

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

September 5, 2006

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

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

Re: Draft Permit No. 0250020-019-AC (PSD-FL-360A)
Titan Florida Pennsoco Cement Plant
Modification of Permit No. 0250020-017-AC (PSD-FL-360)
Reactivation of Finish Mill No. 2 and Miscellaneous Revisions


Dear Mr. Johnson:

The Department of Environmental Protection hereby retracts the Intent to Issue Air Permit and all other documents enclosed and transmitted to you by cover letter dated June 29, 2006 with the same reference numbers listed above. That Intent to Issue is replaced with the one enclosed and the other enclosed documents replace the corresponding ones sent to you with the mentioned letter of June 29. It is our understanding that the previously transmitted package was not publicly noticed because two new baghouses installed as part of the fugitive emissions control plan were not included. They are included in the attached draft permit.

The enclosed package includes the "Technical Evaluation and Preliminary Determination", "Draft Permit", "Written Notice of Intent to Issue Air Permit", and "Public Notice of Intent to Issue Air Permit". The PUBLIC NOTICE must be published one time only in a newspaper of general circulation in the area affected, pursuant to Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, Program Administrator, South Permitting Section, at the letterhead address. If you have any questions, please contact the Project Engineer, Teresa Heron, at 850/921-9529 or Mr. Linero, at 850/921-9523.

Sincerely,


Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/aal/th

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> 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. 	<p>A. Signature <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p>
<p>1. 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)</p>	<p>7000 1670 0013 3110 1205</p>
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

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

7000 1670 0013 3110 1205

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

PS Form 3800, May 2000 See Reverse for Instructions

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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

Mr. Hardy Johnson, President
Tarmac America, LLC, Florida Business
445 Fairway Drive
Deerfield Beach, Florida 33441

Draft Air Permit No. 0250020-019-AC
Titan Florida Pennsuco Cement Plant
Finish Mill No. 2 and Miscellaneous Revisions
Miami-Dade County County, Florida

Applicant: The applicant's name and business address are Tarmac America, LLC., 455 Fairway Drive, Deerfield Beach, Florida 33441. The applicant's authorized representative is Mr. Hardy Johnson, President.

Facility Location: The Titan Florida Pennsuco Cement Plant is located at 11000 NW 121 Way, Medley, Miami-Dade County, Florida.

Project: On February 24, 2006, the applicant submitted an application to revise original Permit No. 0250020-017-AC (PSD-FL-360), which authorized a production increase for the dry process cement production line. The primary revisions include: reactivating Finish Mill No. 2 for operation when at least one of the other finish mills is down; updating the information for several process baghouses; and reducing PM/PM₁₀ emissions standards for the dry process main kiln/raw mill exhaust. As a result, the original PSD netting analysis was revisited and revised to ensure that the changes did not result in a PSD significant emissions increase. Details of the project are provided in the in the application and the enclosed "Technical Evaluation and Preliminary Determination".

Permitting Authority: Applications for 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, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. 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 or phone number listed above.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment 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, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed 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 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.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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. 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, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit. 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 the attached Public Notice or within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit, 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 interests will be affected by the agency determination; (c) A statement of how and when each 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.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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 Written Notice of Intent to Issue Air Permit. 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 in this proceeding.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

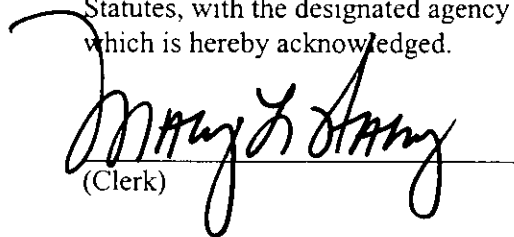
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this "Written Notice of Intent to Issue Air Permit" package (including the Public Notice, the Technical Evaluation and Preliminary Determination, and the Draft Permit) was sent by certified mail (*) and copies were electronically mailed before the close of business on 9/5/06 to the persons listed below.

- Hardy Johnson, Tarmac America*
- Terry Lancaster, Titan America (via e-mail)
- David A. Buff, P.E., Golder Associates Inc. (via e-mail)
- Patrick Wong, Miami-Dade DERM (via e-mail)
- Darrel Graziani, DEP SED (via e-mail)
- Jim Little, EPA Region 4 (via e-mail)
- John Bunyak, National Park Service (via e-mail)

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)

9/5/06
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection

Draft Air Permit No. 0250020-019-AC (PSD-FL-360A)
Tarmac Florida LLC – Titan Florida Pennsuco Cement Plant
Medley, Miami-Dade County

Applicant: The applicant's name and business address are Tarmac America, LLC., 455 Fairway Drive, Deerfield Beach, Florida 33441. The applicant's authorized representative is Mr. Hardy Johnson, President.

Facility Location: The Titan Florida Pennsuco Cement Plant is located at 11000 NW 121 Way, Medley, Miami-Dade County, Florida.

Project: On February 24, 2006, the applicant submitted an application to revise original Permit No. 0250020-017-AC (PSD-FL-360), which authorized a production increase for the dry process cement production line. The primary revisions include: reactivating Finish Mill No. 2 for operation when at least one of the other finish mills is down; updating the information for several process baghouses as installed; and reducing PM/PM₁₀ emissions standards for the dry process main kiln/raw mill exhaust. As a result, the original PSD netting analysis was revisited and revised to incorporate the changes.

Only emissions of particulate matter are affected by this project. Potential emissions will decrease by 2 tons per year of particulate matter and by 1 ton per year of particulate matter with a particle diameter of less than 10 microns. The Department allowed a comparison of potential emissions because the primary purpose is to update baghouse information for the actual equipment installed in accordance with original Permit No. 0250020-017-AC (PSD-FL-360), which was issued less than 7 months ago. Therefore, the revised permit is not subject to PSD preconstruction review (Rule 62-212.400, F.A.C.).

Permitting Authority: Applications for 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, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114 and the facsimile number is 850/921-9533.

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 or phone number listed above. Copies of the project file are also available at the Miami-Dade County Department of Environmental Resources Management (DERM), Air Facilities Section, 33 SW 2nd Avenue, Suite 900. DERM's telephone number is 305/372-6925 and the facsimile number is 305/372-6954. Key documents related to the present permitting action may be viewed at the following web site:

www.dep.state.fl.us/Air/permitting/construction/titan.htm

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment 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, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

proposed 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.

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 this Public Notice. Written comments must be provided to the Permitting Authority at the above address. 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 to Issue Air Permit. 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.

**TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION**

PROJECT

Project No. 0250020-019-AC (PSD-FL-360A)
Tarmac America LLC. / Titan Florida Pennsuco Cement Plant
Revision of Permit No. 0250020-017-AC (PSD-FL-360)
Reactivation of Finish Mill No. 2 and Miscellaneous Revisions

COUNTY

Miami-Dade County, Florida

APPLICANT

Tarmac America, LLC, Florida Business
445 Fairway Drive
Deerfield Beach, Florida 33441

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Air Permitting South Program



September 5, 2006 (Replaces document dated June 29, 2006)

{Filename: Tarmac - TEPD - 019AC}

1. APPLICATION AND PROJECT INFORMATION

Applicant

Mr. Hardy Johnson, President
 Tarmac America, LLC, Florida Business
 445 Fairway Drive
 Deerfield Beach, Florida 33441

Facility Location

Tarmac America LLC, a subsidiary of Titan America LLC, operates a cement and building materials facility at 11000 NW 121 Way, Medley, Miami-Dade County. The facility includes a quarry, cement plant, ready-mix plant, and block plant operated by Titan/Tarmac's Florida Business Unit that includes Titan Florida Aggregate, Titan Florida Cement, Tarmac Block and Tarmac Ready-Mix. Titan Florida's Pennsuco Cement Plant is located on the site.

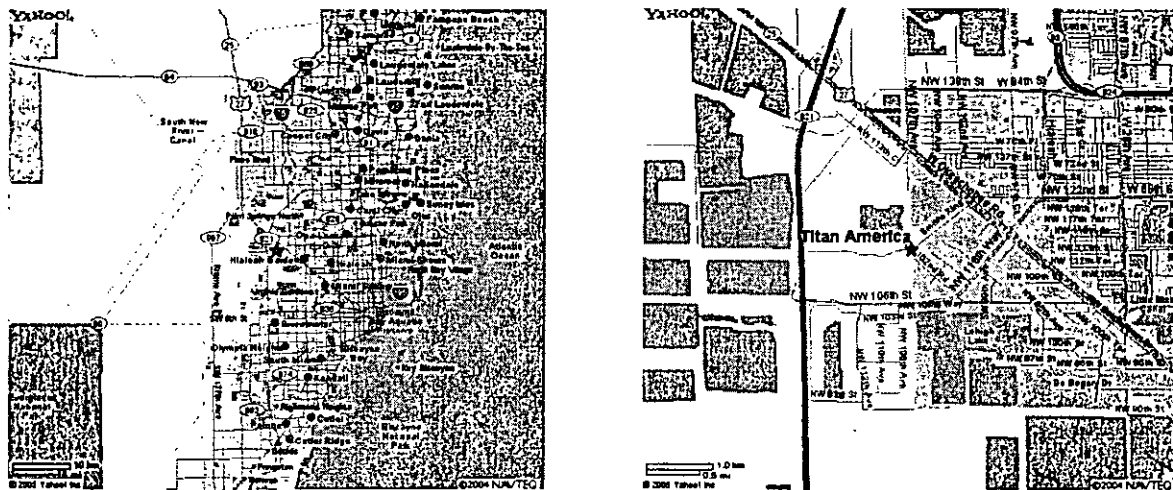


Figure 1. Titan Florida Pennsuco Cement Plant in Medley, Miami-Dade County

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

Standard Industrial Classification Code (SIC)

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

Facility Regulatory Classification

The existing facility is regulated in accordance with the following classifications.

Title III: The existing facility is a potential major source of hazardous air pollutants (HAP).

Title IV: The existing facility operates no units subject to the Acid Rain provisions of the Clean Air Act.

Title V: The existing facility is a "Major Source of Air Pollution or Title V Source" in accordance with the definitions in Rule 62-212.200, F.A.C. and is subject to Chapter 213, F.A.C.

PSD: The existing facility is classified as a "Major Stationary Source" (or PSD-major facility) and is subject to the applicable preconstruction review requirements of Rule 212.400(PSD), F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

NSPS: This existing facility operates units subject to the following New Source Performance Standards in 40 CFR 60 adopted and incorporated by reference in Rule 62-204.800, F.A.C.: Subpart A (General Provisions); Subpart F (Portland Cement Plants); Subpart Y (Coal Preparation Plants); and Subpart OOO (Nonmetallic Mineral Processing Plants).

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

NESHAP: This facility operates units subject to the following National Emission Standards for Hazardous Air Pollutants in 40 CFR 63 adopted and incorporated by reference in Rule 62-204.800, F.A.C.: Subpart A (General Provisions); and Subpart LLL (Portland Cement Manufacturing Industry).

Previous Modernization Project and Related Permits

In April of 1999, the Miami-Dade Department of Environmental Resources Management (DERM) issued a permit to Titan to modernize the plant by replacing the wet process pyroprocessing lines with modern dry process technology including a preheater and calciner (PH/C). PSD did not apply to the modernization project because the differences between emission increases from the new line and the emissions reductions from the shutdown of the old wet process lines were less than the significant emissions rates for each PSD pollutant. This was 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. A description of the modernization project is provided in the Technical Evaluation and Preliminary Determination (TEPD) prepared by DERM.

On May 1, 2001, DERM modified and re-issued the air construction permit to expand the modernization project. The modernized cement plant was permitted to produce up to 250 tons per hour (TPH) of clinker with an annual production rate of 1,642,500 tons per consecutive 12 months. 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.

Titan completed basic construction of the dry process kiln line in June of 2004. Compliance tests were conducted in October and November 2004. On May 31, 2005, the Department of Environmental Protection (Department) issued air construction Permit No. 0250014-016-AC to reflect the final physical configuration of the modernization project. On December 2, 2005, the Department issued air construction Permit No. 0250014-017-AC (PSD-FL-360) to modify the previous permit and authorize an increase in annual cement clinker production to 2,190,000 tons per consecutive 12 months. The revised project was subject to PSD preconstruction review for CO emissions. The details of that permitting action are reflected in the TEPD and final permit for that project.

