

# Department of Environmental Protection

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

Virginia B. Wetherell Secretary

September 13, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Albert Townsend Director of Technical Services Tarmac Florida, Inc. 455 Fairway Drive Deerfield Beach, Florida 33441

Dear Mr. Townsend:

Attached is one copy of the Technical Evaluation and Preliminary Determination, proposed Best Available Control Technology (BACT) determination, and draft permit for the construction of a slag processing operation at the Pennsuco Cement Plant in Medley, Dade County, Florida.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. A. A. Linero, Administrator, New Source Review Section, at the above address. If you have any questions on this matter, please call Willard Hanks at (904) 488-1344.

Sincerely

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/wh/t

Enclosure

cc: I. Goldman, SED

P. Wong, DERM

J. Harper, EPA

J. Bunyak, NPS

D. Buff, KBN

return this card to you.  Attach this form to the front of the mailpiece, or on the back it does not permit.  Write "Return Receipt Requested" on the mailpiece below the arti	f space icle number. nd the date		
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# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an Application for Permit by:

DEP File No. AC 13-273887 PSD-FL-230 Dade County

Mr. Albert Townsend Director of Technical Services Tarmac Florida, Inc. 455 Fairway Drive Deerfield Beach, Florida 33441

# INTENT TO ISSUE

The Department of Environmental Protection gives notice of its intent to issue a permit (copy attached) for the proposed project, as detailed in the application specified above, for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Tarmac Florida, Inc., applied on July 10, 1995, to the Department of Environmental Protection for a permit to construct a blast furnace slag processing operation at the Pennsuco Cement Plant located in Medley, Dade County, Florida.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the proposed action.

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 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.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

Tarmac Florida Inc. AC 13-273887 PSD-FL-230

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of

the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if

any;

- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under

Tarmac Florida, Inc. AC 13-273887 PSD-FL-230

Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

new P.E.

C. H. Fancy, P.E., Chief Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, Florida 32399

904-488-1344

# CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on 9-(3-95) to the listed persons.

Clerk Stamp
FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

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Date

Clerk

Copies furnished to:

I. Goldman, SED

P. Wong, DERM

J. Harper, EPA

J. Bunyak, NPS

D. Buff, KBN



Permit Number: AC 13-273887

(PSD-FL-230)

Expiration Date: 07/01/96

### GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-30.300, 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.

- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
  - (X) Determination of Best Available Control Technology (BACT)
  - (X) Determination of Prevention of Significant Deterioration (PSD)
  - ( ) Compliance with New Source Performance Standards (NSPS)
- 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 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 Department 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 dates analyses were performed;
    - the person responsible for performing the analyses;
    - the analytical techniques or methods used;
    - the results of such analyses.

Permit Number: AC 13-273887

(PSD-FL-230)

Expiration Date: 07/01/96

#### SPECIFIC CONDITIONS:

#### General

1. This permit incorporates all requirement of permit No. AO 13-238048 that are applicable to the No. 4 Finishing Mill; Clinker Silos Nos. 21, 22, 23, 26, 27, and 28; Cement Silos Nos. 7, 8, and 9; Bulk Cement Loadout Units 1 and 2, and all requirements of permit No. AC 13-234568 that are applicable to the conveyer systems handling the slag except as otherwise noted in any specific condition of this permit.

## Construction

- 2. The No. 2 fuel oil storage tanks shall be constructed so that its maximum storage capacity is less than 40 cubic meters (10,568 gallons).
- 3. The blast furnace slag dryer stack shall have a minimum height of 20 feet and a cross sectional area of approximately 4 square feet. The stack shall be equipped with sampling facilities that comply with the requirements of Rule 62-297.345, F.A.C.

# Federal Requirements

4. The permittee shall construct and operate the blast furnace slag processing operation so that it complies with the requirements of 40 CFR 52.21, F.A.C., Prevention of Significant Deterioration of Air Quality.

#### Emission Limits

- 5. The particulate matter emissions (total PM and PM10) from the baghouse serving the slag dryer shall not exceed 0.02 gr/dscf, 2.1 lbs/hr, and 3.1 TPY or 5 percent opacity.
- 6. Except for the No. 4 Finishing Mill, PM emissions from the other processing equipment handling blast furnace slag shall not exceed the quantities listed in Table 3-4 of the application (attached).
- 7. Particulate matter emissions from the No. 4 Finishing Mill shall not exceed 0.02 gr/dscf, 2.57 lbs/hr, 11.26 TPY, or 5 percent opacity.
- 8. Unconfined PM emissions from the yard shall be minimized by applying the following reasonable precautions:
- A. Paved parking and traffic areas shall be well maintained and kept free of particulate matter build-up. Vacuum type sweeper(s) shall be used to clean the paved areas. Sweeper(s) shall be maintained and operated such that visible emissions from the sweeper(s) do not exceed 5% opacity.

