

Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

December 16, 1992

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Townsend:

Re: Amendment to the Operation Permit, No. AO 13-157297, and the Federal Permit, No. PSD-FL-142, to Conduct Performance Tests for Pollutant Emissions on the Facility's No. 3 Cement Kiln While Utilizing Bottom Ash from the Dade County Resource Recovery Incinerator

The Department has reviewed the request that you provided on September 28, 1992. We have also considered the Department's legal authority to allow Tarmac Florida, Inc. (TFI) to conduct the requested performance tests: Paragraph 403.061(15), Florida Statutes (F.S.) authorizes the Department to consult with any person proposing to construct, install, or otherwise acquire a pollution control device or system concerning the efficacy of such device or system, or the pollution problem which may be related to the source, device, or system. Paragraph 403.061(16), F.S., authorizes the Department to encourage voluntary cooperation by persons in order to achieve the purposes of the state environmental control act. Paragraph 403.061(18), F.S., authorizes the Department to encourage and conduct studies, investigations, and research relating to the causes and control of pollution. Florida Administrative Code (F.A.C.) Rule 17-210.700(5) authorizes the Department to consider variation in industrial equipment and make allowances for excess emissions that provide practical regulatory controls consistent with the public interest.

In accordance with the provisions of Paragraphs 403.061(15), (16), and (18), F.S., F.A.C. Rule 17-210.700(5), and F.A.C. Chapters 17-210 thru 17-297, and 17-4, you are hereby authorized to conduct performance tests for pollutant emissions on TFI's No. 3 cement kiln while at baseline conditions (utilizing coal ash) and while utilizing bottom ash from the Dade County Resource Recovery

Mr. Al Townsend
Amendment to AO 13-157297 and PSD-FL-142
December 16, 1992
Page Two

Incinerator (DCRRI). The No. 3 cement kiln's emissions were modeled in the modification evaluation for the No. 2 cement kiln (PSD-FL-142). The source is permitted to utilize ash in the process of making cement.

Screening for actual pollutant emission increases for modification purposes and PSD/NAA (Prevention of Significant Deterioration/Nonattainment Area) applicability will be in accordance with Title 40 Code of Federal Regulations Part 52.21 (July, 1991 version), Chapter 403, F.S., and F.A.C. Chapters 17-210 thru 17-297, and 17-4. If, after the performance test results are evaluated by the Department's Bureau of Air Regulation (BAR) and involved parties (i.e., Department's Southeast District, U.S. EPA, National Park Service, and Dade County Environmental Resources Management) and it is determined that actual pollutant emissions did not increase while utilizing the DCRRI bottom ash, then the Department will amend the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, to authorize continued utilization of the DCRRI bottom ash (PSD-FL-142A). However, if there is an actual increase in pollutant emissions, TFI will not be permitted to utilize the DCRRI bottom ash or any municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties.

The performance tests shall be subject to the following conditions:

1. The permittee shall notify, in writing, the Department's Southeast District and Bureau of Air Regulation (BAR) offices at least 15 days prior to commencement of the performance tests. A written report shall be submitted to these offices within 45 days upon completion of the last test run.
2. Prior to conducting performance tests for pollutant emissions while utilizing the DCRRI bottom ash in the facility's No. 3 cement kiln (Post-tests), performance tests (Pre-tests/baseline) for pollutant emissions shall be conducted while operating under normal operating conditions with the presently permitted kiln fuels and feed material. The pollutant emissions results of the "Pre-tests" shall be compared to the pollutant emissions results of the "Post-tests" to determine if:
 - a) actual pollutant emissions increased [baseline versus DCRRI bottom ash utilization (Pre vs. Post-tests)] for

Mr. Al Townsend
Amendment to AO 13-157297 and PSD-FL-142
December 16, 1992
Page Three

modification purposes and PSD applicability, which, if required, includes the submittal of a permit application and the appropriate processing fee, at a minimum; or,

- b) the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, can be amended to allow the utilization of the DCRRI bottom ash (PSD-FL-142A) in the facility's No. 3 cement kiln.
3. The contents of Mr. David A. Buff's letter received September 28, 1992, are adopted by reference, with the following exceptions:
- a. From the initial date of utilizing the DCRRI bottom ash in the facility's No. 3 cement kiln, which shall be documented in writing to the Department, the permittee shall be limited to a maximum of 14 days, which is to include 7 days of continuous utilization of DCRRI bottom ash, to conduct performance tests. If additional time is needed, the permittee shall provide the Department with documentation of the progress accomplished to date and shall identify what is left to be done to complete the performance tests.
 - b. A Department Type I audit is required and shall be coordinated with the Department.
 - c. Documentation of the utilization rates of the DCRRI bottom ash in the No. 3 cement kiln shall be required.
 - d. Emissions measurements shall also be required for the following pollutants using the following test methods:

<u>Pollutants/Pollutant Category</u>	<u>Test Method</u>
o PM10/PM2.5	EPA Method 5 or EPA Method 201/201A
o Visible Emissions	EPA Method 9 EPA Method 22
o Mercury	EPA Method 101/101A

Note: Stack tests for particulate matter and visible emissions are to be run concurrently, weather permitting. EPA Method 22 will apply to fugitive particulate matter emissions from the DCRRI bottom ash pile. Fugitive emissions shall not exceed 10 minutes, total cumulative time observed, in any 1-hour period.

Mr. Al Townsend
Amendment to AO 13-157297 and PSD-FL-142
December 16, 1992
Page Four

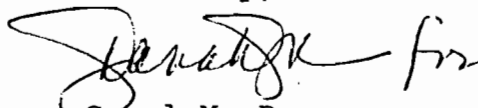
- e. A separate sampling train shall be used exclusively for mercury emissions in order to avoid heating the filter and vaporizing the mercury prior to analyzing.
5. These authorized performance tests shall not result in the release of objectionable odors pursuant to F.A.C. Rule 17-296.320(2).
6. Performance testing shall immediately cease upon the occurrence of a valid environmental complaint by a citizen or other party, or a nuisance or danger to public health or welfare. Performance testing shall not resume until appropriate measures to correct the problem have been implemented.
7. The performance tests for pollutant emissions shall be conducted under the direct supervision and responsible charge of a professional engineer registered in Florida.
8. This Department action is just to authorize the performance tests for pollutant emissions on the facility's No. 3 cement kiln while at baseline conditions (utilizing coal ash) and while utilizing the DCRRI bottom ash.
9. Complete documentation (recording) of any utilization of the DCRRI bottom ash in the facility's No. 3 cement kiln shall be required (i.e., testing results; materials utilized, by weight; etc.) and kept on file for a minimum of two years.
10. The Department shall be notified in writing on the date of the last test run completion.
11. Attachments (See Attachment Section) are incorporated.

The Department has relied on the information referenced in the attachments and conversations with representatives of the TFI, U.S. EPA-Region IV, Department of Interior's National Park Service, Department's Southeast District, and Dade County's Environmental Resources Management, in authorizing this amendment to the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142.

Mr. Al Townsend
Amendment to AO 13-157297 and PSD-FL-142
December 16, 1992
Page Five

This letter must be attached to the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, and shall become a part of the permits.

Sincerely,

A handwritten signature in black ink, appearing to read "Carol M. Browner", with a stylized flourish at the end.

Carol M. Browner
Secretary

CB/rbm

Attachments

c: I. Goldman, SED
P. Wong, DERM
J. Harper, EPA
B. Mitchell, NPS
D. Buff, P.E., KBN
D. Beason, Esq., DER
J. Alves, Esq., HBG&S
S. Kastury, DER

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

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

4a. Article Number

P 062 922 023

4b. Service Type

- | | |
|---|---|
| <input type="checkbox"/> Registered | <input type="checkbox"/> Insured |
| <input checked="" type="checkbox"/> Certified | <input type="checkbox"/> COD |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Return Receipt for Merchandise |

7. Date of Delivery

1-15-92

5. Signature (Addressee)**6. Signature (Agent)**

[Handwritten Signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, November 1990 ★ U.S. GPO: 1991-287-068

DOMESTIC RETURN RECEIPT

P 062 922 023



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, June 1991

Sent to Mr. Al Townsend, Tarmac Inc.	
Street and No. 455 Fairway Drive	
P. O., State and ZIP Code Deerfield Beach, FL 33441	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 1-14-92 Permit: AO 13-157297 PSD-FL-142	

Attachment Section

1. Amendment authorization to operation permit, No. AO 13-157297, and federal permit, No. PSD-FL-142, dated December 18, 1991.
2. Test reports received May 6, 1992.
3. Ms. Jewell A. Harper's letter received July 8, 1992.
4. Mr. H. Patrick Wong's letter received September 16, 1992.
5. Mr. David A. Buff's letter with enclosures received September 28, 1992.
6. Title 40 Code of Federal Regulations (July, 1991 version).
7. Intent to Issue package dated November 5, 1992.
8. Final Determination dated December 16, 1992.

Final Determination

The operation permit amendment application package has been reviewed by the Department. Public Notice of the Department's Intent to Issue was published in the MIAMI REVIEW on November 18, 1992. The Intent to Issue was distributed on November 6, 1992, and available for public inspection at the Department's Southeast District office, the Department's Bureau of Air Regulation office, and the Dade County's Department of Environmental Resources Management office.

There were no comments received during the public notice period. Therefore, it is recommended that the operation permit amendment be issued as drafted.



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Carol Browner
FROM: Howard L. Rhodes *HR*
DATE: January 5, 1993
SUBJ: Approval of an Operation Permit Amendment
AO 13-157297 & PSD-FL-142
Tarmac Florida, Inc.

Attached for your approval and signature is an operation permit and federal permit amendment prepared by the Bureau of Air Regulation for the above referenced company to be allowed 14-days additional time to conduct emissions tests on the facility's No. 3 cement kiln. The tests will be conducted while utilizing bottom ash from the Dade County Resource Recovery Incinerator.

Previous tests were allowed while utilizing both bottom ash and flyash from the same facility, but significant emissions of mercury were detected (were found to be mostly in the flyash by laboratory analysis). Therefore, this test is to verify that the bottom ash contains very little, if any, mercury; and, that it can be utilized as a supplement to the cement production without it being a pollution concern. The No. 3 kiln processes raw materials to make cement. The facility is located in Dade County, Florida.

There were no comments received during the public notice period. I recommend your approval and signature.

HR/BM/rbm

10-19-92 Spohn & Scott EDA

① Baseline Test

② PM 5 Hg - use separate
trains or

No A (heat applied)

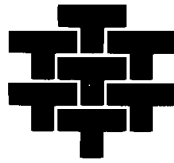
To Bruce M
Date 10/19 Time 3:03

WHILE YOU WERE OUT

M. Scott Davis
of _____
Phone 404 347-5014
Area Code Number Extension

<input checked="" type="checkbox"/> TELEPHONED	<input checked="" type="checkbox"/> PLEASE CALL
<input type="checkbox"/> CALLED TO SEE YOU	<input type="checkbox"/> WILL CALL AGAIN
<input type="checkbox"/> WANTS TO SEE YOU	<input type="checkbox"/> URGENT
<input type="checkbox"/> 10-19-92	<input type="checkbox"/> RETURNED YOUR CALL

10-19-92 @ 3:30
Message TARMAC proposal on bottom ash-
① Baseline
② 2 x Sampling trains
① PM ② Hg
on state that no (A) heat was
applied to the filter (vaporize Hg)
[Signature]
Operator



Tarmac

TARMAC FLORIDA, INC.

455 Fairway Drive
Hillsboro Executive Center North
Deerfield Beach, Florida 33441

September 20, 1993

Telephone:
Deerfield Beach (305) 481-2800

RECEIVED

SEP 23 1993

Division of Air
Resources Management

Mr. Willard Hanks
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, Florida 32399-2400

Re: Tarmac's Request to Modify our Pennsuco Cement Plant Operating Permit

Dear Mr. Hanks:

Per your request, enclosed is a copy of our Air Pollution Operating Permit #AO13-157297 and also a copy of our request of renewal transmittal letter.

Please advise if you have any questions on our modification request to use the Dade County Resource Recovery Ash.

Very truly yours,

Albert W. Townsend
Director of Technical Services

AP15 Res Policy 1 + 3, 8760 lbs/yr
Sub 2, 7884 lbs/yr

AWT/ct

Enclosures

cc: D. Buff
KBN Engineering, Inc.