Proposed Revised Project Description

On February 24, 2006, the applicant submitted an application to revise original Permit No. 0250020-017-AC (PSD-FL-360), which authorized a production increase for the dry process cement production line. The revisions include:

1. For the original project, the applicant intended to shutdown Finish Mill No. 2. However, the applicant now proposes to reactivate Finish Mill No. 2 for backup operation when at least one of the other finish mills is down.
2. Between December 2005 to February 2006, Titan conducted a thorough review to inventory all process baghouses contained in the previous permit applications and permits. The purpose of this review was to verify and document the baghouse design parameters for the installed equipment. From this review, Titan revised flow rate information for specific baghouses within each of the cement process emissions units. Based on the information gathered during the inventory, PM/PM₁₀ emission rates from the baghouses were also updated as presented in Table 3-4 of the application for this permit modification. The applicant proposes to update the original permit with this information.
3. The installed baghouse controlling the dry process main kiln/raw mill exhaust performs much better than expected. The applicant proposes to reduce the PM/PM₁₀ emissions standards for the dry process main kiln/raw mill exhaust to offset any perceived emissions increases from the other changes.
4. Titan installed two new truck loadout baghouses as part of the Fugitive Dust Control Plan. The baghouses will represent a reduction in actual particulate matter (PM) emissions, since PM emissions now released as fugitive emissions will be captured and passed through baghouse dust collectors before being vented to the atmosphere.

Specifically, the applicant requests the following changes to air construction Permit No. 0250020-017-AC (PSD-FL-360).

Finish Mill Nos. 1, 2, 3, 4, and 6 (EU 010, 011, 012, 013, 030)

Existing Finish Mill No. 2 will be added as a backup finish mill, which will operate only when another mill is shut down. Particulate matter emissions from Finish Mill No. 2 (EU 011) will be controlled by Baghouses #F-213 and #F-230. Baghouse #F-330 controlling Finish Mill No. 3 (EU 012) will be renumbered to # F-332. Baghouse #F-728 controlling Finish Mill No. 4 (EU 013) will be renumbered to #F-730. In addition to the two existing baghouses, Baghouse

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

#516.BF510 was also installed for Finish Mill No. 6 (EU 030). The list of emission points in the permit should be revised to identify installed Baghouses #F-213, #F-230, and #516.BF510. There are now 13 baghouses (emission points) associated with Finish Mill Nos. 1, 2, 3, 4, and 6.

Potential PM/PM₁₀ emissions from Finish Mill No. 2 are 10.62 TPY. Although Finish Mill No. 2 is a new source of emissions, this backup unit will only operate when one of the other finish mills is down. Therefore, some of the emissions will be offset by the down finish mill. Based on the updated inventory information, baghouse air flows and emissions will change as follows:

Emissions Unit	Baghouse	From	To
Finish Mill No. 1 (EU 010)	#F-130	12,000 acfm	16,480 acfm
Finish Mill No. 2 (EU 011)	#F-213	--	11,800 acfm
Finish Mill No. 2 (EU 011)	#F-230	--	16,480 acfm
Finish Mill No. 3 (EU 012)	#F-332	20,000 acfm	25,000 acfm
Finish Mill No. 6 (EU 030)	#516.BF510	--	1,950 acfm

All particulate matter emitted from the baghouses is assumed to be PM₁₀. Total potential PM/PM₁₀ emissions from all finish mill baghouses should be changed from 133.83 TPY to 136.2 TPY.

Clinker Handling and Storage System (EU 027)

Existing baghouse #K-447 controlling Silo #17 (EU 027) was added, which brings the total number of emissions points at the Clinker Handling and Storage System to 9 baghouses. The revised process flow diagram in Attachment TM-EU2-11b to the application shows baghouse #K447 and the correct air flow routes. All particulate matter emitted from the baghouses is assumed to be PM₁₀. Total potential PM/PM₁₀ emissions from all Clinker Handling and Storage System baghouses should be changed from 19.7 TPY to 22.7 TPY.

Cement Storage, Loadout, and Packhouse (EUs 014, 015, 016)

Based on the updated inventory information, the revised final configuration for the baghouses controlling the Cement Storage (EU 014), Loadout (EU015), and Packhouse (EU 016) indicates the following minor changes to the baghouse air flows:

Emissions Unit	Baghouse	From	To	PM/PM ₁₀ Emissions (TPY)
Cement Loadout (EU 015)	#B-110	3,000 acfm	2,500 acfm	No change
Cement Loadout (EU 015)	#B-210	3,000 acfm	2,500 acfm	No change
Cement Loadout (EU 015)	#B-382	5,000 acfm	5,100 acfm	No change
Cement Loadout (EU 015)	#VL002	Not Present	2,400 acfm	+2.70
Cement Loadout (EU 015)	#VL003	Not Present	2,400 acfm	+2.70

All particulate matter emitted from the baghouses is assumed to be PM₁₀. Total potential PM/PM₁₀ emissions from all Cement Storage, Loadout, and Packhouse System baghouses should be changed from 31.2 TPY to 36.30 TPY. The apparent increases due to new Baghouses VL002 and VL003 are offset by a greater decrease in unquantified fugitive emissions.

Coal Handling System (EU 026)

Baghouse #461.BF300 controlling the Coal Mill (EU 026) is renumbered to #461.BF350. Based on the updated inventory information, the baghouse air flow changed as follows:

Emissions Unit	Baghouse	From	To
Coal Handling (EU 026)	#461.BF350	5,500 acfm	5,550 acfm

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

All particulate matter emitted from the baghouse is assumed to be PM₁₀. Total potential PM/PM₁₀ emissions from all Coal Handling System baghouses should be changed from 3.10 TPY to 3.21 TPY.

Raw Mill and Pyroprocessing System (EU 028)

For the main kiln/raw mill stack (EU 028), the applicant requests that the PM emissions limit be revised from 0.067 lb/ton dry kiln preheater feed (28.5 lb/hour) to 0.063 lb/ton dry kiln preheater feed (26.8 lb/hour) and that the PM₁₀ emissions limit be revised from 0.056 lb/ton dry kiln preheater feed (23.9 lb/hour) to 0.053 lb/ton dry kiln preheater feed (22.5 lb/hour). For the main kiln/raw mill stack, the proposed revision would reduce potential PM emissions from 125 TPY to 117 TPY and potential PM₁₀ emissions from 105 TPY to 99 TPY. No other changes are requested for any other pollutants originally specified for the main kiln/raw mill exhaust in Permit No. 0250020-017-AC (PSD-FL-360).

2. RULE APPLICABILITY

Federal Rules

The facility is subject to the applicable federal provisions regarding air quality as established by the EPA in the following sections of the Code of Federal Regulations (CFR).