Permittee:

Permit Number: AC 13-273887

(PSD-FL-230)

Expiration Date: 07/01/96

# SPECIFIC CONDITIONS:

B. Water sprinklers shall be used when necessary to control unconfined particulate matter emissions from unpaved roads and work areas.

- C. Bulk Cement (railcar/truck) Loadout Unit 1, Bulk Cement (truck) Loadout Unit 2 and Transfer Pump Hopper (under Silos 10-12), equipped with Baghouses B-110, B-210, and B-323 respectively, exhaust particulate emissions to the interior of enclosed areas. Fugitive emissions shall be contained in this manner so as not to exceed 5% opacity from the vents, doors, etc.
- D. Wind breaks, enclosures, or covers shall be used to control unconfined PM emissions from handling the dried slag in the yard.
- 9. Visible emissions from the blast furnace slag processing operation shall not exceed any of the following:

A. Yard Storage/Handling 20% opacity

B. Each Clinker/Cement silo 5% opacity

C. Each Conveyer Transfer Point 10% opacity

D. No. 4 Finish Mill 5% opacity

E. Bulk Cement Loadout Units 1&2 10% opacity

# Operation Limitations

- 10. The maximum wet blast furnace slag input rate to the dryer shall not exceed 150 TPH. The permittee shall have the means to determine the process rate of the dryer and shall maintain records on the quantity of slag processed each day.
- 11. The facility shall not process more than 300,000 tons of blast furnace slag during any calendar year.
- 13. Only low sulfur No. 2 fuel oil shall be burned in the blast furnace slag dryer. The maximum heat input to the dryer shall not exceed 52 MMBtu/hr (approximately 371 GPH). The maximum fuel consumption shall not exceed 1,114,286 GPY. The permittee shall keep a log on the daily and annual fuel consumption of the dryer.
- 14. The dryer shall not operate more than 3,000 hours per calendar year. The permittee shall maintain a record of the time the dryer operates daily.

Compliance Determination

15. Compliance with the emission limits in this permit shall be determined prior to the expiration date of this construction permit

Permit Number: AC 13-273887

(PSD-FL-230) Expiration Date: 07/01/96

## SPECIFIC CONDITIONS:

and annually thereafter by the following referenced methods as specified in 40 CFR 60, Appendix A (July 1, 1994), or by other test methods with prior Department approval:

- A. PM10 EPA Methods 1, 2, 3, 4, and 5 (assuming all PM is PM10).
- B. Visible Emissions EPA Method 9. The visible emissions test shall be conducted concurrently with any required PM test on the facility.
- 16. Compliance tests on the blast furnace slag dryer shall be conducted at a minimum rate of 135 TPH. If testing is performed at a rate less than specified in this specific condition, operation shall be limited to a maximum of 110 percent of the tested capacity until such time as an acceptable test is performed at a minimum of the production rate specified in this specific condition. When operation is restricted to a lower capacity because of the testing at such level, the Dade County Department of Environmental Resources Management (DERM), upon advanced notification, will allow operation at higher capacities if such operation is for demonstrating compliance at a higher capacity.
- 17. The permittee shall notify DERM at least fifteen (15) days prior to any compliance testing required by this permit or other regulations in accordance with Rule 62-297.340(1)(i), F.A.C.
- 18. Copies of the test report(s) shall be submitted to DERM within forty-five (45) days of completion of testing in accordance with Rule 62-297.450(3)(b), F.A.C.

Record Keeping and Reporting Requirements

- 19. The permittee shall maintain a daily log on the quantity of slag processed and fuel consumed by the slag dryer.
- 20. An annual operation report shall be submitted to DERM by March 1 of each year pursuant to Rule 62-210.370(2), F.A.C.
- 21. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit (Rule 62-4.090, F.A.C.).



