POLLUTANT DETAIL INFORMATION

Page **[1]** of **[2]**
Particulate Matter – **PM₁₀**

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

| | |
|--|--|
| 1. Pollutant Emitted: PM₁₀ | 2. Total Percent Efficiency of Control: |
| 3. Potential Emissions: 3.39 lb/hour 12.5 tons/year | 4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year | |
| 6. Emission Factor: 0.0095 gr/dscf Reference: Applicant Request | 7. Emissions Method Code: 0 |
| 8. Calculation of Emissions: See Part B, Table 2-6. | |
| 9. Pollutant Potential/Estimated Fugitive Emissions Comment: | |

EMISSIONS UNIT INFORMATION

Section [5] of [5]
Raw Material Handling

POLLUTANT DETAIL INFORMATION

Page [1] of [2]
Particulate Matter – PM₁₀

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions _ of _

| | |
|--|---|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: 0.0095 gr/dscf | 4. Equivalent Allowable Emissions: 3.39 lb/hour 12.5 tons/year |
| 5. Method of Compliance: EPA Method 9 | |
| 6. Allowable Emissions Comment (Description of Operating Method): Applicant request. | |

Allowable Emissions Allowable Emissions __ of __

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

Allowable Emissions Allowable Emissions _____ of _____

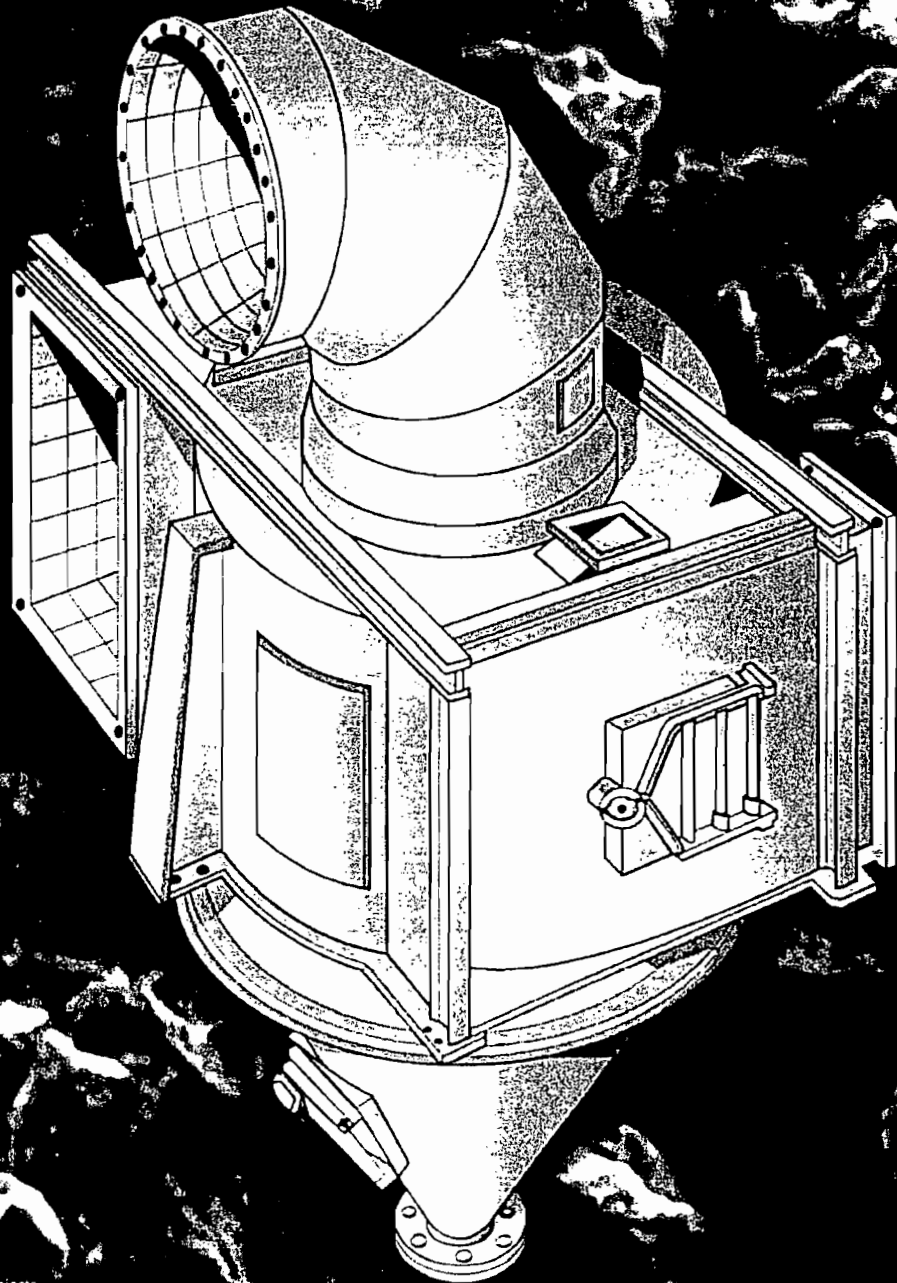
| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

ATTACHMENT E

O-SEPA SEPARATOR INFORMATION

O-Sepa® Separator

- Low Maintenance
- High Efficiency
- Simple Layout



Background shows O-Sepa separator rejects.

FLSMIDTH

Main Features

MILL SYSTEMS

Proven Reliability

- 25 years design and operating experience
- Over 425 units worldwide

Cost Savings

- Reduced specific power consumption
- Increased grinding efficiency
- Low maintenance
- Integral cooling capability

Low Maintenance

- Wear protection targets specific abrasion mechanisms for each separator component
- Circulating oil lubrication system promotes exceptional bearing life

Reduced Capital Cost

- Compact design
- Simple Layout
- Bolt together construction for low installation time

Flexibility

- New and Retrofit installations
- Raw and Cement Grinding
- High Blaine operation
- Standard and Mixed products
- Compatible with Semi-finish Grinding
- Full Gas recirculation optional
- Full size range

Stable operation

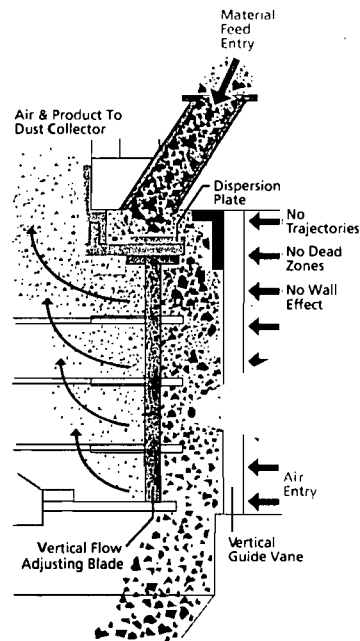
- Simple system control
- Precise, uniform separation
- Less fine returns to the mill

Better product quality

- High separator efficiency
- Improved product particle size distribution from first and second generation separators
- Increased cement quality
- Reduced coarse bypass in the product

The O-Sepa separator is the world standard in high-efficiency separation. F.L.Smidth has supplied O-Sepa separators since 1983. There are now over 425 units installed worldwide.

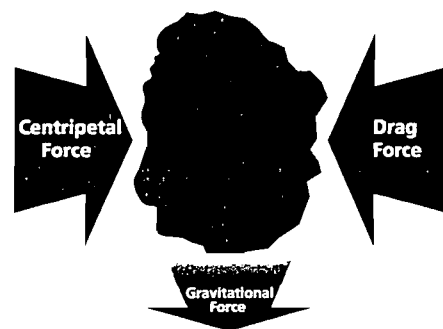
The O-Sepa separator's success, based on its innovative design, continues as a result of superior performance and optimization. There are numerous features that place the O-Sepa separator at the top of industry lists for both performance and mechanical integrity.