40 CFR 50 - National Primary and Secondary Ambient Air Quality Standards

40 CFR 60 - New Source Performance Standards (NSPS)

Subpart A. General NSPS Provisions

Subpart F. Standards of Performance for Portland Cement Plants

Subpart Y. Standards of Performance for Coal Preparation Plants

40 CFR 63 - National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Subpart A. General Provisions

Subpart LLL. Portland Cement Manufacturing Industry

The existing Portland cement plant is a major source of hazardous air pollutants (HAP) because it has the potential to emit at least 10 tons per year (TPY) of at least one HAP and/or 25 TPY of all combined HAPs. Therefore, the plant is subject to the Maximum Achievable Control Technology (MACT) requirements for HAPs as specified in Subpart LLL of 40 CFR 63. The kiln is considered new kiln at an existing brownfield site. The proposed project to revise the previous air construction permit does not trigger any new regulatory requirements.

State Rules

The facility is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). The facility is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code.

<u>F.A.C. Citation</u>	<u>Description</u>
Chapter 62-4	Permits.
Rule 62-204.220	Ambient Air Quality Protection
Rule 62-204.240	Ambient Air Quality Standards
Rule 62-204.260	Prevention of Significant Deterioration Increments
Rule 62-204.360	Designation of Prevention of Significant Deterioration Areas
Rule 62-204.800	Federal Regulations Adopted by Reference
Rule 62-210.300	Permits Required
Rule 62-210.350	Public Notice and Comments
Rule 62-210.370	Reports
Rule 62-210.550	Stack Height Policy
Rule 62-210.650	Circumvention

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

<u>F.A.C. Citation</u>	<u>Description</u>
Rule 62-210.700	Excess Emissions
Rule 62-210.900	Forms and Instructions
Rule 62-212.300	General Preconstruction Review Requirements
Rule 62-212.400	Prevention of Significant Deterioration (PSD) of Air Quality
Chapter 62-213	Operation Permits for Major Sources of Air Pollution
Rule 62-296.320	General Pollutant Emission Limiting Standards
Rule 62-296.407	Portland Cement Plants
Rule 62-297.310	General Test Requirements
Rule 62-297.401	Compliance Test Methods
Rule 62-297.570	Test Reports
Rule 62-297.520	EPA Continuous Monitor Performance Specifications
Rule 62-297.701	Portland Cement Plants

The proposed project does not trigger any new regulatory requirements. PSD applicability for the project is discussed in the following sections.

PSD Applicability Review – General

The Department regulates major air pollution facilities in accordance with Florida's Prevention of Significant Deterioration (PSD) of Air Quality program, as approved by the EPA in Florida's State Implementation Plan and defined in Rule 62-212.400, F.A.C. A PSD review is required in areas currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or areas designated as "unclassifiable" for a given pollutant. A facility is considered "major" with respect to PSD if it emits or has the potential to emit: 250 tons per year or more of any regulated air pollutant, or 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories, or 5 tons per year of lead.

For new projects at existing PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the Significant Emission Rates defined in Rule 62-210.200, F.A.C. Pollutant emissions from a project exceeding these rates are considered "significant" and the applicant must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant and evaluate the air quality impacts. Although a facility may be "major" with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability Review – Current Project

The Titan Florida Pennsuco Cement Plant is located in Miami-Dade County, which is an area presently in attainment for all criteria pollutants in accordance with Rule 62-204.360, F.A.C. While in attainment with the ozone ambient air quality standard, the area is classified as a "maintenance area" for this pollutant. Portland cement manufacturing is one of the major categories listed in the definition of "Major Stationary Source" in Rule 62-210.200, F.A.C. Stack and fugitive emissions from the existing Titan plant are over 100 TPY of at least one regulated criteria pollutant. Therefore, the existing facility is classified as a "Major Stationary Source" (or PSD-major facility) and projects must be reviewed for PSD applicability in accordance with Rules 62-210 and 212.400, F.A.C.

Based on the updated baghouse inventory and the proposed new emissions limits for the main kiln/raw mill exhaust, potential PM emissions will change as follows:

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Emissions Units	Current TPY	Revised TPY	Increase TPY
Finish Mills (EUs 010, 011, 012, 013, 030)	134	136	+ 2
Cement Storage (EU 014), Loadout (EU 015), and Packhouse (EU 016)	31	36*	5*
Minimum Reduction of Fugitive Emissions from Truck Loadout Area	-	-5	-5
Coal Handling (EU 026)	3	3	0
Clinker Handling and Storage System (EU 027)	20	23	+ 3
Main Kiln/Raw Mill (EU 028)	125	117	- 8
Total Change			- 3

*The increase is due to new baghouses VL002 and VL003 that serve the Bulk Loadout Unit 2 and Unit 3 respectively that are part of Emissions Unit 15. This increase is offset by a decrease in previously unquantified fugitive emissions from Emissions Unit 15. The reduction is conservatively estimated to be equal to the increase from the new baghouses.

In addition, PM₁₀ emissions from the main kiln/raw mill stack will be reduced from 105 TPY to 99 TPY, which is a decrease of 6 TPY. All particulate matter emitted from the baghouses controlling the finish mills, cement storage, cement loadout, cement packhouse, and coal handling are assumed to be PM₁₀. Therefore, the proposed changes result in a decrease of 1 TPY of PM₁₀ emissions. The Department allowed a comparison of potential emissions because the purpose of this project is to correct the actual information for Permit No. 0250020-017-AC (PSD-FL-360), which was issued less than 7 months ago. The project only affects PM/PM₁₀ emissions and results in a slight decrease in potential emissions of these pollutants.

Revised Netting Analysis – Permit No. 0250020-017-AC (PSD-FL-360)

The PSD netting analysis from the December 2005 cement clinker production increase authorized in Permit No. 0250020-017-AC (PSD-FL-360) is shown in the following table as revised by the changes discussed for this project.

Table 4. Net Emissions Changes and PSD Applicability^a

Pollutant	Increases Dry Process at Proposed Capacity Potential Emissions (TPY)	Decreases Shutdown of Slag Dryer and Wet Process Actual Emissions (TPY)	Net Emissions Change (TPY)	PSD Significant Emission Rate (TPY)
PM	355 <u>352</u>	385	(30) (33)	25
PM ₁₀	324 <u>320</u>	307	14 13	15
SO ₂	548	514	34	40
NO _x	2,376	2,344	32	40
CO	2,190	1,323	867	100
VOC	175	145	30	40
H ₂ SO ₄ (SAM)	12	19	- 7	7
Hg	229 lb/yr	30 lb/yr	199 lb/yr	200 lb/yr
Pb	1,293 lb/yr	94 lb/yr	1,199 lb/yr	1,200

a. Source: Titan America's updated information received in February 2006. Net emissions decreases (negative values) are shown in parentheses.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

As shown in the above table, only PM and PM₁₀ emissions are affected. The proposed revisions do not change the PSD applicability determination for any pollutants in the original netting analysis. The current project is not subject to PSD preconstruction review and does not alter the previous PSD applicability determination for CO emissions, which required a CO BACT determination in Permit No. 0250020-017-AC (PSD-FL-360).