Florida Department of Environmental Regulation

Southeast District • 1900 S. Congress Ave., Suite A • West Palm Beach, Florida 33406 • 407-964-9668

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary
Scott Benyon, Deputy Assistant Secretary

PERMITTEE:
Mr. Scott Quaas
Environmental Specialist
Tarmac Florida, Inc.
P. O. Box 2998
Hialeah, FL 33012

I.D. NUMBER: 50/DAD/13/0020
PERMIT/CERTIFICATION NUMBER: AO 13-157297 *
DATE OF ISSUE: FEB. 2 1989
EXPIRATION DATE: November 15, 1993
COUNTY: Dade
LATITUDE/LONGITUDE: 25°52'30"N/80°22'30"W
UTM: Zone 17; 562.8 Km. E; 2861.7 Km. N
PROJECT: Tarmac Florida, Inc.
Portland Cement Manufacturer

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule 17-2, and in conformance with all existing regulations of the Florida Department of Environmental Regulation. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

OPERATE: A portland cement manufacturing plant consisting of the following air pollution sources:

- Coal handling system with a 13 ton/hr. throughput capacity consisting of:
 - Dump hopper controlled by a baghouse (G-509) emitting particulate 33 feet above ground level (A.G.L.)
 - Screening tower controlled by baghouse (G-521) emitting particulate 38 feet A.G.L.
 - Coal mill feed bin controlled by baghouse (G-527) emitting particulate 120 feet A.G.L.
 - Bowl mill controlled by baghouses (G-576, G-578, G-580, G-582) emitting particulate through a common stack 117 feet A.G.L. System includes a cyclone used for coal transfer to the pulverized coal bin.
- Kiln 1 with a 40.5 (dry) ton/hr. input capacity controlled by a double chambered electrostatic precipitator (E.S.P.) emitting pollutants 200 ft. A.G.L. **.
- Cooler 1 with 25.0 ton/hr. throughput capacity vented to a multiclone and controlled by a double chambered E.S.P. emitting pollutants 86 feet A.G.L. **.
- Kiln 2 with 40.5 (dry) ton/hr. input capacity controlled by a double chambered E.S.P. emitting pollutants 200 feet A.G.L. **.
- Cooler 2 with a 25.0 ton/hr. throughput capacity vented to a multiclone and controlled by a double chambered E.S.P. emitting pollutants 86 feet A.G.L. **.
- Kiln 3 with a 142 (dry) ton/hr. input capacity vented to a dropout box and controlled by a double chambered E.S.P. emitting pollutants 200 feet A.G.L. ***.
- Cooler 3 with an 87.5 ton/hr. throughput capacity vented to a dropout box and controlled by a 2184 bag (228,000 cfm) baghouse emitting pollutants 100 feet A.G.L. Baghouse also controls emissions from the parallel clinker drag conveyors ***.

PERMITTEE:
Mr. Scott Quaas
Tarmac Florida, Inc.
Hialeah, Florida

I.D. NUMBER: 9 DAD/13/0020
PERMIT/CERTIFICATION NUMBER: AO 13-157297
DATE OF ISSUE: FEB. 2 1989
EXPIRATION DATE: November 15, 1993

- A clinker handling and storage system (for kiln systems 1 and 2) consisting of:

Duplicate bucket elevator/silo distribution drag conveyor operations and clinker silos 1, 2, 4, 5, 11 and 12. Each of the two elevator/conveyor operations and the common silos are controlled by a baghouse (K-147 for one configuration, K-247 for the other) emitting particulate 147 feet A.G.L. Neither elevator/conveyor operation is used simultaneously.

- A clinker handling and storage system (for kiln system 3) consisting of:

Duplicate bucket elevator/silo distribution drag conveyor operations and clinker silos 1 & 17. Each of the elevator/conveyor operations and the common silos are controlled by a baghouse (K-347 for one configuration, K-447 for the other) emitting particulate 160 feet A.G.L. Neither elevator/conveyor operation is used simultaneously.

Clinker silos 4 & 18 controlled by baghouse (K-521) emitting particulate 130 feet A.G.L.

Clinker silos 11, 19, & 20 controlled by baghouse (K-522) emitting particulate 130 feet A.G.L.

Clinker silos 21, 22, 23, 26, 27, & 28 controlled by baghouse (K-633) emitting particulate 130 feet A.G.L.

- Finish mill system 1 with a 25 ton/hr. capacity consisting of two in-line ball mills, clinker/gypsum conveyor, bucket elevator, airslide, separator and transfer line to cement pump (to storage). All of these are controlled by baghouse (F-130) emitting particulate 106 feet A.G.L.
- Finish mill system 2 with a 25 ton/hr. capacity consisting of finish mill 2, clinker/gypsum conveyor, bucket elevator, airslide, separator and transfer line to cement pump (to storage). All of these are controlled by baghouse (F-230) emitting particulate 106 feet A.G.L.
- Finish mill system 3 with an 83.5 ton/hr. capacity consisting of finish mill 3, clinker/gypsum conveyor system controlled by baghouses (F-313 and F-330), a bucket elevator and airslide controlled by a baghouse (F-332), a separator and transfer line to the cement pump (to storage) controlled by a baghouse (F-330). The particulates are emitted 110 feet A.G.L.
- Finish mill system 4 with a capacity of 113 ton/hr. consisting of finish mill 4, a mill sweep controlled by a baghouse (F-430), a clinker/gypsum conveyor system controlled by 4 baghouses (F-603, F-604, F-605) and a general purpose baghouse (F-432), a bucket elevator and airslide controlled by the general purpose baghouse (F-432), a separator and a transfer line to two cement pumps (to storage) controlled by a general purpose baghouse (F-432). The particulates are emitted at an average height of 72 feet A.G.L.
- Cement storage silos 1-9 serving finish mill systems 1, 2, 3 & 4 controlled by baghouses (F-522 for silos 1-6 and F-512 for silos 7-9) emitting particulate 200 feet A.G.L.
- Cement storage silos 10-12 serving finish mill system 4 controlled by baghouses (F-513, F-514 and F-515 respectively) emitting particulate 200 feet A.G.L.
- Bulk cement (truck) loadout unit 3 (cement from silos 10-12) consisting of dual loadout bucket elevators each controlled by a baghouse. (B-372 for one, B-374 for the other) emitting particulate 12 feet A.G.L.; airslide; vibrating screen; truck loadout bin; and telescopic truck loadout spout/hoist. The latter equipment is controlled by baghouse (B-382) emitting particulate 86 feet A.G.L.
- A packhouse with two baggers (for cement silos 3 & 5 for one, 7-9 for the other) controlled by a common baghouse (B-621) emitting particulate 40 feet A.G.L.
- Bulk cement (railcar/truck) loadout unit 1 (uses cement from silos 1-6 and 8) controlled by baghouse (B-110) emitting particulate to exterior of loadout unit 1 building.

Quaas
orida, Inc.
Florida

I.D. NUMBER: 50 DAD/13/0020
PERMIT/CERTIFICATE NUMBER: AO 13-157297 *
DATE OF ISSUE: FEB. 2 1989
EXPIRATION DATE: November 15, 1993

cement (truck) loadout unit 2 (uses cement from silos 7-9) controlled by
use (B-210) emitting particulate to exterior of loadout unit 2 building.

Joint Sources

at hopper (transfers cement from silos 10-12 to 6 & 8) controlled by baghouse
(3) emitting particulate to enclosed basement of cement silos 10-12.

ANCE WITH: Applications for Renewal of Permit to Operate Air Pollution Sources
November 15, 1988 and Applications to Operate Air Pollution Sources dated
1983 addressing: coal handling (revised September 23, 1983), clinker
storage, finish mill systems 1 and 2, cement storage silos 1-9 and packhouse.

ificates of Completion of Construction dated September 28, 1982 submitted in
unction with Application to Construct Air Pollution Sources dated June 14, 1979
plemented by letters dated August 2, 1979 and September 10, 1979) addressing:
at storage silos 10-12 and bulk cement (truck) loadout units 1, 2, & 3.

ications for Renewal dated May 6 and 31, 1983 (as modified/supplemented
ember 23, 1983) based on Application to Operate Air Pollution Sources dated
1, 1971 (as modified by letter dated June 5, 1978) addressing: kiln and
r systems 1 and 2.

ications for Renewal dated May 6 and 31, 1983 (as modified/supplemented
ember 23, 1983) based on Application to Construct Air Pollution Sources dated
ember 26, 1972 (as modified July 18, 1973 and September 23, 1983) and July 2,
addressing: kiln and cooler system 3. Certificate of Completion of
struction dated April 29, 1985. Method of Operation as specified by letter dated
er 4, 1985; Application to Construct Air Pollution Sources dated February 8,
, further information supplied by letters dated May 22, 1980 and June 23, 1982,
request for extension dated March 30, 1982.

ication for Renewal dated October 3, 1984 based on Applications to Construct Air
tion Sources dated July 11, 1972 addressing: finish mill system 3.

ification of Completion of Construction dated December 10, 1982 based on
ication to Construct Air Pollution Sources dated June 1, 1979, and letters dated
14, 1979, August 2, 1979, December 14, 1982 and February 23, 1983 addressing:
sh mill system 4.

Available Control Technology (BACT) determinations signed October 15, 1979 for
at silos 10-12 and bulk cement (truck) loadout unit 3, and April 8, 1980 for
handling, and coal final firing (as modified January 21, 1985 and February 12,
).

point information provided April 28, 1978 (none are attached).

AT: 11000 Northwest 121 Way, Medley, Dade County, Florida.

: A wet process cement manufacturer (SIC # 3241).

TO: General Conditions 1-15 and Specific Conditions 1-13.

permit is a renewal of AO 13-144183 issued December 9, 1985.

Systems 1 & 2 contain a common dust insufflation system which can return
ured particulate to the kiln firing hoods. The dust handling equipment for the
fflation system includes a surge bin (for each kiln precipitator) and a common
bin controlled by baghouse (K-181) emitting particulate 103 feet A.G.L.

System 3 contains a dust insufflation system which can return captured
iculate to the kiln firing hood. The dust handling equipment for the
fflation system includes a scoop bin and a dust bin for the kiln precipitator)
rolled by baghouses (K-383 and K-396 respectively) emitting particulate 100 feet
L. Four new gas sampling ports located in the same plane and elevation as
ious location, 45° from the original ports were installed.

PERMITTEE:
Mr. Scott Quaas
Tarmac Florida, Inc.
Hialeah, Florida

I.D. NUMBER: 50/DAD/13/020
PERMIT/CERTIFICATION NUMBER: AO 13-157297
DATE OF ISSUE: FEB. 2 1989
EXPIRATION DATE: November 15, 1993

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
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), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute 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 the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit, and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
 - a. Having access to and copying any records that must be kept under the conditions of the permit;
 - b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sampling or monitoring 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 the permit, the permittee shall immediately notify and provide the Department with the following information:
 - a. a description of and cause of noncompliance; and
 - b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
Mr. Scott Quaas
Tarmac Florida, Inc.
Hialeah, Florida

I.D. NUMBER: 50/DAD/13 J20
PERMIT/CERTIFICATION NUMBER: AO 13-157297
DATE OF ISSUE: FEB. 2 1989
EXPIRATION DATE: November 15, 1993

GENERAL CONDITIONS:

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 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 arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.
12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.
13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
 - () Compliance with New Source Performance Standards
14. The permittee shall comply with the following monitoring and record keeping requirements:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.
 - b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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 date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be submitted or corrected promptly.

BEST AVAILABLE COPY

PERMITTEE:
Mr. Scott Quaas
Pharmacia Florida, Inc.
Miami, Florida

I.D. NUMBER: 50/DAI 3/0020
PERMIT/CERTIFICATION NUMBER: AO 13-157297
DATE OF ISSUE: FEB. 2 1989
EXPIRATION DATE: November 15, 1993

SPECIFIC CONDITIONS:

Compliance testing shall be conducted for the sources covered by this permit annually (prior to December 31 of each year) in accordance with the methods specified below.

Emission limiting standards are as follows:

- Coal handling:

Particulate shall not exceed 0.1 gr/dscf (April 8, 1980 BACT)

Visible emissions shall not exceed 5 percent opacity (April 8, 1980 BACT)

- Kilns and Coolers 1 & 2:

Particulate shall not exceed the process weight rate table allowable (F.A.C. Rules 17-2.600(7)(a) and 17-2.610(1)(b)). Insufflated material may be included in kiln process weights.

Visible emissions shall not exceed 20 percent opacity (F.A.C. Rule 17-2.610(2)(a)).

- Kiln 3:

Particulate shall not exceed 0.3 lb./Ton of dry kiln feed (F.A.C. Rule 17-2.610(7)(b)1. and 17-2.660(2)(a))(Standards of Performance for New Stationary Sources (NSPS)). Insufflated material may be included in kiln process weights.

Visible emissions shall not equal or exceed 20 percent opacity F.A.C. Rule 17-2.610(2)(a)).

In accordance with the Department BACT Determination Modifications January 21, 1985 for 400 lb SO₂/hr. maximum emission rate, and at operating rates less than maximum, 4.6lb. SO₂/ton of clinker produced.

- Cooler 3:

Particulate shall not exceed 0.1lb./Ton of dry kiln feed (F.A.C. Rules 17-2.600(7)(b).2. & F.A.C. Rule 17-2.660(2)(a)/NSPS).

- Insufflation systems:

Visible emissions shall not equal or exceed 20 percent opacity (F.A.C. Rule 17-2.610(2)(a)).

- Clinker storage (silos 21-23 and 26-28):

- Visible emissions shall not exceed 5 percent opacity (October 15, 1979 BACT)

- Clinker handling/storage (silos 1, 2, 4, 5, 12 and 17-20):

- Visible emissions shall not equal or exceed 20 percent opacity (F.A.C. Rule 17-2.610(2)(a)).

- Finish mill systems 1, 2, & 3:

Particulate shall not exceed the process weight rate table allowable (F.A.C. Rule 17-2.610(2)(a)).