Permit Number:

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(PSD-FL-230)

Expiration Date: 07/01/96

# SPECIFIC CONDITIONS:

22. A timely application for a Title V operation permit must be submitted to DERM by the date required in Rule 62-213.420, F.A.C.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell, Secretary

# BEST AVAILABLE CONTROL TECHNOLOGY (BACT) DETERMINATION

Tarmac Florida, Inc.
Medley, Dade County, Florida
AC 13-273887/PSD-FL-230

Tarmac Florida, Inc. proposes to construct a Blast Furnace Slag Processing Operation at the Pennsuco Cement Plant in Medley, Dade County, Florida. Major components of the proposed slag processing operation are a fuel storage tank and an existing 150 TPH asphalt plant dryer with a baghouse. The slag processing facility will used the existing Clinker and Cement Silos, No. 4 Finishing Mill, and Bulk Cement Loadout Units Nos. 1 and 2. The slag processing operation will emit particulate matter (PM and PM10) and the product of combustion of No. 2 fuel oil. The emission limits requested for the facility would result in a net emissions increase of 36.2 TPY for PM, 31.0 TPY for PM10, 39.6 TPY for SO2, 11.1 TPY for NOx, and smaller quantities (less than the significant emissions rates) for CO, VOC, sulfuric acid mist, total reduce sulfur, lead, mercury, fluorides, asbestos, and vinyl chloride. The requested increase in allowable emissions of PM and PM10 are above the significant emissions rates of 25 and 15 TPY, respectively. The proposed slag processing operation is subject to the Prevention of Significant Deterioration (PSD) regulations and the allowable emissions of PM and PM10 for the slag dryer are set by a BACT determination. existing Portland cement processing equipment (Clinker and Cement Silos, Conveyers, Finishing Mill and Bulk Loadout Units) are not subject to this BACT determination because the equipment was capable of accommodating blast furnace slag without a capital expenditure.

DATE OF RECEIPT OF A BACT APPLICATION

July 10, 1995

BACT REQUESTED BY THE APPLICANT

The applicant proposed the use of a Flex-Kleen baghouse with a 6.48:1 air/cloth ratio to control the emissions from the slag dryer. The requested PM emission standard is 0.04 gr/dscf.

# BACT DETERMINATION PROCEDURE

In accordance with Rule 62-212.410, Florida Administrative Code, Best Available Control Technology Determination, Stationary Source-Preconstruction Review, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department of Environmental Protection (Department), on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that in making the BACT determination the Department shall give consideration to:

BACT Tarmac Florida, Inc. Page Two

- (a) Any Environmental Protection Agency determination of BACT pursuant to 40 CFR 52.21, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- (b) All scientific, engineering, and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determinations of any other state.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission unit in question the most stringent control available for a similar or identical emission unit or emission unit category. If it is shown that this level of control is technically or economically infeasible for the emission unit in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

# BACT DETERMINED BY THE DEPARTMENT

The dryer is a source of particulate matter emissions. emissions of particulate matter will be controlled by a baghouse. The Department considers a baghouse appropriate air pollution controls for this source. The BACT Clearinghouse Document did not list a BACT determination for particulate matter emissions from a blast furnace slag dryer. The Department notes that baghouses controlling other sources handling similar inert solid material (phosphate rock, limestone, etc.) are able to meet a particulate matter emission limit of 0.02 grains per dry standard cubic foot (gr/dscf). The Department also notes that the application stated that the particulate matter emissions from the No. 4 Finish Mill would be 0.01 grains per actual cubic foot. Allowing for the temperature and moisture content of the air leaving the finishing mill, the 0.01 gr/acf is approximately equal to 0.02 gr/dscf. The Department has determined that BACT for the blast furnace slag dryer is use of a baghouse that meets a PM emission standard of 0.02 gr/dscf.

BACT Tarmac Florida, Inc. Page Three

# DETAILS OF THE ANALYSIS MAY BE OBTAINED BY CONTACTING:

Willard Hanks, Review Engineer A. A. Linero, P.E., Administrator Department of Environmental Protection Division of Air Resources Management 2600 Blair Stone Road Tallahassee, Florida 32399-2400

RECOMMENDED BY:

APPROVED BY:

C. H. Fancy, P.E., Chief Bureau of Air Regulation	Virginia B. Wetherell, Dept. of Environmental	
, 1995	Date	, 1995



# Department of Environmental Protection

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

Virginia B. Wetherell Secretary

Permittee: Tarmac Florida, Inc. 455 Fairway Drive Deerfield Beach, FL 33441 Permit Number: AC 13-273887

(PSD-FL-230)

Expiration Date: 07/01/96 Latitude/Longitude: 25°52'26"

80°22'27"

Project: Blast Furnace Slag

Processing Operation

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construct a Blast Furnace Slag Processing Operation at the existing Pennsuco Cement Plant located at 11000 N.W. 121 Way, Medley, Dade County, Florida 33178. The UTM coordinates of this site are Zone 17, 562.8 km E and 2861.7 km N.