3. PERMIT REVISIONS

As a result of the proposed changes and to clarify inconsistencies, the draft permit includes the following revisions.

- Expiration Date: Revise expiration date from April 30, 2006 to December 31, 2006 to allow sufficient time to reactivate Finish Mill No. 2 and process the pending application to renew the Title V air operation permit.
- Raw Material Handling Operations (EU 029): Revise Specific Condition 4 to be consistent with the visible emissions monitoring requirements of 40 CFR 63.1350 included in Appendix I of the permit.
- Pyroprocessing and Raw Mill System Operation (EU 028): Revise Specific Condition 9 to change: the PM emissions standards from 0.067 lb/ton of dry kiln feed to 0.063 lb/ton of dry kiln feed and from 28.5 lb/hr to 26.8 lb/hr; and the PM₁₀ emissions standards from 0.056 lb/ton of dry kiln feed to 0.053 lb/ton of dry kiln feed and from 23.9 lb/hr to 22.5 lb/hr.
- Pyroprocessing and Raw Mill System Operation (EU 028): Revise the second sentence of Specific Condition 14e from "... valid hourly averages for 90 percent or more of the operating hours ..." to "... valid hourly averages for 95 percent or more of the operating hours ...". This correction is consistent with the first sentence, which identifies "95 percent".
- Pyroprocessing and Raw Mill System Operation (EU 028): Revise Specific Condition 16 to clarify the mercury sampling, analysis, and monitoring procedures. This is now consistent with more recent PSD permits for cement plants.
- Clinker Handling & Storage System (EU 027): Add Baghouse #K-447 to control storage clinker silo 17 to Emissions Point table.
- Finish Mill System (EUs 010, 011, 012, 013, and 030): Add Finish Mill No. 2 (EU 011) as a backup to operate when at least one of the other finish mills is down. Also, correct the Emissions Unit identification for Finish Mill No. 1 from "011" to "010", consistent with the Emissions Unit table in Section I of the permit
- Finish Mill System (EUs 010, 011, 012, 013, and 030): Add the following baghouses: #F-213 and #F-230 for the control of Finish Mill No. 2; and #516.BF510 for the control of Finish Mill No. 6. Also, rename Baghouse #F-728 to #F-730 for the control of Finish Mill No. 4. The revisions are reflected in the Emissions Point table.
- Finish Mill System (EUs 010, 011, 012, 013, and 030): Revise Specific Condition 22 to include the operational restriction that Finish Mill No. 2 will not operate unless one of the other finish mills is not in operation.
- Finish Mill System (EUs 010, 011, 012, 013, and 030): Revise Specific Condition 23 to relate the maximum process rate to the corresponding finish mill and include the maximum process rates for Finish Mill Nos. 2 and 6.
- Finish Mill System (EUs 010, 011, 012, 013, and 030): Revise Specific Condition 24 to correctly identify the design outlet loadings for the finish mill baghouses and revises the potential PM emissions from 133.83 TPY to 136.15 TPY.
- Finish Mill System (EUs 010, 011, 012, 013, and 030): Revise Specific Condition 25 to be consistent with the visible emissions monitoring requirements of 40 CFR 63.1350 included in Appendix I of the permit.
- Cement Product Storage Silos / Packhouse / Loadout System (EUS 014, 015, and 016): Rename Baghouse #B-205 as #B-200 in the Emissions Point table. Add Baghouse #VL002 and Baghouse #VL003.
- Coal and Petroleum Coke Handling System (EU 026): Rename Baghouse #461-BF300 as #461-BF500 in the Emissions Point table and revise the potential PM/PM₁₀ emissions in the note to this table.
- Coal and Petroleum Coke Handling System (EU 026): Rename Baghouse #461-BF300 as #461-BF500 and revise the potential PM₁₀ emissions from 110 TPY to 99 TPY.

4. CONCLUSION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit revisions. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. The draft permit will be distributed together with an Intent to Issue package including a Public Notice with a 14-day comment period. Teresa Heron and Jeff Koerner are the project engineers responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

DRAFT PERMIT

PERMITTEE:

Tarmac America, LLC.
455 Fairway Drive
Deerfield Beach, Florida 33441

Authorized Representative:
Mr. Hardy Johnson, President

Permit No. 0250020-019-AC (PSD-FL-360A)
Titan Florida Pennsuco Cement Plant
Facility ID No. 0250020
SIC No. 3241
Finish Mill No. 2 and Miscellaneous Revisions
Expires: December 31, 2006

PROJECT AND LOCATION

The existing Titan Florida Pennsuco Cement Plant is located at 11000 NW 121 Way, Medley, Miami-Dade County. The map coordinates are: UTM coordinates are Zone 17; 562.8 km E; 2861.7 km N. This permit revises original Permit No. 02540020-017-AC (PSD-FL-360), which authorized a production increase for the dry process cement production line. The primary revisions include: reactivating Finish Mill No. 2 for operation when at least one of the other finish mills is down; updating the information for several process baghouses; and reducing PM/PM₁₀ emissions standards for the dry process main kiln/raw mill exhaust. The revisions do not subject the project to further PSD preconstruction review.

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 perform the work 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).

ATTACHMENTS

Permit No. 0250020-017-AC (PSD-FL-360) issued December 2, 2005 is attached as part of this permit.

Executed in Tallahassee, Florida

Joseph Khan, P.E., Acting Director
Division of Air Resource Management

SECTION I. GENERAL INFORMATION

FACILITY DESCRIPTION

Tarmac America LLC operates the Titan Florida Pennsuco facility in Medley, Miami-Dade County, which consists of:

- A 10,000,000 tons per year (TPY) on-site limestone quarry that supplies approximately 3,000,000 TPY to the adjacent cement plant and the remainder to other users;
- A dry process Portland cement plant that consumes up to 3,723,000 TPY of limestone and mineral aggregate and is permitted to produce no more than 2,190,000 TPY of clinker and approximately 2,400,000 TPY of portland cement;
- A ready-mix concrete plant; and
- An 85,000 block per day grey concrete block plant.