Classification Zone

INSTALLATION

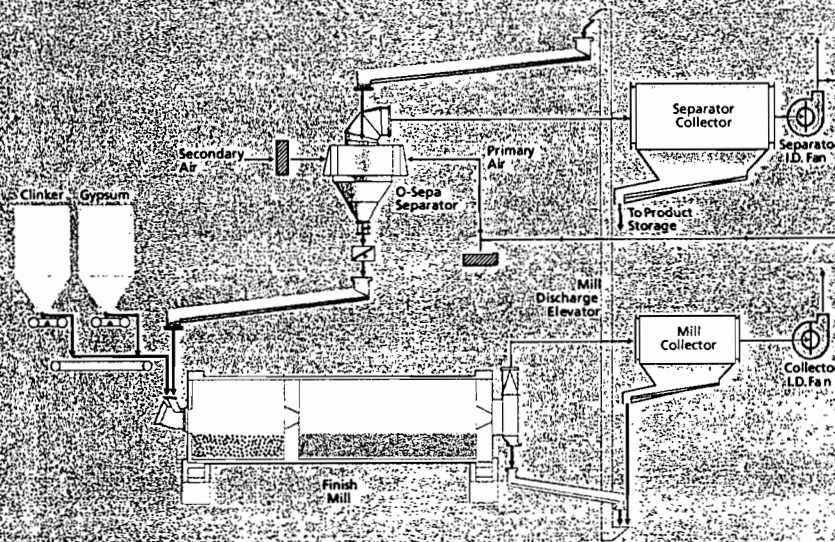
The O-Sepa separator has a compact design requiring minimal space for installation. Its simple circuit layout allows the highly flexible separator to be applied in a variety of systems and to fit any new process requirement or existing system. Installation time for the O-Sepa separator is minimized by its bolted-flange design.



Balance of Forces

The rotor's speed directly affects the centripetal force.
The amount of airflow directly affects the drag force.

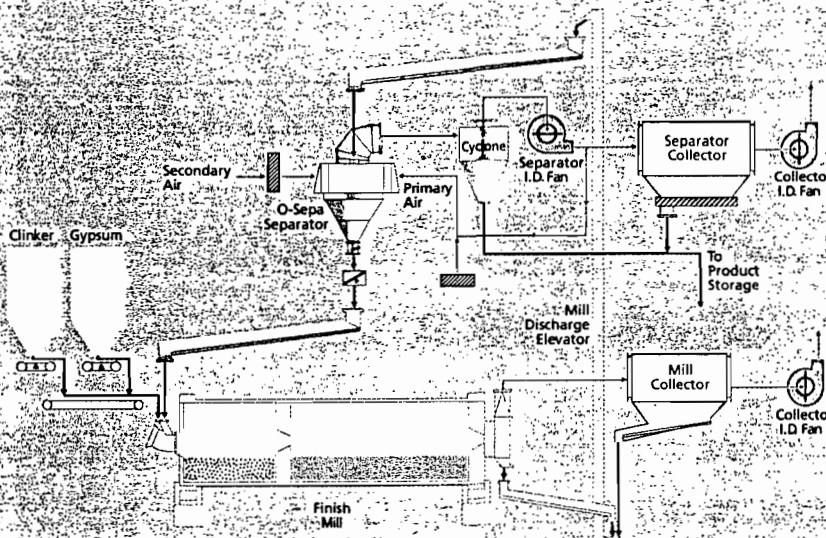
Full Vent System



Alternate Arrangement:

The mill vent gases can be taken through the O-Sepa separator with either system design, thus eliminating one collector and fan.

Cyclone System



FLEXIBILITY

The O-Sepa separator is installed for cement and non-cement applications. The O-Sepa separator can be retrofit into existing ball mill circuits or installed in new mill systems.

A system with dedusting cyclones on the outlet (product) stream can be beneficial for retrofits to existing systems. In this arrangement there is less exhaust gas which can be an advantage in obtaining environmental permits. This compact system, which requires a smaller bag collector, is very flexible and can require less overall space than other system designs.

For new installations where a simpler system containing less equipment and fewer drives is desired a full vent arrangement is possible. In this arrangement the separator fan handles clean gas which reduces maintenance and allows for a higher efficiency fan design. Any recycled air is therefore clean and does not limit the duct arrangement. The dust loading is higher, but of a coarser size, which reduces dust collection problems. This system gives the maximum air cooling or maximum system temperature for controlling product quality.

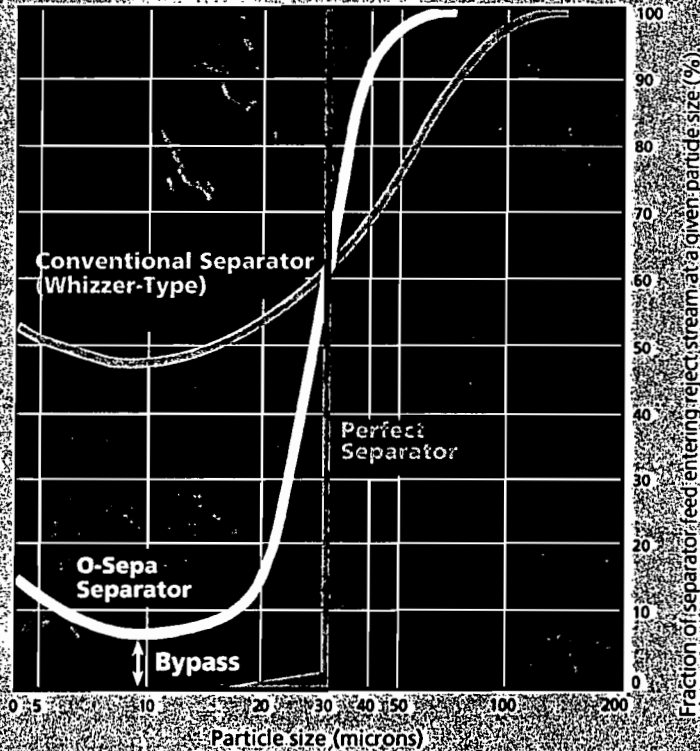
In either arrangement it is possible for all of the classifying air to come from atmosphere. Because of this feature the O-Sepa has a superior cooling capability. The ability to control recirculating material temperatures reduces the chance of ball coating and pack set problems in silos. Further, in either system arrangement it is possible to take the mill vent gases through the separator eliminating the need for a separate dust collector and fan.

Typical Separator Efficiency Curve (Tromp Curve)

The O-Sepa separator properly classifies a higher proportion of feed materials.

The Tromp curve is a plot of the probability of a given size of particle in the separator feed that will be returned to the mill. Thus better separation is indicated by higher probabilities for coarse material, and lower probabilities for fine material.

The Tromp curve is an effective tool when evaluating separator performance. Calculations are based on separator feed, rejects, and product samples. The top side control, which can be determined from the curve, indicates if the seal is operating correctly. Also, the amount of bypass and the extent of the fines tail can be determined. These parameters along with the separator inlet loading give an accurate depiction of the separator's performance in the circuit.



OPERATION

Low Cost Operation

Compared to other separator designs the O-Sepa separator offers improved efficiency. Higher separation efficiency results in less fine material returning to the mill, which in turn reduces the mill power consumption at a given product fineness. System capacity is maximized through the combination of superior grinding efficiency and better product size distribution.