Major components of the proposed blast furnace slag processing operation are a new 10,000 gallon fuel storage tank and a used 150 ton per hour (TPH) asphalt dryer with a baghouse. The slag processing operation will use the Portland cement plant's existing Clinker Silos (Nos. 21, 22, 23, 26, 27, and 28 for dried slag storage), Cement Silos (Nos. 7, 8, and 9 for the ground slag storage), No. 4 Finish Mill, and Bulk Cement Loadout Units Nos. 1 and 2.

The emission units shall be constructed and operated in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

- Application received July 10, 1995.
- 2. DEP letter dated July 24, 1995.
- KBN letter dated August 11, 1995.

Permit Number: AC 13-273887

(PSD-FL-230) Expiration Date: 07/01/96

#### 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 403.161, 403.727, or 403.859 through 403.861, F.S. 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.

- 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 Department.
- 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 Department permit that may be required for other aspects of the total project which are not addressed in this 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 F.S. and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and 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.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of

Permit Number: AC 13-273887 (PSD-FL-230)

Expiration Date: 07/01/96

#### **GENERAL CONDITIONS:**

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 conditions of the permit;
- 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.

- 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.

- 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 F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, 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 Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.

Permit Number: AC 13-273887

(PSD-FL-230)

Expiration Date: 07/01/96

# **GENERAL CONDITIONS:**

This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-30.300, 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.

- This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
  - (X) Determination of Best Available Control Technology (BACT)
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- 14. The permittee shall comply with the following:
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  - 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 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:
    - the date, exact place, and time of sampling or measurements;
    - the person responsible for performing the sampling or measurements;
    - the dates analyses were performed;
    - the person responsible for performing the analyses;
    - the analytical techniques or methods used; the results of such analyses.

Permit Number: AC 13-273887

(PSD-FL-230)

Expiration Date: 07/01/96

# SPECIFIC CONDITIONS:

# General

1. This permit incorporates all requirement of permit No. AO 13-238048 that are applicable to the No. 4 Finishing Mill; Clinker Silos Nos. 21, 22, 23, 26, 27, and 28; Cement Silos Nos. 7, 8, and 9; Bulk Cement Loadout Units 1 and 2, and all requirements of permit No. AC 13-234568 that are applicable to the conveyer systems handling the slag except as otherwise noted in any specific condition of this permit.

#### Construction

- 2. The No. 2 fuel oil storage tanks shall be constructed so that its maximum storage capacity is less than 40 cubic meters (10,568 gallons).
- 3. The blast furnace slag dryer stack shall have a minimum height of 20 feet and a cross sectional area of approximately 4 square feet. The stack shall be equipped with sampling facilities that comply with the requirements of Rule 62-297.345, F.A.C.

# Federal Requirements

4. The permittee shall construct and operate the blast furnace slag processing operation so that it complies with the requirements of 40 CFR 52.21, F.A.C., Prevention of Significant Deterioration of Air Quality.

# Emission Limits

- 5. The particulate matter emissions (total PM and PM10) from the baghouse serving the slag dryer shall not exceed 0.02 gr/dscf, 2.1 lbs/hr, and 3.1 TPY or 5 percent opacity.
- 6. Except for the No. 4 Finishing Mill, PM emissions from the other processing equipment handling blast furnace slag shall not exceed the quantities listed in Table 3-4 of the application (attached).
- 7. Particulate matter emissions from the No. 4 Finishing Mill shall not exceed 0.02 gr/dscf, 2.57 lbs/hr, 11.26 TPY, or 5 percent opacity.
- 8. Unconfined PM emissions from the yard shall be minimized by applying the following reasonable precautions:
- A. Paved parking and traffic areas shall be well maintained and kept free of particulate matter build-up. Vacuum type sweeper(s) shall be used to clean the paved areas. Sweeper(s) shall be maintained and operated such that visible emissions from the sweeper(s) do not exceed 5% opacity.

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B. Water sprinklers shall be used when necessary to control unconfined particulate matter emissions from unpaved roads and work areas.