REGULATORY CLASSIFICATION

Title III: The existing facility is a potential major source of hazardous air pollutants (HAP).

Title IV: The existing facility operates no units subject to the Acid Rain provisions of the Clean Air Act.

Title V: The existing facility is a "Major Source of Air Pollution or Title V Source" in accordance with the definitions in Rule 62-212.200, F.A.C. and is subject to Chapter 213, F.A.C.

PSD: The existing facility is classified as a "Major Stationary Source" (or PSD-major facility) and is subject to the applicable preconstruction review requirements of Rule 212.400(PSD), F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

NSPS: This existing facility operates units subject to the following New Source Performance Standards in 40 CFR 60 adopted and incorporated by reference in Rule 62-204.800, F.A.C.: Subpart A (General Provisions); Subpart F (Portland Cement Plants); Subpart Y (Coal Preparation Plants); and Subpart OOO (Nonmetallic Mineral Processing Plants).

NESHAP: This facility operates units subject to the following National Emission Standards for Hazardous Air Pollutants in 40 CFR 63 adopted and incorporated by reference in Rule 62-204.800, F.A.C.: Subpart A (General Provisions); and Subpart LLL (Portland Cement Manufacturing Industry).

RELEVANT DOCUMENTS

The documents listed below are not part of this permitting action; however, they are specifically related to the present permitting action:

- Permit No. 0250020-008-AC issued October 21, 1999;
- Permit No. 0250020-010-AC issued May 1, 2001;
- Permit No. 0250020-016-AC issued May 31, 2005;
- Permit No. 0250020-017-AC issued December 2, 2005; and
- Application No. 0250020-019-AC to revise Permit No. 0250020-017-AC (PSD-FL-360) received on February 24, 2006. It was revised and made complete by additional information received on May 1 and August 28, 2006.

EMISSIONS UNITS

This permit addresses the following emissions units at the existing Portland Cement Plant: Finish Mill No. 1 (EU 010); Finish Mill No. 2 (EU 011); Finish Mill No. 3 (EU 012); Finish Mill No. 4 (EU 013); Cement Storage (EU 014); Cement Distribution Rail/Truck Loadout (EU 015); Cement Packhouse (EU 016); Clinker Handling and Storage System (EU 027); Coal and Petroleum Coke Handling System (EU 026); Pyroprocessing and Raw Mill System Operations (EU 028); and Finish Mill No. 6 (EU 030).

SECTION 2. PERMIT REVISIONS

Except for the changes specifically identified in this permit revision, the conditions of Permit No. 0250020-017-AC (PSD-FL-360) are incorporated into this air construction permit revision. The following specific conditions are in addition to, or replace, or modify those of previous Permit 0250020-017-AC (PSD-FL-360), which is attached as part of this permit.

PLACARD PAGE

Permit No. 0250020-019-AC (PSD-FL-360A) revises the expiration date from April 30, 2006 to December 31, 2006. This allows sufficient time to reactivate Finish Mill 2 and process the pending application to renew the Title V air operation permit.

SECTION III. RAW MATERIAL HANDLING SYSTEM

This system addresses the following emissions units.

Table with 2 columns: ARMS E.U. No. (029) and DESCRIPTION (Raw Material Handling Operations)

Emissions Limitations and Performance Standards

To be consistent with visible emissions monitoring requirements of 40 CFR 63.1350 included in Appendix I of the permit, Permit No. 0250020-019-AC (PSD-FL-360A) revises Specific Condition 4 as follows:

- 4. Raw Mill Monitoring: The owner or operator of a raw mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCDs (PM control devices) of these affected sources, in accordance with the procedures of Method 22 of Appendix A, 40 CFR Part 60 and as required by 40 CFR 63.1350(e), Subpart LLL.

Pursuant to 40 CFR 63.1350(e):

The owner or operator of a raw mill or finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCD of these affected sources, in accordance with the procedures of Method 22 of Appendix A of Part 60 of this chapter. 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 representative performance conditions. The duration of the Method 22 test shall be six (6) minutes. If visible emissions are observed during any Method 22 visible emissions test, the owner or operator must:

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

[Rules 62-4.070 (B) and 40 CFR 63.1350, Monitoring Requirements]

SECTION III. PYROPROCESSING AND RAW MILL SYSTEM

Permit No. 0250020-019-AC (PSD-FL-360A) corrects the emissions unit identification as follows.

Table with 2 columns: ARMS E.U. No. (026 028) and DESCRIPTION (Pyroprocessing and Raw Mill System Operation)

Emissions Limitations and Performance Standards

For this emissions unit, Permit No. 0250020-019-AC (PSD-FL-360A) revises Specific Condition 9 to change: the PM emissions standards from 0.067 lb/ton of dry kiln feed to 0.063 lb/ton of dry kiln feed and from 28.5 lb/hr to 26.8 lb/hr; and the PM10 emissions standards from 0.056 lb/ton of dry kiln feed to 0.053 lb/ton of dry kiln feed and from 23.9 lb/hr to 22.5 lb/hr. The condition is revised as follows.

SECTION 2. PERMIT REVISIONS

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

PARAMETER	EMISSION LIMIT	AVERAGING TIME	COMPLIANCE METHOD	LIMIT BASIS
PM ⁶	0.067 lb/ton of dry kiln feed 0.063 lb/ton of dry kiln feed	3 hours ⁵	Annual Method 5	PTE, Avoid PSD 40 CFR Subpart LLL
	28.5 lb/hr 26.8 lb/hr			
PM ₁₀ ⁶	0.056 lb/ton of dry kiln feed 0.053 lb/ton of dry kiln feed	3 hours ⁵	Annual Method 5	PTE, Avoid PSD 40 CFR Subpart LLL
	23.9 lb/hr 22.5 lb/hr			

Only the PM/PM₁₀ portion of the table is shown. No changes were made to the notes after the table.

Test Methods, Monitoring and Procedures

Permit No. 0250020-019-AC (PSD-FL-360A) revises the second sentence of Specific Condition 14a from "... valid hourly averages for 90 percent or more of the operating hours ..." to "... valid hourly averages for 95 percent or more of the operating hours ...". This correction is consistent with the first sentence, which identifies "95 percent". The condition is revised as follows.