Stable operation is easily achieved through simple system control and precise, uniform separation. The results of superior efficiency and stable operation are evident through increased cement strength and a reduced amount of coarse material present in the product.

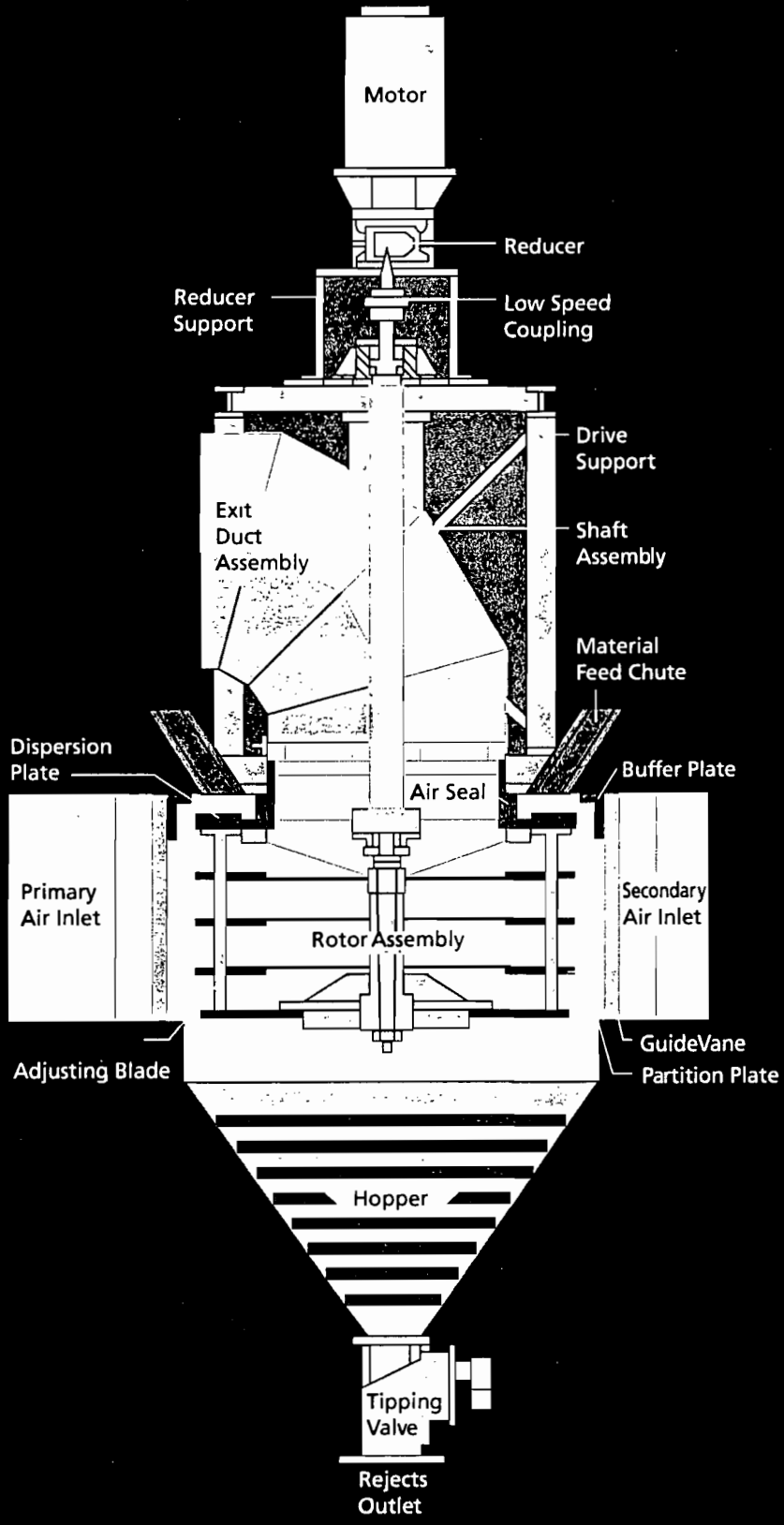
Low Maintenance

Maintenance in the O-Sepa is reduced by specifically addressing the cause and mechanism of wear in each area of the







separator with the most effective wear protection materials. Ceramic tiles lining the separator inlet and exit ducts and the rotor shaft protect against jet abrasion from any dust entrained in the gas streams. The rotor vanes are coated with a spray ceramic for the same reason. The guide vanes around the rotor are made from chromium carbide bulk-welded plate to resist the impact of oversized material rejected from the rotor. The feed chutes are made from abrasion-resistant plate. The air seal and material distribution plate are made from impact and abrasion resistant NiHard castings. The use of dedicated wear materials reduces the maintenance requirements of the separator and saves overall operating costs.

To maximize the protection of the separator bearings the O-Sepa separator incorporates a standard circulating lubrication system. The use of circulating lubrication system ensures a long bearing life.

Wear Protection

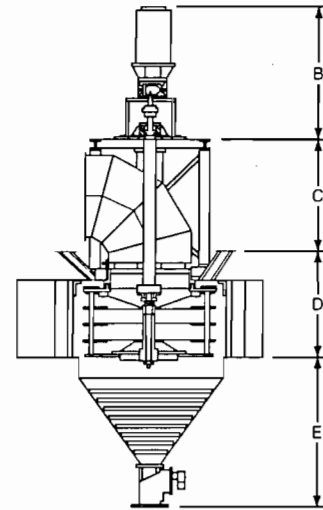
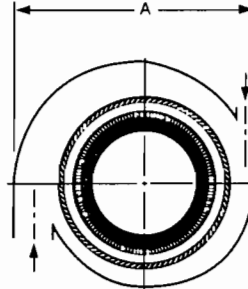
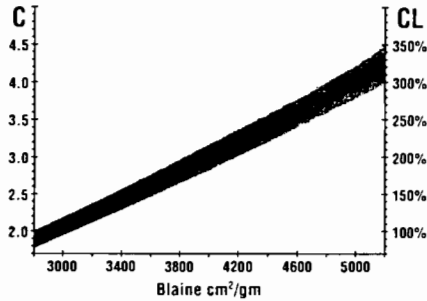


Wear Protection Components

-  Ceramic tile on inlet ducts, outlet ducts, and shaft assembly
-  Spray ceramic coating on rotor
-  Chromium carbide bulk-welded plate for guide vanes
-  NiHard castings for air seal, distribution plate, and buffer ring
-  Abrasion-resistant plate in feed chutes
-  Autogenous hopper lining

How to Size an O-Sepa Separator

- Predict circulation factor.
$$\text{Circulation factor} = \left[1 + \frac{\text{Circulating Load (\%)}}{100\%} \right] = \frac{\text{separator feed}}{\text{production}}$$
- Determine expected system production and feed rate to separator.
(___ mtp production x ___ Circulation factor = ___ mtp feed)
- Pick the separator size (from the chart below) that has rated feed and production which are greater than those expected. If separator will produce several types of cements, use maximum feed and production.