PERMITTEE:
Mr. Scott Quaas
Tarmac Florida, Inc.
Hialeah, Florida

I.D. NUMBER: 50 AD/13/0020
PERMIT/CERTIFICATE NUMBER: AO 13-157297
DATE OF ISSUE: FEB. 2 1989
EXPIRATION DATE: November 15, 1993

SPECIFIC CONDITIONS Cont.:

- Finish mill system 4:
Particulate shall not exceed the process weight rate table allowable (F.A.C. Rule 17-2.610(2)(a)).
Visible emissions shall not exceed 5 percent opacity (October 15, 1979 BACT).
- Cement storage silos 1-9 and packhouse:
Visible emissions shall not exceed 20 percent opacity (F.A.C. Rule 17-2.610(2)(a)).
- Cement storage silos 10-12 and bulk cement loadout unit 3:
Visible emissions shall not exceed 5 percent opacity (October 15, 1979 BACT).
- Bulk cement loadout units 1 & 2:
Visible emissions shall not equal or exceed 10 percent opacity (F.A.C. Rule 17-2.660(7)(a)/NSPS).

3. Compliance test methods (continued):

Source/Emission Point	Pollutant	Test Method
Coal handling/(G-509), (G-521), (G-527) & (-576, G-578, G-580 and G-582)	Particulate Visible emissions	EPA Method 5 * EPA Method 9 **
Kiln 1, Cooler 1, Kiln 2, Cooler 2 and Cooler 3	Particulate Visible emissions	EPA Method 5 ** EPA Method 9
Kiln 3	SO ₂ Particulate Visible emissions	EPA Method 6 EPA Method 5 EPA Method 9
[Insufflation systems] (K-181),	Visible emissions	EPA Method 9
Clinker handling & Storage system/ (K-633), (K-147), (K-247), (K-347), (K-447), (K-521), & (K-522)	Visible emissions	EPA Method 9
Finish mill systems 1, 2, 3, & 4 (F-130) & (F-230)	Particulate Visible emissions	EPA Method 5 * EPA Method 9
Cement storage silos, packhouse & bulk cement loadout units 1, 2, & 3 (F-511), (F-512 N.) (F-512 S.) (F-513), (F-514), (F-515), (B-621), (B-382, (B-372) & (B-374)	Visible emissions	EPA Method 9

* Visible emissions testing demonstrating opacity does not exceed 5 percent opacity (by EPA Method 9) may be submitted in lieu of particulate testing.

** EPA Method 17 may be used for Kilns & Coolers 1 & 2.

The compliance test report shall be submitted to the Department in accordance with Florida Administrative Code (F.A.C.) Rule 17-2.700(7).

Emissions testing is required to be conducted as soon as practical but no later than thirty (30) days after reactivation of any source which did not operate the previous calendar year.

Testing of emissions should be conducted using the fuel and/or process input which are expected to result in the highest emissions and within ten percent (10%) of

PERMITTEE:
Mr. Scott Quaas
Tarmac Florida, Inc.
Hialeah, Florida

I.D. NUMBER: 5(AD/13/0020
PERMIT/CERTIFICATION NUMBER: AO 13-157297
DATE OF ISSUE: FEB. 2 1989
EXPIRATION DATE: November 15, 1993

SPECIFIC CONDITIONS Cont.:

the rated capacity of the source. Otherwise the Department may require the test to be repeated or modify the permit to reflect tested rates and/or fuels.

6. The Department shall be notified of expected test dates at least fifteen (15) days prior to compliance testing.

7. On or before March 1 of each calendar year, a completed DER Form 17-1.202(6), Annual Operations Report Form for Air Emissions Sources shall be submitted to the Department.

8. Fuel used in Kilns 1 & 2 shall be limited to Natural gas and No. 6 fuel oil except that operation with other fuels is allowed under a valid construction permit for debugging and testing equipment. Kiln 3 shall be limited to low sulfur (< 2.5%_s) coal, natural gas, No. 6 fuel oil and used oil fuel meeting EPA specifications for used oil fuel. For used oil fuel, the amount of used oil fuel generated on site shall be kept in a log on the premises. Samples shall be drawn on a semi-annual basis with the analyses by EPA Recommended Analytical procedures for used oil fuel for lead, arsenic, cadmium, chromium, total halogens and flashpoint. Analyses by ASTM methods, or other methods with prior DER-SEFD approval shall be performed on each sample for sulfur, ash, BTU content and PCB's. The results of the analyses (on the laboratory's letterhead) shall be submitted to the DER-SEFD no later than 30 days after the analyses. The unused portion of the used oil fuel sample shall be retained for six months following the submittal of the analyses in case further testing is required. All records, reports and data collected shall be maintained as specified in General Condition 14, Part B.

9. Copies of all reports, tests, notifications or other submittals required by this permit shall be submitted to both the Department of Environmental Regulation, Southeast District Office, and Dade County Environmental Resources Management.

10. Unconfined emissions of particulate shall be controlled by the following means:

- a. Paved parking and trafficked areas shall be well maintained and kept free of particulate matter build-up.
- b. Sprinkling when necessary shall be used for unpaved areas and in conjunction with vacuum type sweeper(s) for paved areas. Sweeper(s) shall be maintained and operated such that visible emissions do not exceed 5 percent opacity by EPA Method 9.
- 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 area. Fugitive emissions shall be contained in this manner so as not to exceed 5 percent opacity. This emission limit is specifically required for the transfer pump hopper (B-323) by the April 8, 1980 BACT determination.

11. Proof of compliance with the permit shall be the kiln daily operating log, the SO_x/NO_x monitor's strip charts and compliance test data. The day, time, type of fuel, fuel feed rate (TPH), sulfur content of the fuel, kiln feed rate (TPH), sulfur content of the kiln feed, oxygen content of the flue gas and the clinker production rate shall be recorded for each kiln. The time period that each kiln operated will also be recorded in the operating log. The logs shall be maintained on the premises for viewing during subsequent compliance inspections and shall be kept for a minimum of two (2) years.

BEST AVAILABLE COPY

PERMITTEE:
Mr. Scott Quaas
Tarmac Florida, Inc.
Hialeah, Florida

I.D. NUMBER: 56 AD/13/0020
PERMIT/CERTIFICATION NUMBER: AO 13-157297
DATE OF ISSUE: FEB. 2 1989
EXPIRATION DATE: November 15, 1993

SPECIFIC CONDITIONS Cont.:

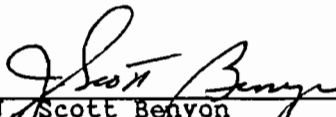
12. Permittee will continue the use of the SO₂ and NO_x monitor to measure the concentrations of SO_x and NO_x in the stack for Kiln Number 3. The measured concentrations, as demonstrated by the SO₂/NO_x strip chart recording, shall not be used to determine compliance with applicable emission limitations. However, whenever the strip chart recording indicates a SO₂ concentration greater than 350 ppm or a NO_x concentration than 500 ppm, the permittee shall notify the Department by telephone. The Department may then determine whether a stack test will be necessary to confirm the status of Kiln Number 3 emissions for the parameter exceeding the above stated thresholds. The permittee shall note on the daily log whether or not threshold values were exceeded. If exceeded, the time the Department was notified shall be noted

In addition, the permittee will continue to discharge to waste the dust from fields five and six of the electrostatic precipitator for Kiln Number 3, which represents the conditions existing during the stack test of April 28, 1987, during which compliance with the state and federal SO₂ and NO_x emission limitations was demonstrated. The permittee shall verify on the Kiln daily log that the dust collected in the hoppers for fields five and six is discharged to the "Dust Waste Bin".

3. If Kiln 1 and Cooler 1 have not been reactivated by April 1, 1992, a new construction permit application and review will be required. Also, if Kiln 2 and cooler 2 have not been reactivated by May 1, 1992, a new construction permit application and review will be required. Startup of Kilns 1 and 2 prior to the above dates requires advance notification and testing per Specific Condition 4.

Issued this 2nd day of February, 1989

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION



J. Scott Benyon
Deputy Assistant Secretary

BEST AVAILABLE COPY

TEL: 407-433-2650

Sep 22 93

11:48 No.007 P.01

CIVIL SERVICE COLLECTION



Lawton Chiles
Governor

Southeast District
P.O. Box 15425
West Palm Beach, Florida 33416

Virginia B. Wetherell
Secretary

FAX TRANSMITTAL LETTER

DATE 9/22/93 # OF PAGES 8
including this one

FROM: M. Skinner

TO: Willard Hanks

PERSON SENDING FAX:

FAX NUMBER: SC 292-6979

M. Skinner

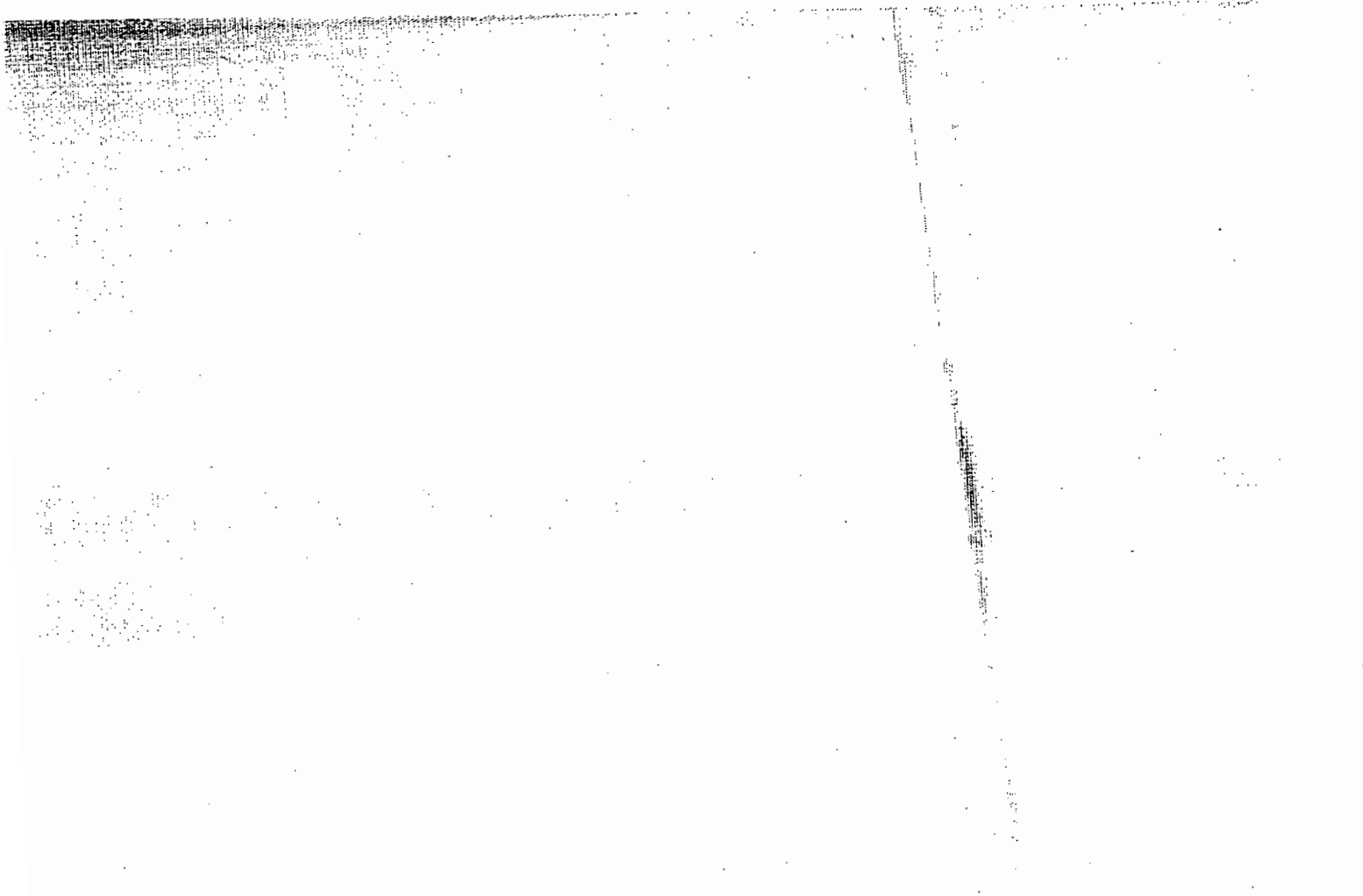
AGENCY: _____

TRANSMITTAL ON A HITACHI/HIFAX/35

FAX NUMBER: 407/433-2666

IF ANY OF THE PAGES ARE NOT CLEARLY RECEIVED PLEASE CALL: 407/433-2650

COMMENTS: _____





Tarmac Florida, Inc.

455 Fairway Drive • Deerfield Beach, Florida 33441 • 305-481-2800

F A C S I M I L E

September 2, 1993

TO: **Isadore Goldman**

Facsimile # 407-433-2660

FROM: **Albert W. Townsend**
Technical Services

Facsimile # (305)421-0296

number of pages including cover sheet 2

Comments:

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTION 120.60(2), FLORIDA STATUTES

Modification of 4013-157297

Applicant's Name: TARMAC FLORIDA, INC.

The undersigned has read Section 120.60(2), Florida Statutes, and fully understands the applicant's rights under that section.