14. Continuous Emission Monitoring Systems:

- e. Data Availability: During each semiannual (six-month) period, CEM system valid hourly averages shall be obtained for at least 95 percent of the operating hours for which the plant is producing clinker. If the CEM system does not obtain valid hourly averages for 90 95 percent or more of the operating hours per semiannual period for which the plant is producing clinker, the permittee shall also submit a continuous monitoring system performance report with the semiannual excess emissions report. This report must include corrective actions, and it shall be submitted within 30 days following the end of each semiannual reporting period.

[Permit No AC-0250020-019-AC issued December 12, 2005; Applicant's request dated February 24, 2006]

Permit No. 0250020-019-AC (PSD-FL-360A) revises Specific Condition 16 to clarify the mercury sampling, analysis, and monitoring procedures. The condition is revised as follows.

16. Material Balance Records of Mercury: The owner or operator shall demonstrate compliance with the mercury throughput limitation by material balance and making and maintaining records of monthly and rolling 12-month mercury throughput. The owner or operator shall, for each month of sampling required by this condition, perform daily sampling of the raw mill feed, coal, petroleum coke, and fuel oil and shall composite the daily samples each month, and shall analyze the monthly composite sample to determine mercury content of these materials for the month. The owner or operator shall determine the mass of mercury introduced into the pyroprocessing system (in units of pounds per month) from the total of the product of the mercury content from the monthly composite analysis and the mass of each material or fuel used during the month. The consecutive 12-month record shall be determined from the individual monthly records for the current month and the preceding eleven months and shall be expressed in units of pounds of mercury per consecutive 12-month period. Such records shall be completed no later than 25 days following the month of the records. The first 12-month rolling period shall begin on July 1, 2006. Mercury Compliance Demonstration: The owner or operator shall demonstrate compliance with the mercury throughput limitation by material balance and maintaining records of the monthly and rolling 12-month mercury throughput. The following sampling and analytical procedures shall be used:

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

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

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

SECTION 2. PERMIT REVISIONS

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

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

The analytical methods used to determine mercury concentration shall be EPA or ASTM methods such as EPA Method 7471A (Mercury in Solid or Semisolid Waste). No other methods may be used unless prior written approval is received from the Department. If the mercury concentration is below detection limit or below the limits of quantification, the detection limit will be assumed for the concentration of the raw material or fuel, the permittee shall report the detection limit as the corresponding level.

[Rules 62-4.070(3) and 62-212.400(2)(g), F.A.C.]

SECTION III. CLINKER HANDLING & STORAGE SYSTEM

This system addresses the following emissions unit.

ARMS E.U. No.	DESCRIPTION
027	Clinker Handling & Storage System

The clinker handling operations are controlled by the following baghouses:

For this emissions unit, Permit No. 0250020-019-AC (PSD-FL-360A) adds Baghouse #K-447 to control storage clinker silo 17 as reflected in the following table.

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

SECTION III. FINISH MILLS SYSTEM

Permit No. 0250020-019-AC (PSD-FL-360A) adds Finish Mill No. 2 (EU 011) as a backup to operate when at least one of the other finish mills is down. Also, the Emissions Unit identification for Finish Mill No. 1 was corrected from "011" to "010", consistent with the Emissions Unit table in Section 1 of the permit. The revisions are reflected in the following table.

This system addresses the following emissions units.

ARMS E.U. No.	DESCRIPTION
011 010	Finish Mill No. 1
011	Finish Mill No. 2
012	Finish Mill No. 3
013	Finish Mill No. 4
030	Finish Mill No. 6

SECTION 2. PERMIT REVISIONS

Permit No. 0250020-019-AC (PSD-FL-360A) adds the following baghouses: #F-213 and #F-230 for the control of Finish Mill No. 2; and #516.BF510 for the control of Finish Mill No. 6. Also, Baghouse #F-728 was renamed #F-730 for the control of Finish Mill No. 4. The revisions are reflected in the following Emissions Point table.

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

EMISSION POINT	DESCRIPTION
Baghouse I.D. F-113	Dust collector – Finish Mill No. 1 – Feeder
Baghouse I.D. F-130	Dust collector – Finish Mill No. 1 – Mill Sweep
<u>Baghouse I.D. F-213</u>	<u>Dust collector – Finish Mill No. 2 – Feeder</u>
<u>Baghouse I.D. F-230</u>	<u>Dust collector – Finish Mill No. 2 – Mill Sweep</u>
Baghouse I.D. F-313	Dust collector – Finish Mill No. 3 – Feeder
Baghouse I.D. F-332	Dust collector – Finish Mill No. 3 – Mill Sweep
Baghouse I.D. 533.BF340	Dust collector – Finish Mill No. 3 - O-Sepa Cement Separator
Baghouse I.D. F-432	Dust collector – Finish Mill No. 4 - Belt conveyor/Separator
Baghouse I.D. F-430	Dust collector – Finish Mill No. 4 - Ball Mill/Mill Sweep
<u>Baghouse I.D. F-728/730</u>	<u>Dust collector – Finish Mill No. 4 - O-Sepa Cement Separator</u>
Baghouse I.D. 536.BF340	Dust collector – Finish Mill No. 6 - O-Sepa Cement Separator
Baghouse I.D. 536.BF500	Dust collector – Finish Mill No. 6 – Sweep
<u>Baghouse I.D. 516.BF510</u>	<u>Dust collector – Finish Mill No. 6 – Feeder</u>

Monitoring Requirements

Permit No. 0250020-019-AC (PSD-FL-360A) revises Specific Condition 22 to include the operational restriction that Finish Mill No. 2 will not operate unless one of the other finish mills is not in operation. The condition is revised as follows.

22. Hours of Operation: This emissions unit system is allowed to operate 8,760 hours per year. Finish Mill No. 2 (EU 011) shall not operate unless one of the other Finish Mills is not in operation. [Permit No. 0250020-017-AC (PSD-FL-360); Application No. 0250020-019-AC]

Permit No. 0250020-019-AC (PSD-FL-360A) revises Specific Condition 23 to relate the maximum process rate to the corresponding finish mill and include the maximum process rates for Finish Mill Nos. 2 and 6. The condition is revised as follows.

23. Finish Mill Process Rates: The maximum total hourly process rate of cement is 359 TPH on a 24-hr block average. The individual process rates are 25 TPH (F-113/F-130 Finish Mill 1); 25 TPH (Finish Mill 2); 84 TPH (533.BF340/F-313/F-332 Finish Mill 3) and 140 TPH (F-430/F-432/F-728 Finish Mill 4); and 110 TPH (Finish Mill 6). The owner or operator shall record all hourly process rates, and maintain records for a minimum of 5 years.