Sizing Chart

| Size | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Typical Drive Type | Rotor Diameter (mm) | Rotor Height (mm) | Speed (rpm) | Motor (kW) | Air (m ³ /min) | Feed (mtp) | Production (mtp) |
|--------|--------|--------|--------|--------|--------|--------------------|---------------------|-------------------|-------------|------------|---------------------------|------------|------------------|
| N-250 | 1522 | *2550 | — | 673 | 1604 | V-belt | 940 | 550 | 250-550 | 25 | 250 | 37.5 | 13 |
| N-350 | 1757 | 1350 | 1190 | 798 | 1510 | Vertical | 1040 | 518 | 170-370 | 35 | 350 | 52.5 | 18 |
| N-500 | 2109 | 1470 | 1396 | 956 | 1993 | Vertical | 1220 | 580 | 190-420 | 55 | 500 | 75 | 26 |
| N-750 | 2517 | 1650 | 1676 | 1107 | 2310 | Vertical | 1460 | 730 | 170-360 | 75 | 750 | 112.5 | 38 |
| N-1000 | 2714 | 1890 | 1693 | 1387 | 2505 | Vertical | 1660 | 850 | 150-320 | 90 | 1000 | 150 | 51 |
| N-1500 | 3294 | 2220 | 2281 | 1434 | 2931 | Vertical | 2000 | 1060 | 120-260 | 110 | 1500 | 225 | 77 |
| N-2000 | 3804 | 2500 | 2541 | 1643 | 2878 | Vertical | 2270 | 1240 | 105-230 | 150 | 2000 | 300 | 102 |
| N-2500 | 4194 | 2590 | 2894 | 1791 | 3275 | Vertical | 2530 | 1390 | 95-205 | 185 | 2500 | 375 | 128 |
| N-3000 | 4689 | 2610 | 3087 | 1933 | 3616 | Horizontal | 2760 | 1530 | 85-190 | 225 | 3000 | 450 | 153 |
| N-3500 | 5154 | 2780 | 3408 | 2077 | 3861 | Horizontal | 2970 | 1660 | 80-175 | 260 | 3500 | 525 | 179 |
| N-4000 | 5459 | 2880 | 3363 | 2515 | 4118 | Horizontal | 3150 | 1780 | 75-165 | 300 | 4000 | 600 | 204 |
| N-4500 | 5750 | 2890 | 3744 | 2331 | 4171 | Horizontal | 3330 | 1900 | 70-155 | 335 | 4500 | 675 | 230 |
| N-5000 | 6074 | 2900 | 3458 | 2806 | 4596 | Horizontal | 3480 | 2000 | 65-150 | 375 | 5000 | 750 | 255 |
| N-5500 | 6300 | 3000 | 3454 | 3330 | 4900 | Horizontal | 3640 | 2100 | 60-145 | 410 | 5500 | 825 | 281 |
| N-6000 | 6613 | 3010 | 3453 | 3607 | 5100 | Horizontal | 3850 | 2200 | 54-135 | 450 | 6000 | 900 | 306 |
| N-7000 | 6991 | 3020 | 4736 | 3237 | 5500 | Horizontal | 4159 | 2371 | 50-125 | 525 | 7000 | 1050 | 357 |

* with V-belt drive, value is B+C

FLSMIDTH

www.flsmidth.com

Up-to-date addresses of worldwide subsidiaries and sales offices are available from our website

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E-mail: indiainfo@flsmidth.com

04-2004-OSEPA

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Hardy Johnson, President
 Florida Division
 Tarmac America, LLC
 455 Fairway Drive
 Deerfield Beach, Florida 33441

2. Article Number
(Transfer from service label)

7001 0320 0001 3692 3098

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X 

Agent

Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? Yes

If YES, enter delivery address below: No

3. Service Type

Certified Mail Express Mail

Registered Return Receipt for Merchandise

Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee)

Yes

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

OFFICIAL USE

960E 3692 3098
7001 0320 0001 3692 3098

Postage \$

Certified Fee

Return Receipt Fee
(Endorsement Required)

Restricted Delivery Fee
(Endorsement Required)


Postmark
Here

Mr. Hardy Johnson, President
 Florida Division
 Tarmac America, LLC
 455 Fairway Drive
 Deerfield Beach, Florida 33441

PS Form 3800, January 2001

See Reverse for Instructions

BEST AVAILABLE COPY

| SECTION | COMPLETE THIS SECTION ON DELIVERY |
|--|--|
| <p>Items 1, 2, and 3. Also complete Restricted Delivery if desired. Attach your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits.</p> <p>Article Addressed to:</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Mr. Hardy Johnson, President Florida Division Tarmac America, LLC 455 Fairway Drive Deerfield Beach, Florida 33441</p> </div> | <p>A. Signature  <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) _____ C. Date of Delivery _____</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p> |
| | <p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> |
| | <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p> |

2. Article Number (Transfer from service label) 7001 0320 0001 3692 2138

PS Form 3800, August 2001 Domestic Return Receipt 102595-02-M-1540

U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

OFFICIAL USE

| | |
|---|------------------|
| Postage \$ | Postmark Here |
| Certified Fee | |
| Return Receipt Fee (Endorsement Required) | |
| Restricted Delivery Fee (Endorsement Required) | |
| Total | |

Sent To: Mr. Hardy Johnson, President
 Florida Division
 Tarmac America, LLC
 455 Fairway Drive
 Deerfield Beach, Florida 33441