With regard to the above referenced license (permit, certification) application, the applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Section 120.60(2), Florida Statutes, waives the right under Section 120.60(2), Florida Statutes, to have the application approved or denied by the St. Johns Water Management District within the 90 day time period prescribed in Section 120.60(2), Florida Statutes. Said waiver is made freely and voluntarily by the applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the St. Johns Water Management District.

This waiver shall expire on the 1st day of October, 1993.

The undersigned is authorized to make this waiver on behalf of the applicant.



SIGNATURE

Albert W. Townsend-Dir. Technical Services

TYPED NAME AND TITLE

September 2, 1993

DATE

(305)421-2800

TELEPHONE NO.



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

May 14, 1993

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Albert W. Townsend
Director of Technical Services
Tarmac Florida, Inc.
Hillsborough Executive Center North
455 Fairway Drive
Deerfield Beach, Florida 33441

Dear Mr. Townsend:

RE: Tarmac Portland Cement Plant - Permit Modification to
Utilize Dade County Combustor Ash

The Bureau of Air Regulation received your May 11, 1993, application for the above referenced project. We have determined that the fee submitted is insufficient and are returning your check No. 100015 for \$250 with this letter. Since the request is to modify two sources (kilns 2 and 3), a separate fee for each source will be required before processing can begin.

Please submit the correct fee to the DER Southeast District office in West Palm Beach. We are forwarding your application to that office to begin processing when the fees are received. If you have any questions, please call Patty Adams at (904)488-1344.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/pa

Enclosure

cc: Isidore Goldman, Southeast District

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

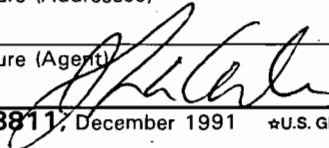
Consult postmaster for fee.

3. Article Addressed to:
 Mr. Albert W. Townsend
 Director of Technical Services
 Tarmac Florida, Inc.
 455 Fairway Drive
 Deerfield Beach, FL 33441

4a. Article Number
 P 230 524 301

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 5-20-93

5. Signature (Addressee)
 6. Signature (Agent)


8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

P 230 524 301

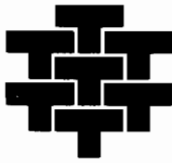


Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to	
Mr. Albert W. Townsend	
Street and No. Tarmac Florida	
455 Fairway Drive	
P.O., State and ZIP Code	
Deerfield Beach, FL 33441	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
Mailed: 5-17-93	

PS Form 3800, June 1991



Tarmac

TARMAC FLORIDA, INC.

455 Fairway Drive
Hillsboro Executive Center North
Deerfield Beach, Florida 33441

December 7, 1992

Telephone:
Deerfield Beach (305) 481-2800

RECEIVED

DEC 08 1992

DIVISION OF Air
Resources Management

Mr. Bruce Mitchell
FDER
Twin Towers Office Bldg.
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Request for Authorization to Conduct Pollutant Emissions Performance Tests While Utilizing Bottom Ash from the Dade County Resource Recovery Incinerator in TFI's No. 3 Cement Kiln

Dear Mr. Mitchell:

At the request of Mr. Albert W. Townsend, Director of Technical Services, I have enclosed a copy of our certified " Notice of Intent to Issue" ad from the Miami Review. The ad ran on 11/18/92.

If you have any questions or comments, please feel free to call. Thank you.

Sincerely,

Kathy Richardson
Real Estate Coordinator

Encs:

MIAMI REVIEW

Published Daily except Saturday, Sunday and
Legal Holidays

Miami, Dade County, Florida.

STATE OF FLORIDA
COUNTY OF DADE:

Before the undersigned authority personally appeared Octelma V. Ferbeyre, who on oath says that she is the Supervisor of Legal Advertising of the Miami Review, a daily (except Saturday, Sunday and Legal Holidays) newspaper, published at Miami in Dade County, Florida; that the attached copy of advertisement, being a Legal Advertisement of Notice in the matter of

STATE OF FLORIDA
NOTICE OF INTENT TO ISSUE
TARMAC FLORIDA, INC.
AMENDMENT TO AO 13-157297 and
PSD-FL-142

in the x x x Court,
was published in said newspaper in the issues of

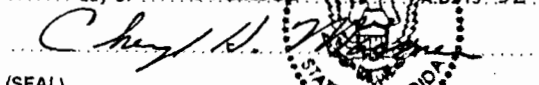
November 18, 1992

Affiant further says that the said Miami Review is a newspaper published at Miami in said Dade County, Florida, and that the said newspaper has heretofore been continuously published in said Dade County, Florida, each day (except Saturday, Sunday and Legal Holidays) and has been entered as second class mail matter at the post office in Miami in said Dade County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.



Sworn to and subscribed before me this

18th day of November, A.D. 1992



(SEAL)

Octelma V. Ferbeyre personally known to me
OFFICIAL NOTARY SEAL
CHERYL H. MARMAR
COMMISSION NO. CC191642
MY COMMISSION EXP. APR. 12, 1996

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF INTENT TO ISSUE

TARMAC FLORIDA, INC. AMENDMENT TO AO 13-157297 AND PSD-FL-142

The Department of Environmental Regulation (Department) hereby gives notice of its Intent to issue to Tarmac Florida, Inc. (TFI) an amendment to the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, authorizing performance tests for pollutant emissions on the No. 3 cement kiln, as detailed in the application package. The Department is issuing this Intent to Issue for the reasons stated below and in the proposed amendment.

The applicant, TFI, Post Office Box 2998, Hialeah, Florida 33012, submitted a request on November 4, 1991, to the Department's Bureau of Air Regulation (BAR) for authorization to conduct pollutant emissions tests on the facility's No. 3 cement kiln. The performance tests for pollutant emissions will be conducted while at baseline conditions utilizing the standard raw material (coal ash) and while utilizing as a substitute raw material combustor bottom ash from the Dade County Resource Recovery Incinerator (DCRRI). The amount of the DCRRI ash to be utilized is 3,000 tons, which is approximately the amount of ash produced by the DCRRI in a 1-week period. The No. 3 cement kiln's emissions were evaluated in the modification of the No. 2 cement kiln (PSD-FL-142). The No. 3 cement kiln is permitted to utilize ash as a raw material in the process of making cement.

Screening for actual pollutant emission increases for modification purposes and PSD/NAA (Prevention of Significant Deterioration/ Nonattainment Area) applicability will be in accordance with Title 40 Code of Federal Regulations (CFR) Part 52.21 (July, 1991 version), Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. If, after the performance test results are evaluated by the Department's Bureau of Air Regulation (BAR) and involved parties (i.e., Department's Southeast District, U.S. EPA, National Park Service, and Dade County Environmental Resources Management) and it is determined that actual pollutant emissions did not increase while utilizing the ash, then the Department will amend the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, to authorize continued utilization of the ash (PSD-FL-142A). However, if there is an actual emissions increase in pollutant emissions, TFI will not be permitted to utilize the DCRRI ash or any other municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties.

The proposed project will occur at the applicant's facility located at 11000 N.W. 121 Way, Hialeah, Dade County, Florida.

The Department has permitting jurisdiction under Chapter 403, F.S., F.A.C. Chapters 17-2 and 17-4, and Title 40 CFR (July, 1991 version). The project is not exempt from permitting procedures. The Department has determined that an amendment is required for the proposed activity.

Any 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, within fourteen (14) days of publication of this notice. 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 Amendment 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 Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/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 publication of this notice 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 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.

The request/application is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m. Monday through Friday, except legal holidays, at:

Department of Environmental Regulation

Bureau of Air Regulation

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

Department of Environmental Regulation

Southeast District Office

1900 S. Congress Avenue, Suite A

West Palm Beach, Florida 33406

Dade County Environmental Resources Management

801 S.W. 3rd Avenue

Miami, Florida 33130

Any person may send written comments on the proposed action to Mr. Preston Lewis at the Department's Tallahassee address. All comments received within 14 days of the publication of this notice will be considered in the Department's final determination.

11/18

92-4-111896MRR

REVIEW NEWSPAPERS

Affiliates of Time Warner Inc.

Miami Review
(305) 377-3721

Broward Review
(305) 463-1432 / (305) 945-6577

Palm Beach Review
(407) 832-0386 / (305) 421-5900

TARMAC FLORIDA, INC
455 FAIRWAY DRIVE
DEERFIELD BEACH FL 33442

Kathy Richardson

REMIT TO
REVIEW NEWSPAPERS
P.O. BOX 010589
MIAMI, FL 33101-0589

PLEASE RETURN REMITTANCE COPY
TERMS: NET DUE ON RECEIPT OF INVOICE

SALES CODE	ORDER NUMBER	CUSTOMER NO.	CODE	DEPARTMENT	DATE	INVOICE NO.	
	111996	75670-11	HP	PA 04	11/15/92	141765	
DESCRIPTION						UNIT PRICE	AMOUNT
MIAMI REVIEW NOTICE OF INTENT TO ISSUE AMENDMENT TO AC 13-157297 AND PSD-FL-142 AD RAN 11/16/92 (KATHY RICHARDSON)							165.30
						SUB-TOTAL	165.
						SALES TAX	
						TOTAL DUE	165.

165.30

% Maria

CREDIT DEPT. (305) 347-6616
PAST DUE BALANCES WILL BE CHARGED A 1.5 PER MONTH
SERVICE CHARGE (18% PER ANNUM).

REMITTANCE COPY



RECEIVED
DER - MAIL ROOM

1992 SEP 28 AM 10: 57

September 25, 1992

Mr. Clair Fancy
Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Proposed Retest of Incinerator Ash as Raw Material
Tarmac Florida, Inc., Cement Plant
Dade County, Florida

Dear Mr. Fancy:

Mr. Al Townsend of Tarmac and I recently discussed with Mr. Bruce Mitchell of your staff the re-testing of Tarmac Kiln #3 using Dade County Resources Recovery Facility (DCRRF) incinerator ash as a substitute raw material. As we presented to Mr. Mitchell, EPA Region IV has reviewed the test results from the trial burn tests of January and February 1992 and concluded that the pollutants particulate matter (PM) and mercury (Hg) resulted in an increase in emissions when utilizing the DCRRF ash.

Tarmac believes the increase in PM emissions as reflected in the tests is not a result of the DCRRF ash; Tarmac now utilizes power plant ash in the raw feed and there should be no difference in PM emissions from the kiln. Instead, the difference in PM emissions is a result of the variability of the process and ESP operation. This is demonstrated in the varying PM emissions reflected in the PM compliance tests conducted over the past 10 years for Kiln #3. As a result, Tarmac wishes to retest the kiln for PM when using DCRRF ash to demonstrate no increase in PM emissions under similar operating conditions.

Tarmac is also concerned about Hg emissions in south Florida. As a result, Tarmac has investigated the situation with Dade County. DCRRF ash consists of two components: about 80 percent is bottom ash and 20 percent is fly ash. Each ash stream was analyzed for Hg content. The bottom ash was found to contain virtually no Hg, whereas the fly ash contained measurable quantities of Hg. This result is consistent with combustion theory, which indicates that all the Hg in the solid waste would be vaporized in the boiler and exit the boiler in the flue gases. Little if any Hg would be retained in the bottom ash. As the flue gas temperature decreases downstream of the boiler to less than about 500°F, Hg begins to condense out onto the fly ash particles. PM control with an ESP, which operates at about 400-450°F, would result in some collection of Hg in the ESP ash.

As a result, Tarmac desires to conduct a second trial burn utilizing only DCRRF bottom ash (no ESP ash included) in order to demonstrate that neither PM or Hg emissions increase when utilizing this ash. The retest protocol (Attachment A) is essentially the same as the initial trial burn, except that only PM and Hg will be tested. A description of the Tarmac cement production process was provided in the original test protocol and, therefore, is not repeated in Attachment A.

1031-1-13

6080262851

10

E
A



WEIGHT



KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 N.W. 57th Street Gainesville, Florida 32605
Telephone: (904) 331-9000 FAX: (904) 332-4189

904/488-1344

DABuff/VJP
12034

AM Prior

Mr. Clair Fancy
Division of Air Resources Mgmt
Florida Dept of Environmental Reg
2600 Blair Stone Road
Tallahassee, FL 32399-2400



In our conversation, Mr. Bruce Mitchell of your staff concurred with this approach. It is understood that this will require a separate amendment to the operating permit and a new public notice. The \$250 application processing fee is enclosed. Thank you for your cooperation in this matter.