Permit No. 0250020-019-AC (PSD-FL-360A) revises Specific Condition 24 to correctly identify the design outlet loadings for the finish mill baghouses and revises the potential PM emissions from 133.83 TPY to 136.15 TPY. The condition is revised as follows.

24. Visible Emissions Limits

{Note: The applicant advised that the baghouses are designed to control particulate emissions to 0.0095 grains/dry standard cubic foot (gr/dscf) and 0.01 gr/acf (F-113; F-130; F-213; F-230; F-313; F-332; F-430; and F-432). The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM₁₀ for all emission points in this emission unit system will be less than ~~133.83~~ 136.15 TPY. This annual emission estimate is part of the facility-wide netting calculation to escape PSD applicability for PM/PM₁₀. Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition and not necessarily an exceedance of the opacity limitations given in 40 CFR 63, Subpart LLL}

To be consistent with visible emissions monitoring requirements of 40 CFR 63.1350 included in Appendix I of the permit, Permit No. 0250020-019-AC (PSD-FL-360A) revises Specific Condition 25 as follows:

SECTION 2. PERMIT REVISIONS

25. **Finish Mill Monitoring:** The owner or operator of a raw mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCDs (PM control devices) of these affected sources, in accordance with the procedures of Method 22 of Appendix A, 40 CFR Part 60 and as required by 40 CFR 63.1350(e), Subpart LLL.

Pursuant to 40 CFR 63.1350(e):

The owner or operator of a raw mill or finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCDs of these affected sources in accordance with the procedures of Method 22 of Appendix A of ~~to~~ Part 60 of this chapter. 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~~ representative performance conditions. The duration of the Method 22 test shall be ~~six~~ 6 minutes. If visible emissions are observed during any Method 22 visible emissions test, the owner or operator must:

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

[Rules 62-4.070(3) and 40 CFR 63.1350, Monitoring Requirements]

SECTION III. CEMENT PRODUCTS STORAGE SILOS/ PACKHOUSE/ LOADOUT SYSTEM

This system addresses the following emissions units:

ARMS E.U. No.	DESCRIPTION
014	Cement Storage
015	Cement Distribution Rail/Truck Loadout
016	Cement Packhouse

Permit No. 0250020-019-AC (PSD-FL-360A) renames Baghouse #B-205 as #B-200. The revision is reflected in the following table.

The cement handling operations are controlled by the following baghouses:

EMISSION POINT	DESCRIPTION
Baghouse I.D. F-511	Dust collector, Cement Silos 1-6
Baghouse I.D. F-512	Dust collector - Cement Silos 7-9
Baghouse I.D. F-513	Dust collector - Cement Silo 10
Baghouse I.D. F-514	Dust collector - Cement Silo 11
Baghouse I.D. F-515	Dust collector - Cement Silo 12
Baghouse I.D. B-110	Dust collector - Bulk Loadout Unit 1 (Rail/Truck).
Baghouse I.D. B-210	Dust collector - Bulk Loadout Unit 2 (Truck).
<u>Baghouse I.D. VL002</u>	<u>Dust collector - Bulk Loadout Unit 2 - Line 2 (Truck Loadout Operation)</u>
Baghouse I.D. B-372	Dust collector - Bulk Loadout Unit 3 - Line 1
Baghouse I.D. B-374	Dust collector - Bulk Loadout Unit 3 - Line 2
Baghouse I.D. B-382	Dust collector - Bulk Loadout Unit 3 - Line 3
<u>Baghouse I.D. VL003</u>	<u>Dust collector - Bulk Loadout Unit 3 - Line 3 (Truck Loadout Operation)</u>

SECTION 2. PERMIT REVISIONS

EMISSION POINT	DESCRIPTION
Baghouse I.D. B-120	Dust collector – Packhouse
Baghouse I.D. B-205 <u>200</u>	Dust collector – Packhouse
Baghouse I.D. B-400	Dust collector – Packhouse

SECTION III. CEMENT PLANT COAL HANDLING SYSTEM

This system addresses the following emissions unit.

ARMS E.U. No.	DESCRIPTION
026	Coal and Petroleum Coke Handling System

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

Permit No. 0250020-019-AC (PSD-FL-360A) renames Baghouse #461-BF300 as #461-BF500 and revises the potential PM/PM₁₀ emissions in the note to this table. The condition is revised as follows.

The coal handling operations are controlled by the following baghouses:

EMISSION POINT	DESCRIPTION
Baghouse I.D. 461-BF300 <u>500</u>	Coal Mill ¹
Baghouse I.D. 461-BF130	Coal Feed Bin Dump Hopper (Transfer)
Baghouse I.D. 461-BF230	Conveyors (2) (Transfer) & Coal/Petroleum Coke Feed Bins
Baghouse I.D. 461-BF750	Coke/Petroleum Coke (Transfer) Surge Bin Feeder
Baghouse I.D. 461-BF650	Coal (Transfer) / Surge Bin (Feeder)
Baghouse I.D. 461.BF350	Coal Mill Feed

¹ This emissions unit discharges to the common (main) stack. The Clinker Cooler which is limited to 10% opacity, discharges to the common (main) stack and therefore determines the opacity limit for this emissions unit. Total PM/PM₁₀ emissions from the processing Raw Mill/Coal Mill Systems shall not exceed ~~130.3~~ 117 and ~~109.5~~ 99 TPY respectively.

All of the above process emissions units, except for the dump hopper with baghouse 461-BF130, are subject to 40 CFR 60, Subpart Y, NSPS for Coal Preparation Plants (Appendix H attached).

Emissions Limitations and Performance Standards

Permit No. 0250020-019-AC (PSD-FL-360A) revises Specific Condition 31 to rename Baghouse #461-BF300 as #461-BF500 and revise the potential PM₁₀ emissions from 110 TPY to 99 TPY. The condition is revised as follows.

31. **Visible Emissions Limits:** Visible emissions are limited to 5 percent from each of the above listed baghouses. Compliance shall be demonstrated by EPA Reference Method 9 and the procedures specified in 40 CFR 60.11.

For the coal mill main baghouse #461-BF300 500, the opacity shall not exceed 10%. Compliance shall be demonstrated pursuant to EPA Reference Method 9. Annual emissions of PM/PM₁₀ for the kiln/cooler/coal mill main stack shall not exceed ~~110~~ 99 TPY.