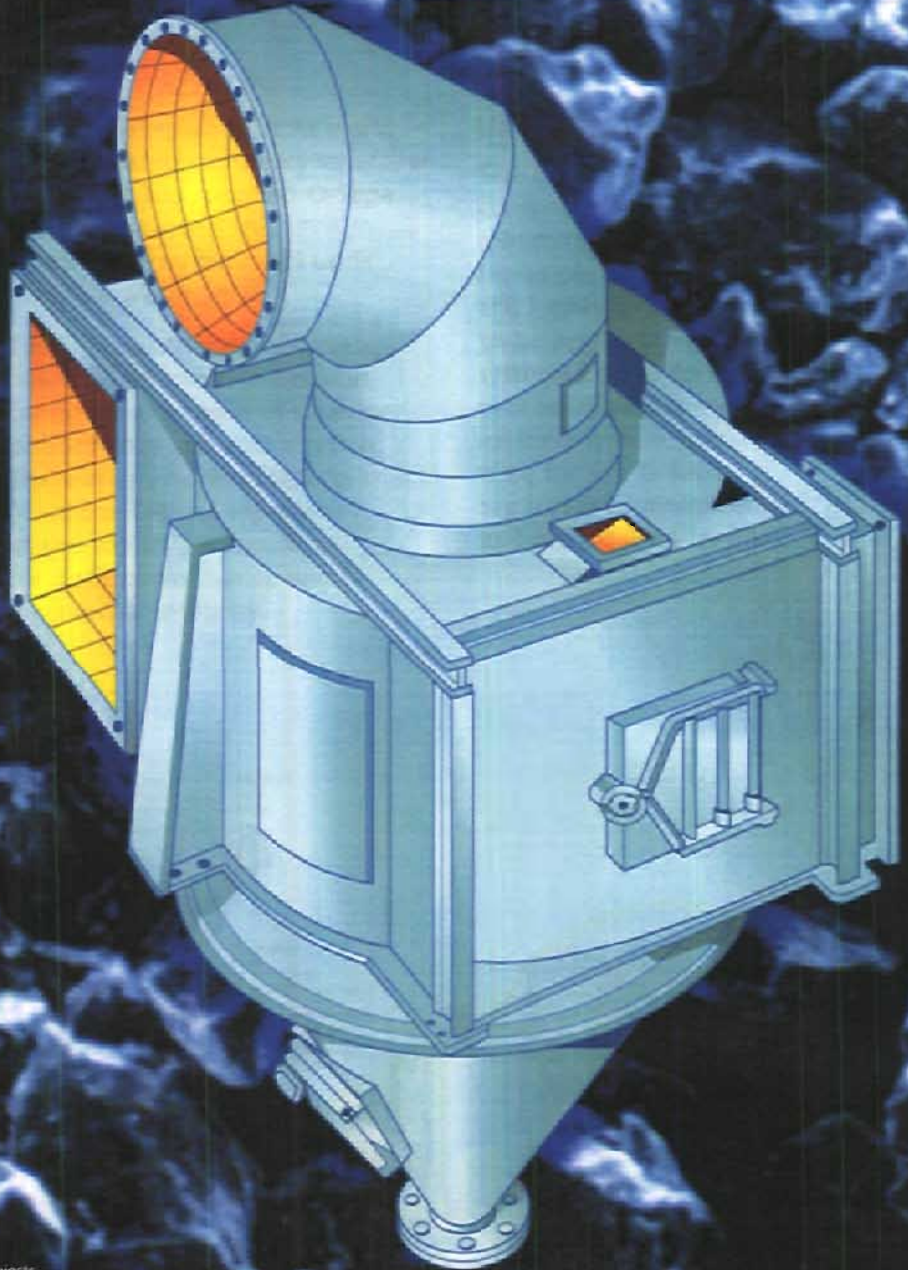
PS Form 3800, January 2001

Instructions

7001 0320 0001 3692 2138

O-Sepa® Separator

- Low Maintenance
- High Efficiency
- Simple Layout



Background shows O-Sepa separator rejects.

FLSMIDTH

Main Features

MILL SYSTEMS

Proven Reliability

- 25 years design and operating experience
- Over 425 units worldwide

Cost Savings

- Reduced specific power consumption
- Increased grinding efficiency
- Low maintenance
- Integral cooling capability

Low Maintenance

- Wear protection targets specific abrasion mechanisms for each separator component
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- Precise, uniform separation
- Less fine returns to the mill

Better product quality

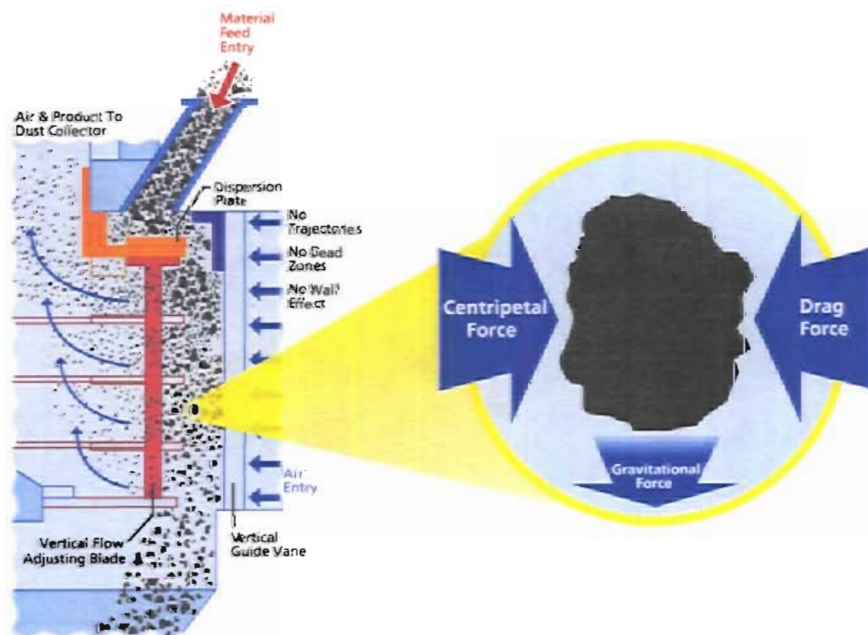
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INSTALLATION

The O-Sepa separator has a compact design requiring minimal space for installation. Its simple circuit layout allows the highly flexible separator to be applied in a variety of systems and to fit any new process requirement or existing system. Installation time for the O-Sepa separator is minimized by its bolted-flange design.

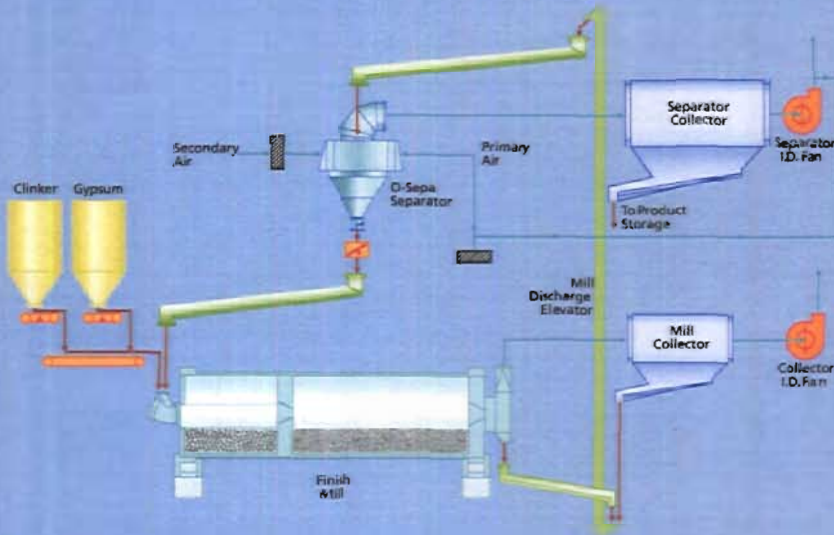


Classification Zone

Balance of Forces

The rotor's speed directly affects the centripetal force.
The amount of airflow directly affects the drag force.

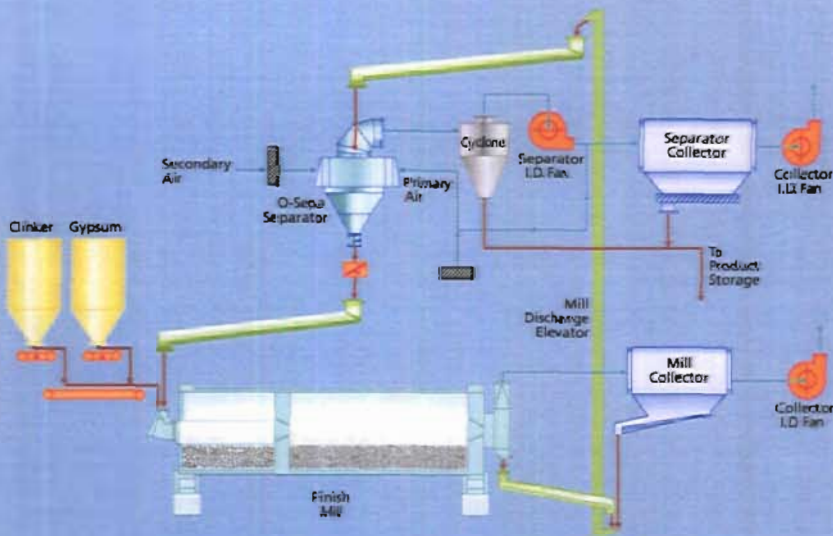
Full Vent System



Alternate Arrangement:

The mill vent gases can be taken through the O-Sepa separator with either system design, thus eliminating one collector and fan.

Cyclone System



FLEXIBILITY

The O-Sepa separator is installed for cement and non-cement applications. The O-Sepa separator can be retrofit into existing ball mill circuits or installed in new mill systems.

A system with dedusting cyclones on the outlet (product) stream can be beneficial for retrofits to existing systems. In this arrangement there is less exhaust gas which can be an advantage in obtaining environmental permits. This compact system, which requires a smaller bag collector, is very flexible and can require less overall space than other system designs.