Sincerely,

David A. Buff

David A. Buff, M.E., P.E.
Principal Engineer

Enclosures

- cc: Al Townsend
Jim Alves
Bruce Mitchell
Tahnum Goldschmid
Charlie Strong
Project File (2)
S. Brooks, SE Wiat.
D. Stang, DERM
G. Warner, EPA
B. Mitchell, NPS

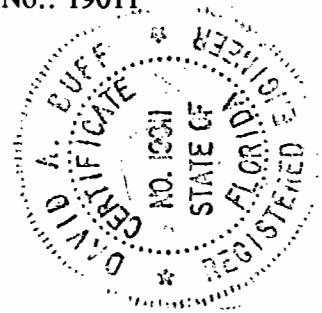
Professional Engineer Certification

Name: David A. Buff

Signature: *David A. Buff*

Florida P.E. Registration No.: 19011

Seal:





TARMAC FLORIDA, INC.
P.O. BOX 8648, DEERFIELD BEACH, FL 33443

CHECK NO. - 72806
CHECK DATE - 09/18/92

PAYMENT ADVICE

STUB 1 OF 1

INVOICE		COMMENT	GROSS	DEDUCTIONS	AMOUNT PAID
NUMBER	DATE				
SEPT 92	09/17	04	250.00		250.00

DETACH BEFORE DEPOSITING



TARMAC FLORIDA, INC.
P.O. BOX 8648, DEERFIELD BEACH, 33443

NATIONSBANK OF TEXAS, N.A.
WICHITA FALLS, TEXAS 76301

CHECK NUMBER **072806**

88-130
1119

00072806

16059

DATE	AMOUNT
09/18/92	\$*****250.00

PAY
TWO HUNDRED FIFTY AND 00/100 *****
TO THE ORDER OF:

FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATIONS,

Lowell James
J. Adams

AUTHORIZED SIGNATURES

ATTACHMENT A
TARMAC FLORIDA, INC.
ASH RECYCLING RE-TEST BURN PLAN

I. INTRODUCTION

The test burn will use approximately 3,000 tons of bottom ash, which is approximately the amount of bottom ash produced by DCRRF in a 1-week period. This amount of ash will allow the cement plant to operate at full capacity with the DCRRF bottom ash during the test burn. The production time to process the bottom ash through the cement plant is 7 days.

II. TRANSPORTATION AND STORAGE

The bottom ash will be transported by Dade County vehicles or private haulers. The bottom ash will be delivered over a 3-day period. The total round-trip distance is approximately 17 miles. Trucks used to transport the bottom ash will have roll canvas tops to prevent the ash from becoming airborne. The bottom ash delivered by the trucks will be deposited on the ground at Tarmac next to a loading hopper.

III. CEMENT PRODUCTION

Immediately after the bottom ash arrives at the Tarmac plant, it is mixed with limestone. This prevents the ash from caking and solidifying. Front-end loaders will transfer the premixed materials from the ground into an existing hopper. This premix is then transported by way of a belt conveyor to raw material storage silos. The ash is then mixed with additional limestone, which is housed in a separate silo, to produce a raw mix. The limestone, which contains 89 percent calcium carbonate, is mixed with the ash to produce the proper alumina, iron, silica, and calcium carbonate content needed to make the cement.

The limestone/ash premix and the limestone from the silo are fed through weigh-belt conveyors to the grinding mill for slurry production. The raw mix is ground with water to produce a slurry. The slurry is stored and blended in large, steel tanks. Next, it is pumped to the feed end of an inclined, coal-fired, rotary Kiln. The slurry passes through the Kiln, where it is first heated, driving off the moisture, then calcined. The mixture reaches the critical temperature of 2,800°F,

and calcium silicates and calcium aluminates form. These are the fundamental compounds required to produce Portland cement clinker.

The hot clinker is cooled to 150°F and conveyed to silos. It is then withdrawn, gypsum is added, and the mix is interground in grinding mills to produce Portland cement. This cement is pneumatically pumped to storage silos. From these silos, it is shipped by truck and rail to customers.

The cement clinkers will contain a total of approximately 3,000 tons of bottom ash during a 7-day period. There will be approximately 13 percent ash, by weight, in the raw mix (slurry); 20 percent ash, by weight, in the clinker; 19 percent ash, by weight, in the cement; and 3.4 percent ash, by weight, in the concrete.

IV. SAMPLING PROTOCOL

Baseline sampling for PM and Hg was conducted at Tarmac on August 28, 1992.

The sampling program for the DCRRF incinerator bottom ash test burn will consist of sampling the Kiln 3 stack for PM and Hg emissions. In addition, a sample of bottom ash will be taken by Dade County personnel immediately before it is transported to Tarmac. This bottom ash will be analyzed for Hg content. The samples will be analyzed by Spectrum Laboratories, Inc., located in Fort Lauderdale, Florida.

Stack testing will start on the eighth day after the DCRRF ash is first introduced into the process and one day after the kiln begins processing new slurry containing the ash to assure that no residue from the previously used coal ash is present. Emissions testing for PM and Hg will consist of three test runs of 2 hours in duration. The test burn sampling plan is summarized in Tables A-1 and A-2. A sampling protocol developed by Air Consulting and Engineering, Inc., is attached as Appendix A.

Table A-1. Test Burn Sampling Plan

I.	DCRRF Bottom Ash	
A.	<u>Metals</u>	<u>Method</u>
	Mercury	7471
II.	Kiln 3 Stack	
A.	<u>Metals</u>	
	Mercury	EPA Method 101A
B.	<u>Nonmetals</u>	
	Particulate Matter	EPA Method 101A

Table A-2. Schedule

A. Baseline sampling - Conducted on August 28, 1992 and witnessed by DER/DERM

B. Re-Test Burn Sampling

Day 1: Bottom ash is sampled by Dade County. DCRRF bottom ash is then transported by truck to Tarmac and is blended with raw feed.

Day 2: Same as Day 1.

Day 3: Same as Day 1; raw mill grinding has begun.

Day 4: Raw mill is operating.

Day 5: Raw mill is operating, and use of old and new slurry has begun.

Day 6: Old and new slurry is used.

Day 7: New slurry is used containing DCRRF bottom ash only.

Day 8: Stack testing will begin on this day.

Day 9: Same as Day 7; stack testing is continued as necessary.

APPENDIX A

Tarmac K-3 Kiln
Tarmac Resource Recovery Ash Project
Particulate and Mercury Testing
Methodology and Scope of Work

1.0 *Testing Overview*

The optimum sampling train for performing particulate (PM) and Mercury (Hg) emissions testing simultaneously is the EPA Method 101A train with a slight modification for sample handling as provided in accordance with the EPA Multi-Metal Train which is also used for Hg testing. I have provided copies of both methods for review of interested parties. One will note that use of a heated filter is an option in the Method 101A train. Sampling train and sampling handling procedures are discussed in 3.0.

2.0 *Field Personnel*

A three member field test team will be utilized. The ground person will recover and collect samples and recharge sampling train components.

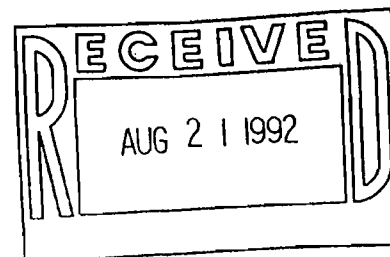
3.0 *PM/Hg Sampling Train*

A schematic of the sampling train is provided. Operation of the train is identical to EPA Method 5. Three 2-hour test runs will be conducted per test series. Additional KMnO_4 impingers and KMnO_4 volumes are added due to the high condensate volume anticipated. At the end of each test run the train components will be lowered to a clean-up trailer for collection. Sample fractions will be collected as follows.

1. Glass Bottle - save all impinger contents after measuring for condensate gain. Wash filter backhalf and all impinger components except silica gel impinger with KMnO_4 solution.
2. Silica Gel
3. Save filter in glass petri dish.
4. Glass Bottle - Rinse probe, nozzle, and front half filter holder with acetone using metallic free brush. Re-rinse with KMnO_4 and place in Container 1.

Particulate analysis will be performed in the Gainesville ACE lab using normal procedures. After particulate analysis, probe wash residue shall be resolubilized with concentrated nitric acid and added to Container 1. Hg samples are now reduced to containers 1 and 3. Analysis now proceeds starting with 7.3.1 of EPA Method 101A. As this method states, samples are eventually reduced to one analysis per run. The total number of samples analyzed for Hg for a three run test series will be 4.

1. Run 1
2. Run 2
3. Run 3
4. Blank (consisting of filter, KMnO_4 , and HNO_3)



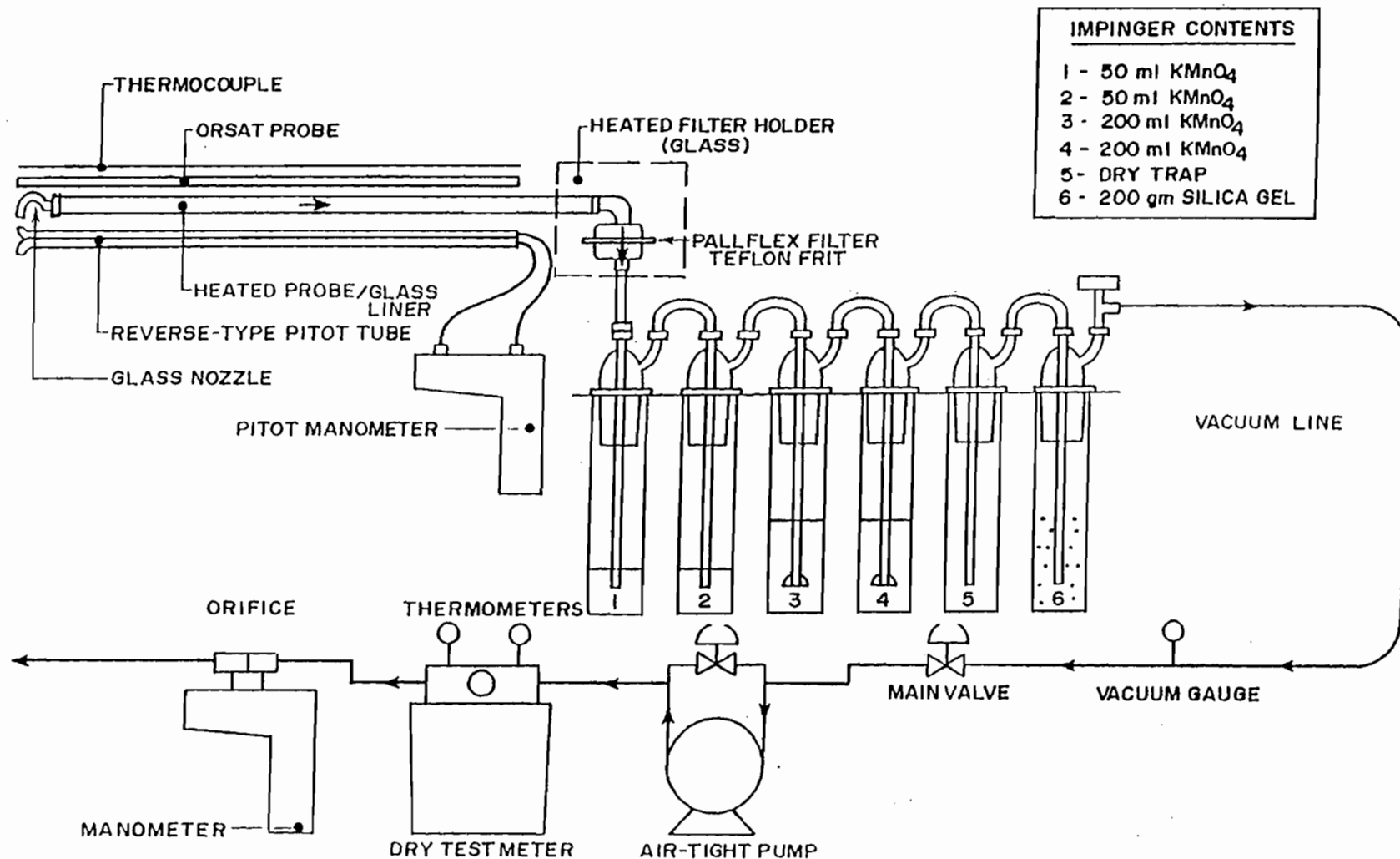


FIGURE I.

MERCURY AND PARTICULATE MATTER SAMPLING TRAIN

AIR CONSULTING
and
ENGINEERING



ENVIRONMENTAL RESOURCES MANAGEMENT
SUITE 1310
111 N.W. 1st STREET
MIAMI, FLORIDA 33128-1971
(305) 375-3376

September 10, 1992

RECEIVED

SEP 16 1992

Division of Air
Resources Management

Mr. Bruce Mitchell
Bureau of Air Regulation
Florida Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

RE: TESTING OF DCRR INCINERATOR ASH AT TARMAC KILN 3. - AP-0368

Dear Mr. Mitchell:

The U.S. EPA review of Tarmac Kiln 3 test reports has determined that feeding DCRR ash causes significant increase of particulate and mercury emissions. Both bottom ash and fly ash were utilize as feed in the tests.

Tarmac has indicated that they are prepared to retest using only bottom ash from the boilers which will produce lower emissions. DERM has no objections to a baseline retest followed by another trial test using boiler bottom ash as raw feed additive.

Protocol for these tests should be similar to the first test series.

If you desire any additional information, please call DERM Air Section at (305) 858-0601.

Sincerely,

A handwritten signature in cursive script, appearing to read "H. Patrick Wong for".

H. Patrick Wong
Chief, Air Section
Environmental Monitoring Division

ELA/aas

cc: Albert Townsend, Tarmac, Inc.

BEST AVAILABLE COPY

METROPOLITAN DADE COUNTY, FLORIDA



METRO-DADE CENTER

ENVIRONMENTAL RESOURCES MANAGEMENT
SUITE 1310
111 N.W. 161 STREET
MIAMI, FLORIDA 33128-1971
(305) 375-3376

RECEIVED
SEP 15 1992
TECHNICAL SERVICES

September 10, 1992

Mr. Bruce Mitchell
Bureau of Air Regulation
Florida Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

RE: TESTING OF DCRR INCINERATOR ASH AT TARMAC KILN 3. - AP-0368

Dear Mr. Mitchell:

The U.S. EPA review of Tarmac Kiln 3 test reports has determined that feeding DCRR ash causes significant increase of particulate and mercury emissions. Both bottom ash and fly ash were utilize as feed in the tests.