- C. Bulk Cement (railcar/truck) Loadout Unit 1, Bulk Cement (truck) Loadout Unit 2 and Transfer Pump Hopper (under Silos 10-12), equipped with Baghouses B-110, B-210, and B-323 respectively, exhaust particulate emissions to the interior of enclosed areas. Fugitive emissions shall be contained in this manner so as not to exceed 5% opacity from the vents, doors, etc.
- D. Wind breaks, enclosures, or covers shall be used to control unconfined PM emissions from handling the dried slag in the yard.
- 9. Visible emissions from the blast furnace slag processing operation shall not exceed any of the following:

A. Yard Storage/Handling 20% opacity

B. Each Clinker/Cement silo 5% opacity

C. Each Conveyer Transfer Point 10% opacity

D. No. 4 Finish Mill 5% opacity

E. Bulk Cement Loadout Units 1&2 10% opacity

# Operation Limitations

- 10. The maximum wet blast furnace slag input rate to the dryer shall not exceed 150 TPH. The permittee shall have the means to determine the process rate of the dryer and shall maintain records on the quantity of slag processed each day.
- 11. The facility shall not process more than 300,000 tons of blast furnace slag during any calendar year.
- 13. Only low sulfur No. 2 fuel oil shall be burned in the blast furnace slag dryer. The maximum heat input to the dryer shall not exceed 52 MMBtu/hr (approximately 371 GPH). The maximum fuel consumption shall not exceed 1,114,286 GPY. The permittee shall keep a log on the daily and annual fuel consumption of the dryer.
- 14. The dryer shall not operate more than 3,000 hours per calendar year. The permittee shall maintain a record of the time the dryer operates daily.

# Compliance Determination

15. Compliance with the emission limits in this permit shall be determined prior to the expiration date of this construction permit

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Expiration Date: 07/01/96

## SPECIFIC CONDITIONS:

and annually thereafter by the following referenced methods as specified in 40 CFR 60, Appendix A (July 1, 1994), or by other test methods with prior Department approval:

- A. PM10 EPA Methods 1, 2, 3, 4, and 5 (assuming all PM is PM10).
- B. Visible Emissions EPA Method 9. The visible emissions test shall be conducted concurrently with any required PM test on the facility.
- 16. Compliance tests on the blast furnace slag dryer shall be conducted at a minimum rate of 135 TPH. If testing is performed at a rate less than specified in this specific condition, operation shall be limited to a maximum of 110 percent of the tested capacity until such time as an acceptable test is performed at a minimum of the production rate specified in this specific condition. When operation is restricted to a lower capacity because of the testing at such level, the Dade County Department of Environmental Resources Management (DERM), upon advanced notification, will allow operation at higher capacities if such operation is for demonstrating compliance at a higher capacity.
- 17. The permittee shall notify DERM at least fifteen (15) days prior to any compliance testing required by this permit or other regulations in accordance with Rule 62-297.340(1)(i), F.A.C.
- 18. Copies of the test report(s) shall be submitted to DERM within forty-five (45) days of completion of testing in accordance with Rule 62-297.450(3)(b), F.A.C.

Record Keeping and Reporting Requirements

- 19. The permittee shall maintain a daily log on the quantity of slag processed and fuel consumed by the slag dryer.
- 20. An annual operation report shall be submitted to DERM by March 1 of each year pursuant to Rule 62-210.370(2), F.A.C.
- 21. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit (Rule 62-4.090, F.A.C.).

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# SPECIFIC CONDITIONS:

22. A timely application for a Title V operation permit must be submitted to DERM by the date required in Rule 62-213.420, F.A.C.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell, Secretary

To:

Clair Fancy

From:

A. A. Linero

Date:

September 13, 1995

Subject:

Intent to Issue Permit Tarmac Florida, Inc.

Attached for your approval and signature is a preliminary determination, proposed BACT, and draft permit for Tarmac Florida, Inc. to construct a blast furnace slag processing operation at the Pennsuco Portland cement plant located in Medley, Dade County, Florida.

The slag processing operation will contain a new 10,000 gallon No. 2 fuel oil storage tank and a used 150 TPH asphalt dryer. It will use existing clinker and cement silos, finishing mill, and bulk cement loadout units.

The blast furnace slag is not introduced into the existing cement kilns or clinker coolers. The proposed operation operates independently from the rest of the Portland cement production at this facility. Therefore, the kilns and clinker coolers were not subject to review under this application.

The project was subject to the PSD regulations because the PM and PM10 emissions increase requested by the applicant were above the significant emission rates. The BACT addressees only the slag dryer. The PM emission standard for the dryer was reduced from the requested 0.04 grains/dscf to an allowable 0.02 grains/dscf by the BACT determination.

The application was complete on August 14, 1995. I recommend your approval and distribution of the determination.

AAl/wh/t