For new installations where a simpler system containing less equipment and fewer drives is desired a full vent arrangement is possible. In this arrangement the separator fan handles clean gas which reduces maintenance and allows for a higher efficiency fan design. Any recycled air is therefore clean and does not limit the duct arrangement. The dust loading is higher, but of a coarser size, which reduces dust collection problems. This system gives the maximum air cooling or maximum system temperature for controlling product quality.

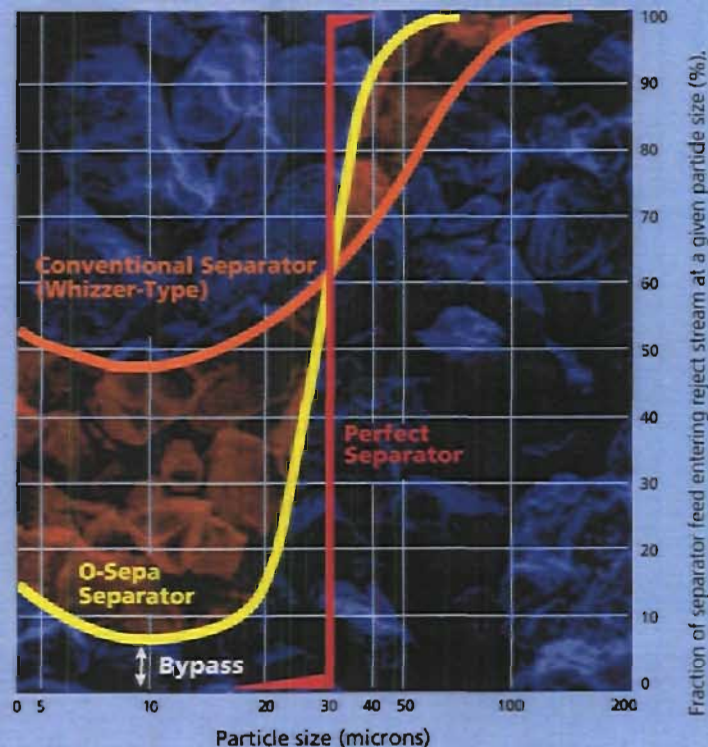
In either arrangement it is possible for all of the classifying air to come from atmosphere. Because of this feature the O-Sepa has a superior cooling capability. The ability to control recirculating material temperatures reduces the chance of ball coating and pack set problems in silos. Further, in either system arrangement it is possible to take the mill vent gases through the separator eliminating the need for a separate dust collector and fan.

Typical Separator Efficiency Curve (Tromp Curve)

The O-Sepa separator properly classifies a higher proportion of feed materials.

The Tromp curve is a plot of the probability of a given size of particle in the separator feed that will be returned to the mill. Thus better separation is indicated by higher probabilities for coarse material, and lower probabilities for fine material.

The Tromp curve is an effective tool when evaluating separator performance. Calculations are based on separator feed, rejects, and product samples. The top side control, which can be determined from the curve, indicates if the seal is operating correctly. Also, the amount of bypass and the extent of the fines' tail can be determined. These parameters along with the separator inlet loading give an accurate depiction of the separator's performance in the circuit.



OPERATION

Low Cost Operation

Compared to other separator designs the O-Sepa separator offers improved efficiency. Higher separation efficiency results in less fine material returning to the mill, which in turn reduces the mill power consumption at a given product fineness. System capacity is maximized through the combination of superior grinding efficiency and better product size distribution.

Stable operation is easily achieved through simple system control and precise, uniform separation. The results of superior efficiency and stable operation are evident through increased cement strength and a reduced amount of coarse material present in the product.

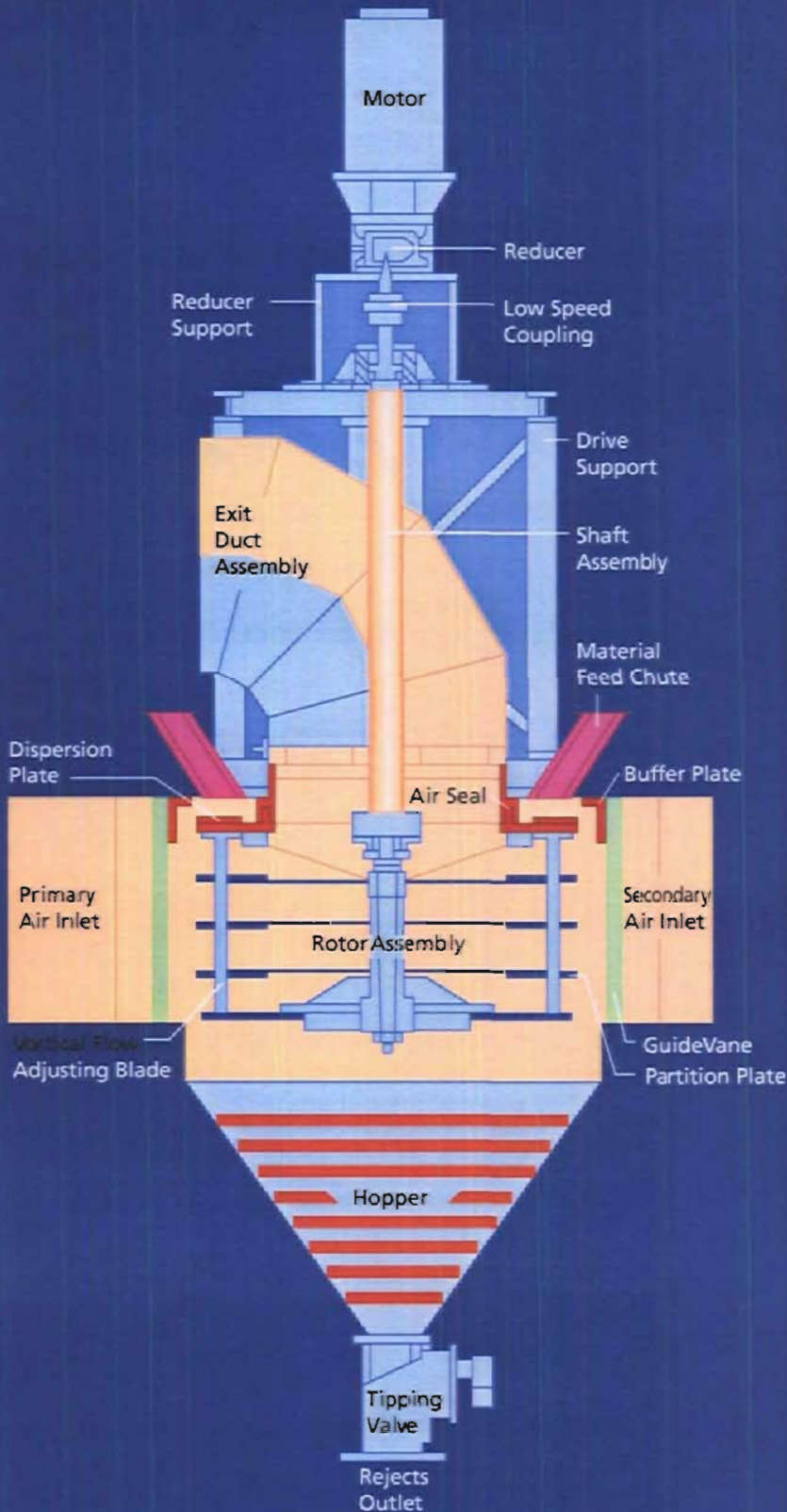
Low Maintenance

Maintenance in the O-Sepa is reduced by specifically addressing the cause and mechanism of wear in each area of the

separator with the most effective wear protection materials. Ceramic tiles lining the separator inlet and exit ducts and the rotor shaft protect against jet abrasion from any dust entrained in the gas streams. The rotor vanes are coated with a spray ceramic for the same reason. The guide vanes around the rotor are made from chromium carbide bulk-welded plate to resist the impact of oversized material rejected from the rotor. The feed chutes are made from abrasion-resistant plate. The air seal and material distribution plate are made from impact and abrasion resistant NiHard castings. The use of dedicated wear materials reduces the maintenance requirements of the separator and saves overall operating costs.