Tarmac has indicated that they are prepared to retest using only bottom ash from the boilers which will produce lower emissions. DERM has no objections to a baseline retest followed by another trial test using boiler bottom ash as raw feed additive.

Protocol for these tests should be similar to the first test series.

If you desire any additional information, please call DERM Air Section at (305) 858-0601.

Sincerely,
H. Patrick Wong

H. Patrick Wong
Chief, Air Section
Environmental Monitoring Division

ELA/aas

cc: Albert Townsend, Tarmac, Inc.

Post-It™ brand fax transmittal memo 7671		# of pages > 1	
To	BRUCE MITCHELL	From	AL TOWNSEND
Co.	FDER	Co.	Tarmac
Dept.	AIS	Phone #	305 425 4161
Fax #	304-922-6979	Fax #	305 421-0236



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

RECEIVED

JUL 08 1992

Division of Air
Resources Management

4APT-AEB

JUL -1 1992

Mr. C. H. Fancy, P.E., Chief
Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Comparative Testing Conducted on the No. 3 Cement Kiln at
Tarmac Florida, Inc., Medley, Florida

Dear Mr. Fancy:

As requested in your letter of May 22, 1992, we have reviewed two reports for emission testing conducted at the referenced facility in January and February 1992. The purpose of the testing addressed in the reports was to determine whether feeding ash from the Dade County Resource Recovery Incinerator (DCRRI) to Kiln No. 3 at Tarmac Florida, Incorporated (Tarmac) causes an increase in emissions that would be considered significant as defined in 40 C.F.R. §52.21(b)(23).

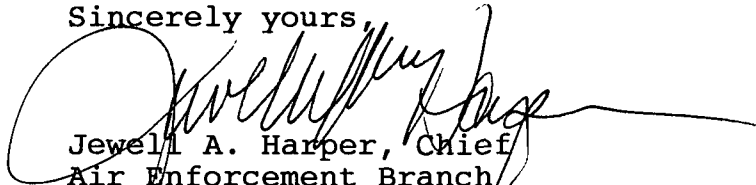
Based upon our review of the reports for the baseline and ash testing, we have determined that feeding ash from the DCRRI to Kiln No. 3 caused significant increases in the emission rates of two pollutants (particulate and mercury). Emission rates of these pollutants during both the baseline testing and ash testing and the emission rate increases resulting from the incinerator ash fed to the kiln are summarized below:

	Emission rate, lb/hr		Emission rate increase,
	Baseline test	Ash test	ton/year
Particulate	0.89	11.08	44.6
Mercury	0.003	0.0699	0.293

Since feeding incinerator ash to the kiln causes emission rate increases that exceed the significance levels specified for particulate and mercury in 40 C.F.R. §52.21(b)(23) (25 tons/year and 0.1 ton/year, respectively), it will be necessary for Tarmac to apply for and receive a modification to their Prevention of Significant Deterioration permit prior to burning DCRRI ash in Kiln No. 3 on a continuous basis.

If you have any questions regarding the determination provided in this letter, please contact Mr. David McNeal of my staff at 404/347-5014.

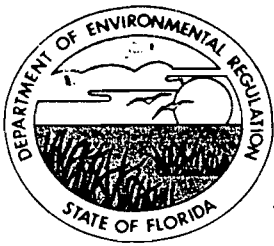
Sincerely yours,



Jewell A. Harper, Chief
Air Enforcement Branch
Air, Pesticides and Toxics
Management Division

cc: Mr. Bruce Mitchell
Bureau of Air Regulation
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

J. Goldman, SE Dist. }
P. Stong, DEEM } 7-13-92
C. Sharer, NPS }
CMF/PL



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

May 22, 1992

Ms. Jewell A. Harper, Chief
Air Enforcement Branch
U.S. EPA, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30308

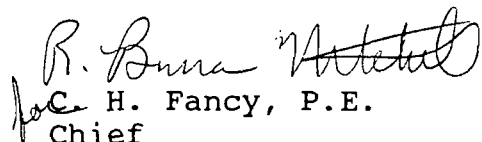
Dear Ms. Harper:

RE: Tarmac Florida Inc.
Emissions Test Report on the Facility's No. 3 Cement Kiln
While Utilizing Dade County MSWI Ash
PSD-FL-142A

Enclosed for your review is the above referenced four-volume set report, which is the result of the permit amendment authorization dated December 18, 1991 (attached). Please critique and forward your comments to the Department's Bureau of Air Regulation by June 30, 1992. The Bureau's FAX number is (904)922-6979.

If you have any questions, please call Mr. Bruce Mitchell at (904)488-1344 or write to me at the above address.

Sincerely,


for C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/rbm

Attachment/Enclosures

Attachment



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

December 18, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Townsend:

Re: Amendment to the Operation Permit, No. AO 13-157297, and the Federal Permit, No. PSD-FL-142, to Conduct Performance Tests for Pollutant Emissions on the Facility's No. 3 Cement Kiln While Utilizing Ash from the Dade County Resource Recovery Incinerator

The Department has reviewed the request that you provided on November 4, 1991. We have also considered the Department's legal authority to allow Tarmac Florida, Inc. (TFI) to conduct the requested performance tests. Paragraph 403.061(15), Florida Statutes (F.S.) authorizes the Department to consult with any person proposing to construct, install, or otherwise acquire a pollution control device or system concerning the efficacy of such device or system, or the pollution problem which may be related to the source, device, or system. Paragraph 403.061(16), F.S., authorizes the Department to encourage voluntary cooperation by persons in order to achieve the purposes of the state environmental control act. Paragraph 403.061(18), F.S., authorizes the Department to encourage and conduct studies, investigations, and research relating to the causes and control of pollution. Florida Administrative Code (F.A.C.) Rule 17-2.250(5) authorizes the Department to consider variation in industrial equipment and make allowances for excess emissions that provide practical regulatory controls consistent with the public interest.

In accordance with the provisions of Paragraphs 403.061(15), (16), and (18), F.S., and F.A.C. Rule 17-2.250(5), you are hereby authorized to conduct performance tests for pollutant emissions on TFI's No. 3 cement kiln while at baseline conditions (utilizing coal ash) and while utilizing bottom and fly ash from the Dade County Resource Recovery Incinerator (DCRRI). The No. 3 cement kiln's emissions were modeled in the modification evaluation for the No. 2 cement kiln (PSD-FL-142). The source is permitted to utilize ash in the process of making cement.

Mr. Al Townsend
Page Two

Screening for actual pollutant emission increases for modification purposes and PSD/NAA (Prevention of Significant Deterioration/Nonattainment Area) applicability will be in accordance with Title 40 Code of Federal Regulations Part 52.21 (July, 1990 version), Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. If, after the performance test results are evaluated by the Department's Bureau of Air Regulation (BAR) and involved parties (i.e., Department's Southeast District, U.S. EPA, National Park Service, and Dade County Environmental Resources Management) and it is determined that actual pollutant emissions did not increase while utilizing the ash, then the Department will amend the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, to authorize continued utilization of the ash (PSD-FL-142A). However, if there is an actual emissions increase in pollutant emissions, TFI will not be permitted to utilize the DCRRI ash or any municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties.

The performance tests shall be subject to the following conditions:

1. The permittee shall notify, in writing, the Department's Southeast District and Bureau of Air Regulation (BAR) offices at least 15 days prior to commencement of the performance tests. A written report shall be submitted to these offices within 45 days upon completion of the last test run.
2. Prior to conducting performance tests for pollutant emissions while utilizing the DCRRI ash facility's No. 3 cement kiln (Post-tests), performance tests (Pre-tests/baseline) for pollutant emissions shall be conducted while operating under normal operating conditions with the presently permitted kiln fuels and feed material. The pollutant emissions results of the "Pre-tests" shall be compared to the pollutant emissions results of the "Post-tests" to determine if:
 - a) actual pollutant emissions increased [(baseline versus DCRRI ash utilization (Pre vs. Post-tests))] for modification purposes and PSD applicability, which, if required, includes the submittal of a permit application and the appropriate processing fee, at a minimum; or,
 - b) the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, can be amended to allow the utilization of the DCRRI ash (PSD-FL-142A) in the facility's No. 3 cement kiln.

3. The contents of Mr. David A. Buff's letter received November 4, 1991, are adopted by reference, with the following exceptions:
 - a. From the initial date of utilizing the DCRRI ash in the facility's No. 3 cement kiln, which shall be documented in writing to the Department, the permittee shall be limited to a maximum of 14 days, which is to include 9 days of continuous utilization of DCRRI ash, to conduct performance tests. If additional time is needed, the permittee shall provide the Department with documentation of the progress accomplished to date and shall identify what is left to be done to complete the performance tests.
 - b. A Department Type I audit is required and shall be coordinated with the Department.
 - c. Documentation of the utilization rates of the DCRRI ash in the No. 3 cement kiln shall be required.
 - d. Emissions measurements shall also be required for the following pollutants using the following test methods:

<u>Pollutants/Pollutant Category</u>	<u>Test Method</u>
o PM10/PM2.5	EPA Method 5 or EPA Method 201/201A
o Visible Emissions	EPA Method 9 EPA Method 22

Note: Stack tests for particulate matter and visible emissions are to be run concurrently, weather permitting. EPA Method 22 will apply to fugitive particulate matter emissions from the DCRRI ash pile. Fugitive emissions shall not exceed 10 minutes, total cumulative time observed, in any 1-hour period.

5. These authorized performance tests shall not result in the release of objectionable odors pursuant to F.A.C. Rule 17-2.620(2).
6. Performance testing shall immediately cease upon the occurrence of a valid environmental complaint by a citizen or other party, or a nuisance or danger to public health or welfare. Performance testing shall not resume until appropriate measures to correct the problem have been implemented.
7. The performance tests for pollutant emissions shall be conducted under the direct supervision and responsible charge of a professional engineer registered in Florida.

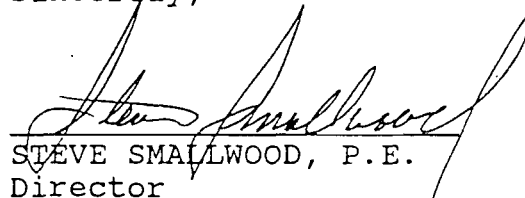
Mr. Al Townsend
Page Four

8. This Department action is just to authorize the performance tests for pollutant emissions on the facility's No. 3 cement kiln while at baseline conditions (utilizing coal ash) and while utilizing the DCRRI ash.
9. Complete documentation (recording) of any utilization of the DCRRI ash in the facility's No. 3 cement kiln shall be required (i.e., testing results; materials utilized, by weight; etc.) and kept on file for a minimum of two years.
10. The Department shall be notified in writing on the date of the last test run completion.
11. Attachments (See Attachment Section) are incorporated.

The Department has relied on the information referenced in the attachments and conversations with representatives of the TFI, U.S. EPA-Region IV, Department of Interior's National Park Service, Department's Southeast District, and Dade County's Environmental Resources Management, in authorizing this amendment to the operation permit, No. AC 13-157297, and the federal permit, No. PSD-FL-142.

This letter must be attached to the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, and shall become a part of the permit.

Sincerely,


STEVE SMALLWOOD, P.E.
Director
Division of Air Resources
Management

SS/BM/rbm

Attachments

- c: I. Goldman, SE District
P. Wong, DERM
J. Harper, EPA
C. Shaver, NPS
D. Buff, P.E., KBN
G. Smallridge, Esq., DER
J. Alves, Esq., HBG&S
J. Reese, DER
S. Kastury, DER

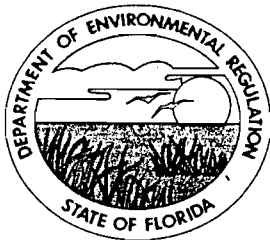
Final Determination

The operation permit amendment application package has been reviewed by the Department. Public Notice of the Department's Intent to Issue was published in The Miami Herald on December 3, 1991. The Intent to Issue was distributed on November 21, 1991, edited on November 26, 1991, and available for public inspection at the Department's Southeast District office, the Department's Bureau of Air Regulation office, and Dade County's Department of Environmental Resources Management office.

There were no comments received during the public notice period. Therefore, it is recommended that the operation permit amendment be issued as drafted.

Attachment Section

1. Mr. Tanhum Goldshmid's letter with attachment received June 7, 1991.
2. Ms. Delores Smith's letter received June 10, 1991.
3. Mr. Steve Smallwood's letter dated July 1, 1991.
4. Mr. John A. Reese's letter dated July 16, 1991.
5. Mr. David A. Buff's letter received October 18, 1991, via FAX.
6. Mr. David A. Buff's letter with attachments received November 4, 1991.
7. Mr. David A. Buff's letter with enclosures received November 6, 1991, via FAX.
8. Mr. David A. Buff's letter with enclosures received November 12, 1991.
9. Mr. David A. Buff's Letter of Transmittal with attachment received November 18, 1991.
10. Title 40 Code of Federal Regulations (July, 1990 version).
11. Intent to Issue package dated November 21, 1991.