To maximize the protection of the separator bearings the O-Sepa separator incorporates a standard circulating lubrication system. The use of circulating lubrication system ensures a long bearing life.

Wear Protection

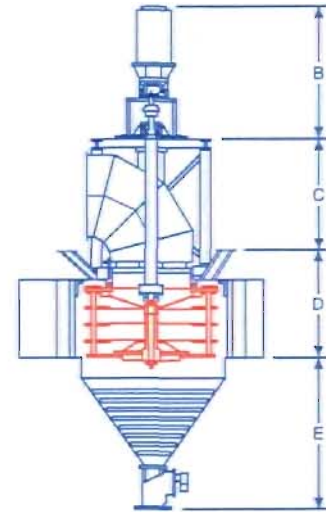
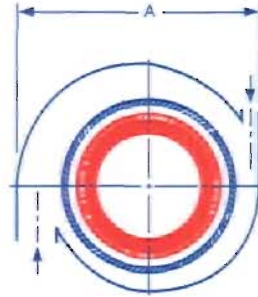
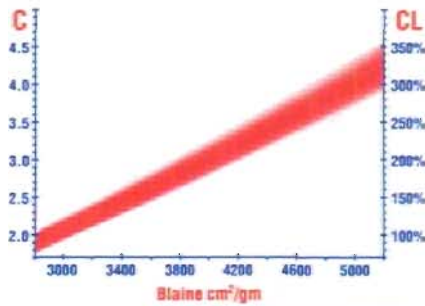


Wear Protection Components

- Ceramic tile on inlet ducts, outlet ducts, and shaft assembly
- Spray ceramic coating on rotor
- Chromium carbide bulk-welded plate for guide vanes
- NiHard castings for air seal, distribution plate, and buffer ring
- Abrasion-resistant plate in feed chutes
- Autogenous hopper lining

How to Size an O-Sepa Separator

- Predict circulation factor. $\text{Circulation factor} = \left[1 + \frac{\text{Circulating Load (\%)}}{100\%} \right] = \frac{\text{separator feed}}{\text{production}}$
- Determine expected system production and feed rate to separator.
(____ mtpH production x ____ Circulation factor = ____ mtpH feed)
- Pick the separator size (from the chart below) that has rated feed and production which are greater than those expected. If separator will produce several types of cements, use maximum feed and production.



Sizing Chart

| Size | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Typical Drive Type | Rotor Diameter (mm) | Rotor Height (mm) | Speed (rpm) | Motor (kW) | Air (m ³ /min) | Feed (mtpH) | Production (mtpH) |
|--------|--------|--------|--------|--------|--------|--------------------|---------------------|-------------------|-------------|------------|---------------------------|-------------|-------------------|
| N-250 | 1522 | 2550 | — | 673 | 1604 | V-belt | 940 | 550 | 250-550 | 25 | 250 | 37.5 | 13 |
| N-350 | 1757 | 1350 | 1190 | 798 | 1510 | Vertical | 1040 | 518 | 170-370 | 35 | 350 | 52.5 | 18 |
| N-500 | 2109 | 1470 | 1396 | 956 | 1993 | Vertical | 1220 | 580 | 190-420 | 55 | 500 | 75 | 26 |
| N-750 | 2517 | 1650 | 1676 | 1107 | 2310 | Vertical | 1460 | 730 | 170-360 | 75 | 750 | 112.5 | 38 |
| N-1000 | 2714 | 1890 | 1693 | 1387 | 2505 | Vertical | 1660 | 850 | 150-320 | 90 | 1000 | 150 | 51 |
| N-1500 | 3294 | 2220 | 2281 | 1434 | 2931 | Vertical | 2000 | 1060 | 120-260 | 110 | 1500 | 225 | 77 |
| N-2000 | 3804 | 2500 | 2541 | 1643 | 2878 | Vertical | 2270 | 1240 | 105-230 | 150 | 2000 | 300 | 102 |
| N-2500 | 4194 | 2590 | 2894 | 1791 | 3275 | Vertical | 2530 | 1390 | 95-205 | 185 | 2500 | 375 | 128 |
| N-3000 | 4689 | 2610 | 3087 | 1933 | 3616 | Horizontal | 2760 | 1530 | 85-190 | 225 | 3000 | 450 | 153 |
| N-3500 | 5154 | 2780 | 3408 | 2077 | 3861 | Horizontal | 2970 | 1660 | 80-175 | 260 | 3500 | 525 | 179 |
| N-4000 | 5459 | 2880 | 3363 | 2515 | 4118 | Horizontal | 3150 | 1780 | 75-165 | 300 | 4000 | 600 | 204 |
| N-4500 | 5750 | 2890 | 3744 | 2331 | 4171 | Horizontal | 3330 | 1900 | 70-155 | 335 | 4500 | 675 | 230 |
| N-5000 | 6074 | 2900 | 3458 | 2806 | 4596 | Horizontal | 3480 | 2000 | 65-150 | 375 | 5000 | 750 | 255 |
| N-5500 | 6300 | 3000 | 3454 | 3330 | 4900 | Horizontal | 3640 | 2100 | 60-145 | 410 | 5500 | 825 | 281 |
| N-6000 | 6613 | 3010 | 3453 | 3607 | 5100 | Horizontal | 3850 | 2200 | 54-135 | 450 | 6000 | 900 | 306 |
| N-7000 | 6991 | 3020 | 4736 | 3237 | 5500 | Horizontal | 4159 | 2371 | 50-125 | 525 | 7000 | 1050 | 357 |