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

December 18, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Townsend:

Re: Amendment to the Operation Permit, No. AO 13-157297, and the Federal Permit, No. PSD-FL-142, to Conduct Performance Tests for Pollutant Emissions on the Facility's No. 3 Cement Kiln While Utilizing Ash from the Dade County Resource Recovery Incinerator

The Department has reviewed the request that you provided on November 4, 1991. We have also considered the Department's legal authority to allow Tarmac Florida, Inc. (TFI) to conduct the requested performance tests. Paragraph 403.061(15), Florida Statutes (F.S.) authorizes the Department to consult with any person proposing to construct, install, or otherwise acquire a pollution control device or system concerning the efficacy of such device or system, or the pollution problem which may be related to the source, device, or system. Paragraph 403.061(16), F.S., authorizes the Department to encourage voluntary cooperation by persons in order to achieve the purposes of the state environmental control act. Paragraph 403.061(18), F.S., authorizes the Department to encourage and conduct studies, investigations, and research relating to the causes and control of pollution. Florida Administrative Code (F.A.C.) Rule 17-2.250(5) authorizes the Department to consider variation in industrial equipment and make allowances for excess emissions that provide practical regulatory controls consistent with the public interest.

In accordance with the provisions of Paragraphs 403.061(15), (16), and (18), F.S., and F.A.C. Rule 17-2.250(5), you are hereby authorized to conduct performance tests for pollutant emissions on TFI's No. 3 cement kiln while at baseline conditions (utilizing coal ash) and while utilizing bottom and fly ash from the Dade County Resource Recovery Incinerator (DCRRI). The No. 3 cement kiln's emissions were modeled in the modification evaluation for the No. 2 cement kiln (PSD-FL-142). The source is permitted to utilize ash in the process of making cement.

Screening for actual pollutant emission increases for modification purposes and PSD/NAA (Prevention of Significant Deterioration/Nonattainment Area) applicability will be in accordance with Title 40 Code of Federal Regulations Part 52.21 (July, 1990 version), Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. If, after the performance test results are evaluated by the Department's Bureau of Air Regulation (BAR) and involved parties (i.e., Department's Southeast District, U.S. EPA, National Park Service, and Dade County Environmental Resources Management) and it is determined that actual pollutant emissions did not increase while utilizing the ash, then the Department will amend the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, to authorize continued utilization of the ash (PSD-FL-142A). However, if there is an actual emissions increase in pollutant emissions, TFI will not be permitted to utilize the DCRRI ash or any municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties.

The performance tests shall be subject to the following conditions:

1. The permittee shall notify, in writing, the Department's Southeast District and Bureau of Air Regulation (BAR) offices at least 15 days prior to commencement of the performance tests. A written report shall be submitted to these offices within 45 days upon completion of the last test run.
2. Prior to conducting performance tests for pollutant emissions while utilizing the DCRRI ash facility's No. 3 cement kiln (Post-tests), performance tests (Pre-tests/baseline) for pollutant emissions shall be conducted while operating under normal operating conditions with the presently permitted kiln fuels and feed material. The pollutant emissions results of the "Pre-tests" shall be compared to the pollutant emissions results of the "Post-tests" to determine if:
 - a) actual pollutant emissions increased [(baseline versus DCRRI ash utilization (Pre vs. Post-tests)] for modification purposes and PSD applicability, which, if required, includes the submittal of a permit application and the appropriate processing fee, at a minimum; or,
 - b) the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, can be amended to allow the utilization of the DCRRI ash (PSD-FL-142A) in the facility's No. 3 cement kiln.

3. The contents of Mr. David A. Buff's letter received November 4, 1991, are adopted by reference, with the following exceptions:
 - a. From the initial date of utilizing the DCRRI ash in the facility's No. 3 cement kiln, which shall be documented in writing to the Department, the permittee shall be limited to a maximum of 14 days, which is to include 9 days of continuous utilization of DCRRI ash, to conduct performance tests. If additional time is needed, the permittee shall provide the Department with documentation of the progress accomplished to date and shall identify what is left to be done to complete the performance tests.
 - b. A Department Type I audit is required and shall be coordinated with the Department.
 - c. Documentation of the utilization rates of the DCRRI ash in the No. 3 cement kiln shall be required.
 - d. Emissions measurements shall also be required for the following pollutants using the following test methods:

<u>Pollutants/Pollutant Category</u>	<u>Test Method</u>
o PM10/PM2.5	EPA Method 5 or EPA Method 201/201A
o Visible Emissions	EPA Method 9 EPA Method 22

Note: Stack tests for particulate matter and visible emissions are to be run concurrently, weather permitting. EPA Method 22 will apply to fugitive particulate matter emissions from the DCRRI ash pile. Fugitive emissions shall not exceed 10 minutes, total cumulative time observed, in any 1-hour period.

5. These authorized performance tests shall not result in the release of objectionable odors pursuant to F.A.C. Rule 17-2.620(2).
6. Performance testing shall immediately cease upon the occurrence of a valid environmental complaint by a citizen or other party, or a nuisance or danger to public health or welfare. Performance testing shall not resume until appropriate measures to correct the problem have been implemented.
7. The performance tests for pollutant emissions shall be conducted under the direct supervision and responsible charge of a professional engineer registered in Florida.

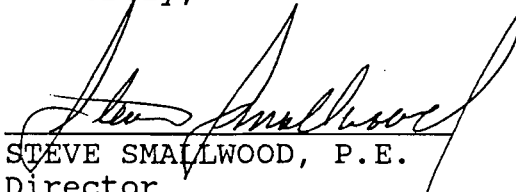
Mr. Al Townsend
Page Four

8. This Department action is just to authorize the performance tests for pollutant emissions on the facility's No. 3 cement kiln while at baseline conditions (utilizing coal ash) and while utilizing the DCRRI ash.
9. Complete documentation (recording) of any utilization of the DCRRI ash in the facility's No. 3 cement kiln shall be required (i.e., testing results; materials utilized, by weight; etc.) and kept on file for a minimum of two years.
10. The Department shall be notified in writing on the date of the last test run completion.
11. Attachments (See Attachment Section) are incorporated.

The Department has relied on the information referenced in the attachments and conversations with representatives of the TFI, U.S. EPA-Region IV, Department of Interior's National Park Service, Department's Southeast District, and Dade County's Environmental Resources Management, in authorizing this amendment to the operation permit, No. AC 13-157297, and the federal permit, No. PSD-FL-142.

This letter must be attached to the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, and shall become a part of the permit.

Sincerely,


STEVE SMALLWOOD, P.E.
Director
Division of Air Resources
Management

SS/BM/rbm

Attachments

- c: I. Goldman, SE District
P. Wong, DERM
J. Harper, EPA
C. Shaver, NPS
D. Buff, P.E., KBN
G. Smallridge, Esq., DER
J. Alves, Esq., HBG&S
J. Reese, DER
S. Kastury, DER

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece next to the article number.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Al Townsend
 Director of Technical Services
 Tarmac Florida, Inc.
 Deerfield Beach, FL 33441

RECEIVED
 DEC 30 1991

5. Signature (Addressee)

6. Signature **TECHNICAL SERVICES**

4a. Article Number

P 832 538 754

4b. Service Type

- Registered Insured
- Certified COD
- Express Mail Return Receipt for Merchandise

7. Date of Delivery

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, October 1990

U.S. GPO: 1990-273-861

DOMESTIC RETURN RECEIPT

P 832 538 754



Certified Mail Receipt

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to	
Mr. Al Townsend, Tarmac	
Street & No.	
455 Fairway Drive	
P.O., State & ZIP Code	
Deerfield Beach, FL 33441	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	
Mailed: 12-20-91	
Permit: AC 13-157297	
PSD-FL-142	

PS Form 3800, June 1990

Final Determination

The operation permit amendment application package has been reviewed by the Department. Public Notice of the Department's Intent to Issue was published in The Miami Herald on December 3, 1991. The Intent to Issue was distributed on November 21, 1991, edited on November 26, 1991, and available for public inspection at the Department's Southeast District office, the Department's Bureau of Air Regulation office, and Dade County's Department of Environmental Resources Management office.

There were no comments received during the public notice period. Therefore, it is recommended that the operation permit amendment be issued as drafted.

Attachment Section

1. Mr. Tanhum Goldshmid's letter with attachment received June 7, 1991.
2. Ms. Delores Smith's letter received June 10, 1991.
3. Mr. Steve Smallwood's letter dated July 1, 1991.
4. Mr. John A. Reese's letter dated July 16, 1991.
5. Mr. David A. Buff's letter received October 18, 1991, via FAX.
6. Mr. David A. Buff's letter with attachments received November 4, 1991.
7. Mr. David A. Buff's letter with enclosures received November 6, 1991, via FAX.
8. Mr. David A. Buff's letter with enclosures received November 12, 1991.
9. Mr. David A. Buff's Letter of Transmittal with attachment received November 18, 1991.
10. Title 40 Code of Federal Regulations (July, 1990 version).
11. Intent to Issue package dated November 21, 1991.

Attachments
Available Upon Request



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Steve Smallwood
FROM: Clair Fancy *CF*
DATE: December 18, 1991
SUBJ: Approval of an Operation Permit Amendment
AO 13-157297 (PSD-FL-142)
Tarmac Florida, Inc.

Attached for your approval and signature is an operation permit amendment prepared by the Bureau of Air Regulation for the above referenced company to conduct emissions tests on the facility's No. 3 cement kiln. The tests will be conducted while operating at baseline conditions utilizing the standard raw materials (coal ash) and while utilizing as a substitute raw material combustor ash from the Dade County Resource Recovery Incinerator. The facility is located in Hialeah, Dade County, Florida. There were no comments received during the public notice period.

I recommend your approval and signature.

CF/BM/rbm



TARMAC FLORIDA, INC.

RECEIVED
DEC 20 1991
455 Fairway Drive
Hillsboro Executive Center North
Deerfield Beach, Florida 33441
Division of Air
Resources Management
Telephone:
Deerfield Beach (305) 481-2800

December 16, 1991

Mr. Bruce Mitchell
Florida Department of Environmental Regulation
Division of Air
2600 Balirstone Street
Tallahassee, FL 32399-2400

Dear Bruce;

Per my fax memo this morning, I am enclosing the hard copy of the "Intent to Issue" notice published in the Miami Herald on December 3, 1991.

Please call if there are any questions. Thank you.

Very truly yours,

Albert W. Townsend
Director of Technical Services

AWT/kr

Encs:

The Miami Herald

PUBLISHED DAILY
MIAMI - DADE - FLORIDA

STATE OF FLORIDA
COUNTY OF DADE:

Before the undersigned authority personally appeared

ANN MARTULA

who on oath says that he/she is

CUSTODIAN OF RECORDS

of The Miami Herald, a daily newspaper published at Miami in Dade County, Florida; that the attached copy of advertisement was published in said newspaper in the issues of

DECEMBER 3, 1991

Affiant further says that the said The Miami Herald is a newspaper published at Miami, in the said Dade County, Florida and that the said newspaper has heretofore been continuously published in said Dade County, Florida, each day and has been entered as second class mail matter at the post office in Miami, in said Dade County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Ann Martula

Sworn to and subscribed before me this...3rd... day of...December... A.D. 1991

My commission expires...*[Signature]*...

NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXP. MAR. 16, 1995
BONDED THRU GENERAL INS. 1990.

State of Florida Department of Environmental Regulation
Notice of Intent to Issue
The Department of Environmental Regulation (Department) hereby gives notice of its intent to issue to Tarmac Florida, Inc. (TFI) an amendment to its operating permit No. AQ 13-17237 and the 1990 permit No. 1000-13-17237, authorizing performance tests for pollutant emissions on the No. 3 cement kiln, as detailed in the application package. The Department is issuing this notice to issue for the reasons stated below and in the proposed amendment.
The applicant, TFI, Post Office Box 3288, Hialeah, Florida 33012, submitted a request on November 4, 1991, to the Department for a permit for authorization to conduct pollutant emissions tests on the facility's No. 3 cement kiln. The performance tests for pollutant emissions will be conducted while at baseline conditions utilizing the standard raw material (see ash) and while utilizing as a substitute raw material (consultor ash from the Dade County Resource Recovery Plant or RCRP). The amount of RCRP ash to be utilized is 3,000 tons per year. The amount of ash produced by the RCRP is 6 to 7 million tons per year. The No. 3 cement kiln's emissions were evaluated in the modification of the No. 2 cement kiln (P202-1421). The No. 3 cement kiln is permitted to utilize ash as a raw material in the process of making cement. The estimated pollutant emission increases for substitution purposes and PSD/NAA (Prevention of Significant Deterioration) Nonattainment Area applicability will be determined in accordance with Title 40 Code of Federal Regulations (CFR) Part 48, July 1990 version, Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-3. The Department's Bureau of Air Regulation (BAR) and the Department's Southeast District, U.S. EPA, National Park Service, and Dade County Environmental Resources Management and Planning (ERM) have determined that actual pollutant emissions did not increase while utilizing ash, then the Department will amend the operating permit No. AQ 13-17237, and the 1990 permit, No. 1000-13-17237, to authorize emissions of ash. The Department will not be permitted to utilize the RCRP ash or any other municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties.
The proposed project will occur at the applicant's facility located at 11000 N.W. 121 Way, Hialeah, Florida.
The Department has permitting jurisdiction under Chapter 403, F.S., F.A.C. Chapters 17-2 and 17-3, and Title 40 CFR July 1990 version. The project is not exempt from permitting requirements. The Department has determined that an amendment is required for the proposed activity. A determination of substantial interests are affected by the proposed decision may be required by administrative proceedings under Section 120.57, Florida Statutes. The petition contains the information set forth below and may be read (received) in the Office of General Counsel at 2600 Biscayne Road, Fort Lauderdale, Florida 33309-2400, within 14 days of publication of this notice. Petitioner shall make a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file the petition within this time period shall constitute a waiver of any right such person may have to request an administrative hearing under Section 120.57, Florida Statutes.
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 the petitioner, if any;
(e) A statement of the facts which petitioner contends were not revealed or modification of the Department's action or proposed action;
(f) A statement of which rule or statute, petition contends require reversal or modification of the Department's action or proposed action;
(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;
(h) A petition is filed if administrative hearing process is designed to formulate the Department's final action may be different from the petition taken by it in the Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to a petition shall be permitted to intervene in the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice 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 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 official upon motion filed pursuant to Rule 28.5-207, F.A.C.
The request/application is available for public inspection during normal business hours, 9:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:
Department of Environmental Regulation
Bureau of Air Regulation
2600 Biscayne Road
Fort Lauderdale, Florida 33309-2400
Department of Environmental Regulation
Southeast District Office
1900 S. Congress Avenue, Suite A
West Palm Beach, Florida 33408
Dade County Environmental Resource Management
801 S.W. 3rd Avenue
Miami, Florida 33130
Any person may submit written comments on the proposed action to the Department at the Department's Office.