* with V-belt drive, value is B+C



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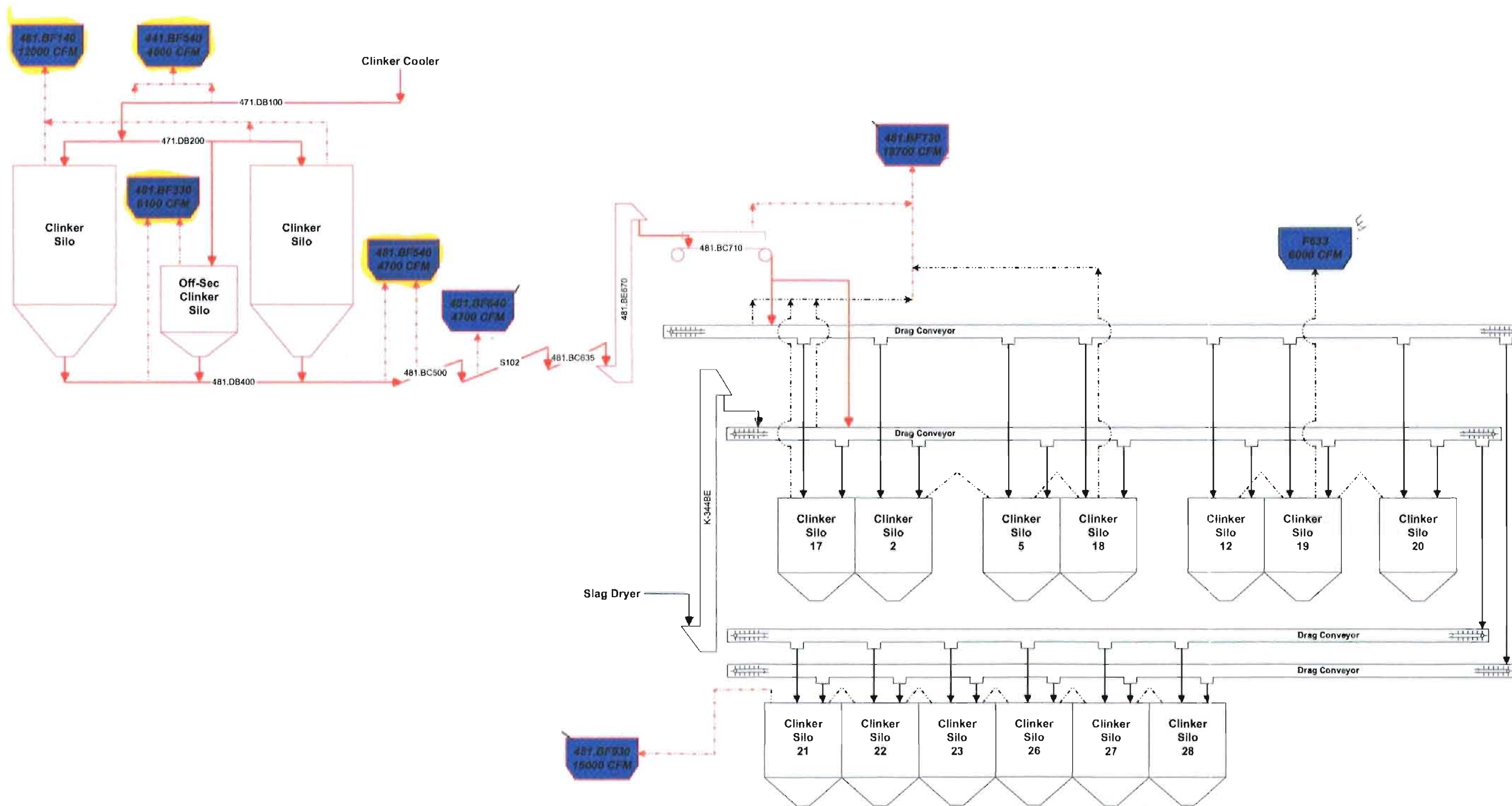
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04-2004-OSEPA



Clinker Handling & Storage [EU-027]

| | | |
|---|--|---|
| DESCRIPTION FACILITY SCHEMATICS EMISSION UNITS | TITLE: PENNSUCO CEMENT |  |
| | FILENAME: CEM-T5-SCHEMATIC-CLINKERSTORAGE_12_04.VSD | |
| | LAST REVISION DATE: 12/8/2004 | |

VIA ELECTRONIC MAIL

20 February 2004

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Ms. Mallika Muthiah
Air Quality Management Division
Miami-Dade County Environmental Resources Management
33 SW 2nd Avenue
Miami, Florida 33130-1540

RE: **Pennsuco Cement**
Miami-Dade County – AP
Draft Title V Permit Revision
Permit No. 250020-013-AV

Dear Ms. Muthiah:

Following are comments submitted on behalf of Tarmac America, LLC. (Tarmac) regarding Miami-Dade County's Department of Environmental Resources Management [DERM] issuance of the draft Title V permit revision referenced above. We appreciate the opportunity to submit these comments and look forward to discussing them with you at your earliest convenience.

- (1) The Intent to Issue is scheduled to be published the week of February 23rd.
- (2) This draft permit revision contains numerous specific conditions and references to the Consent Agreement between Tarmac and DERM, signed on February 2, 1998, including a new compliance plan regarding operation of CEMS at Kiln 2. As was explained in correspondence dated October 9, 2002 and December 16, 2002, the basis for the Consent Agreement – compliance with NOx emission limits – has been satisfied. It is Tarmac's understanding, therefore, that this Consent Agreement has expired and no longer provides authority for conditions in the Title V permit. Accordingly, Tarmac requests that all Title V permit conditions relying on the Consent Agreement for their authority be deleted, as well as all references to the Consent Agreement or the requirement to operate NOx CEMS (other than perhaps a historical reference in the "documents on file with the permitting authority" section, if desired).

- (3) Tarmac appreciates DERM's efforts regarding establishing that this facility is an area, not major, source for HAPs. However, the draft permit references the new kiln system which at this instance is not a part of the Title V operation permit. The revision goes on to state that once the new kiln starts up, the source will be major. It is premature to make such a conclusion, and inappropriate to make such a pre-judged applicability statement in the Title V permit. Site-specific data will be available when the new kiln conducts its initial compliance tests, and Tarmac requests that area or major source status for HAPs be re-determined for the facility at that time and/or at the new kiln inclusion into the Title V permit. Therefore, Tarmac requests that the permit simply state that the facility is currently an area HAP source. If desired, a reference could be included that the facility's HAP status will be re-assessed after the new kiln starts up. Tarmac currently expects that the new kiln will startup in mid-to-late Summer 2004.
- (4) Facility-wide Conditions 8 and 9 ("Kiln No. 2" and "Kiln No. 3"), states that the Kiln 2 and 3 data used to demonstrate non-major HAP status cannot be used for any other purpose. Tarmac does not understand the rationale for this limitation, and believes that this data is accurate, valuable, site-specific data that may be useful in the future. Tarmac request that this language be deleted.
- (5) In the "Permitting Note" under Subsection B., the reference to 40 CFR Part 60, Subpart F (NSPS for Portland Cement Plants) has been deleted. It is Tarmac's understanding that some Subpart F requirements apply to Tarmac's facility because it is an area HAP source.
- (6) Condition B.1. and D.1. – This rule language from 40 CFR 63.1356 was revised by EPA on April 5, 2002. Tarmac requests that these conditions be revised to reflect the current rule language. Note that the July 1, 2003 version of the CFR appears to contain a clerical error (subsections (a)(1) and (a)(2) are missing); you have to use the April 5 amendments and the prior version of this section to obtain the full correct rule quote.
- (7) Condition B.12. The column "EPA Testing Method" lists "Method 9/COM" under the visible emissions row. Rule 63.1349, Table 1, however states that COMs are only required for kilns, "if feasible." Accordingly, Tarmac requests that the reference to COMs be deleted from this condition.
- (8) Condition B.29. The authority for this condition is revised to include 40 CFR 63.1355(a), (b), and (c), but the language from subparagraph (c) is not included.

.../3

- (9) Subsection D. There are several revisions in the description section to delete the reference to NSPS Subpart F and add NESHAP Subpart LLL. However, 40 CFR 63.1340 states that the NESHAP LLL only applies to these types of activities if the facility is major for HAPs. Similarly, Condition D.2 states that the activities in this Subsection of the permit shall comply with 40 CFR Part 63, Subpart (General Conditions), but Subpart A only applies if LLL (or another NESHAP) applies.
- (10) Condition D.7 appears to be citing this Title V permit revision as authority for the revised condition. This is circular and it is otherwise inappropriate to cite a Title V permit as authority for a Title V permit condition. Other conditions citing to this permit revision authority for the condition should similarly be corrected.

Thank you again for your consideration of our comments and should you have any questions please contact me at (954) 425-4165.

Sincerely,



Scott Quaas
Environmental Manager
Environmental Services—Florida Business

cc: P. Wong – DERM
A. Townsend
D. Buff – Golder
R. Manning – HGS