BEST AVAILABLE COPY

December 16, 1991

F A C S I M I L E

TARMAC FLORIDA, INC.
Technical Services Group
455 Fairway Drive
Deerfield Beach, Florida 33441

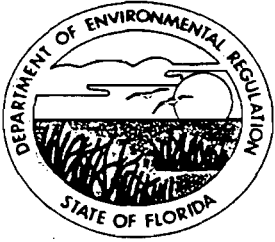
Telephone: (305)421-2800
Facsimile: (305)421-0299

FROM: AL TOWNSEND

TO: BRUCE MITCHELL

Facsimile: (904)422-8079

12/16/91



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400
Lawton Chiles, Governor Carol M. Browner, Secretary

FAX TRANSMITTAL SHEET

Names:

DATE: Mr. Isidore Goldman / Mr. Tom Title

Date
NAME (S): 11-26-91

DEPARTMENT/COMPANY: FDER / SE District

PHONE: _____

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 5

FROM: Brian Mitchell

DEPARTMENT: FDER / OARM / BAR

OFFICE PHONE: 904-488-1344 FAX PHONE: 904-922-6979

SENDER: Sam

COMMENTS: Edited "Intent to Issue": TARMAC FL, Inc.

NOV 26 1991

NOV 26 1991 10:36

DEPT OF ENVIRONMENTAL REGULATION

TEL. NO. 904-488-1344

SEARCHED	INDEXED	SERIALIZED	FILED

BEST AVAILABLE COPY



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

FAX TRANSMITTAL SHEET

DATE: 11-26-91

NAME(S): Mr. David Buff

DEPARTMENT/COMPANY: KBN, Engineering

PHONE: 904-332-4189

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 5

FROM: Bruce Mitchell

DEPARTMENT: FER/DARM/BAR

OFFICE PHONE: 904-487-1344 FAX PHONE: 904-922-6979

SENDER: sem

COMMENTS: Edited "Intent to Issue": TRAMAC FL, Inc.

RECEIVED CONFIRMATION

11-26-91 TUE 10:48

TERM NO: DIV OF ENV REG LIGHT 2-8989

TEL NO: 904-632-6079

TEL NO	FAX NO	TEL NO	TEL NO	DEPT CODE	ST	LG
904-632-6079	904-632-6079	904-632-6079	904-632-6079		05	00

Best Available Copy



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

FAX TRANSMITTAL SHEET

DATE: 11-26-91

NAME(S): Mr. Patrick Wong

DEPARTMENT/COMPANY: DERM

PHONE: 305-375-3360

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 5

FROM: Bruce Mitchell

DEPARTMENT: FDER/DARM/BAR

OFFICE PHONE: 904-488-1344 FAX PHONE: 904-922-6979

SENDER: Sam

COMMENTS: Edited "Intent to Issue": TARMAC FL, Inc.

NOV 26 1991
11:26 AM
FAX
2600 BLAIR STONE RD
TALLAHASSEE, FL 32399-2400



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

FAX TRANSMITTAL SHEET

Name

DATE: Mr. AL Townsend

Date
NAME(S): 11-26-91

DEPARTMENT/COMPANY: TARMAC FL, Inc.

PHONE: 305-421-0296

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 5

FROM: Bruce Mitchell

DEPARTMENT: FDER/OARM/BAR

OFFICE PHONE: 904-488-1344 FAX PHONE: 904-922-6979

SENDER: Sam

COMMENTS: Edited "Intent to Issue" : TARMAC FL, Inc.

RECEIVED 10/26/91

10/26/91 5: 06 10:51

TELETYPE UNIT OF AIR RES UNIT P-2555

TEL NO: 904-922-6979

10/26/91	10:51	05
05	00	00



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

November 26, 1991

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

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

Dear Mr. Townsend:

Re: Request for "Intent to Issue" Edit Associated with the Proposal to Conduct Pollutant Emissions Performance Tests While Utilizing Combustor Ash from the Dade County Resource Recovery Incinerator in TFI's No. 3 Cement Kiln

Attached is one copy of the "Intent to Issue" referenced above, which has been edited in accordance with Mr. James S. Alves's request received on November 25, 1991. Please replace the original "Intent to Issue" with this one.

If there are any questions, please call Mr. Bruce Mitchell at (904)488-1344 or write to me at the above address.

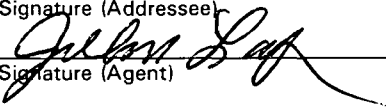
Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/BM/rbm

Attachments

c: I. Goldman, SE District
P. Wong, DERM
D. Buff, P.E., KBN
C. Shaver, NPS
J. Harper, EPA
G. Smallridge, Esq., DER
J. Alves, Esq., HBG&S
J. Reese, DER
S. Kastury, DER

SENDER: • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece next to the article number.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. Al Townsend Director of Technical Services Tarmac Florida, Inc. 455 Fairway Drive Deerfield Beach, FL 33441		4a. Article Number) 832 538 749	
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
		7. Date of Delivery 12-2	
5. Signature (Addressee) 		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent)			

PS Form 3811, October 1990

U.S. GPO: 1990-273-861

DOMESTIC RETURN RECEIPT

P 832 538 749



Certified Mail Receipt
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to	
Mr. Al Townsend, Tarmac FLA	
Street & No.	
455 Fairway Drive	
P.O., State & ZIP Code	
Deerfield Beach, FL 33441	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	
Mailed: 11-26-91	

PS Form 3800, June 1990

Attachments

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation (Department) hereby gives notice of its intent to issue to Tarmac Florida, Inc. (TFI) an amendment to the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, authorizing performance tests for pollutant emissions on the No. 3 cement kiln, as detailed in the application package. The Department is issuing this Intent to Issue for the reasons stated below and in the proposed amendment.

The applicant, TFI, Post Office Box 2998, Hialeah, Florida 33012, submitted a request on November 4, 1991, to the Department's Bureau of Air Regulation (BAR) for authorization to conduct pollutant emissions tests on the facility's No. 3 cement kiln. The performance tests for pollutant emissions will be conducted while at baseline conditions utilizing the standard raw material (coal ash) and while utilizing as a substitute raw material combustor ash from the Dade County Resource Recovery Incinerator (DCRRI). The amount of the DCRRI ash to be utilized is 3,000 tons, which is approximately the amount of ash produced by the DCRRI in a 1-week period. The No. 3 cement kiln's emissions were evaluated in the modification of the No. 2 cement kiln (PSD-FL-142). The No. 3 cement kiln is permitted to utilize ash as a raw material in the process of making cement.

Screening for actual pollutant emission increases for modification purposes and PSD/NAA (Prevention of Significant Deterioration/Nonattainment Area) applicability will be in accordance with Title 40 Code of Federal Regulations (CFR) Part 52.21 (July, 1990 version), Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. If, after the performance test results are evaluated by the Department's Bureau of Air Regulation (BAR) and involved parties (i.e., Department's Southeast District, U.S. EPA, National Park Service, and Dade County Environmental Resources Management) and it is determined that actual pollutant emissions did not increase while utilizing the ash, then the Department will amend the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, to authorize continued utilization of the ash (PSD-FL-142A). However, if there is an actual emissions increase in pollutant emissions, TFI will not be permitted to utilize the DCRRI ash or any other municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties.

The proposed project will occur at the applicant's facility located at 11000 N.W. 121 Way, Hialeah, Dade County, Florida.

The Department has permitting jurisdiction under Chapter 403, F.S., F.A.C. Chapters 17-2 and 17-4, and Title 40 CFR (July, 1990 version). The project is not exempt from permitting procedures. The Department has determined that an amendment is required for the proposed activity.

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, within fourteen (14) days of publication of this notice. 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 Amendment 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 Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/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 publication of this notice 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 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.

The request/application is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Department of Environmental Regulation
Southeast District Office
1900 S. Congress Avenue, Suite A
West Palm Beach, Florida 33406

Dade County Environmental Resources Management
801 S.W. 3rd Avenue
Miami, Florida 33130

Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments received within 14 days of the publication of this notice will be considered in the Department's final determination.

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS
123 SOUTH CALHOUN STREET
POST OFFICE BOX 6526
TALLAHASSEE, FLORIDA 32314
(904) 222-7500
FAX (904) 224-8551

CHARLES A. CULP
JAMES C. GOODLETT
RICHARD W. MOORE
ANGELA R. MORRISON
MARIBEL N. NICHOLSON
LAURA BOYD PEARCE
GARY V. PERKO
MICHAEL P. PETROVICH
DAVID L. POWELL
DOUGLAS S. ROBERTS
JULIE B. ROME
KRISTIN C. RUBIN
CECELIA C. SMITH
OF COUNSEL
W. ROBERT FOXES

CARLOS ALVAREZ
JAMES S. ALVES
BRIAN H. BIBEAU
KATHLEEN BLIZZARD
ELIZABETH C. BOWMAN
WILLIAM L. BOYD, IV
RICHARD S. BRIGHTMAN
PETER C. CUNNINGHAM
THOMAS M. DEROSE
WILLIAM H. GREEN
WADE L. HOPPING
FRANK E. MATTHEWS
RICHARD D. MELSON
WILLIAM D. PRESTON
CAROLYN S. RAEPPLE
GARY P. SAMS
ROBERT P. SMITH
CHERYL G. STUART

November 25, 1991

RECEIVED
NOV 25 1991
Division of Air
Resources Management

BY HAND-DELIVERY

Mr. Clair H. Fancy, P.E.
Chief, Bureau of Air Regulation
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road, Room 306F
Tallahassee, Florida 32399-2400

Re: Tarmac Florida, Inc.

Dear Clair:

Tarmac Florida, Inc. sincerely appreciates the Department's expeditious handling of its application to conduct performance tests while utilizing incinerator ash as a substitute raw material in the No. 3 cement kiln at its facility in Dade County. We particularly appreciate Bruce Mitchell's willingness to put this matter on "the front burner" despite his heavy workload.

I called you -- Bruce is out of the office -- this morning to determine whether the Department would feel comfortable with a few minor changes to the "Notice" appended to the Intent To Issue the amendment to Tarmac's air permits. More specifically, Tarmac would prefer to see the second paragraph of that Notice (copy attached) read as follows as shown in a ~~strike-through~~/underscore format:

The applicant, TFI, Post Office Box 2998, Hialeah, Florida 33012, submitted a request on November 4, 1991, to the Department's Bureau of Air Regulation (BAR) for authorization to conduct pollutant emissions tests on the facility's No. 3 cement kiln. The performance tests for pollutant emissions will be conducted while at baseline conditions (utilizing the standard raw material (coal ash) and while utilizing as a substitute raw material combustor ash ~~bottom~~ and fly ash from

Mr. Clair H. Fancy, P.E.
November 25, 1991
Page 2

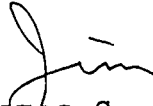
the Dade County Resource Recovery Incinerator (DCRRI). The amount of the DCRRI ash to be utilized is 3,000 tons, which is approximately the amount of the ash produced by the DCRRI in a 1-week period. The No. 3 cement kiln's emissions were evaluated in the modification of the No. 2 cement kiln (PSD-FL-142). The No. 3 cement kiln is permitted to utilize ash as a raw material in the process of making cement.

These minor changes would verify that Tarmac utilizes ash as a raw material in its manufacturing operations, and would avoid any potential misunderstanding to the effect that the cement kiln constitutes a disposal facility.

Clair, if at all possible I would greatly appreciate hearing from you on this today (hopefully confirming that these changes are acceptable), as Tarmac needs to make arrangements for publication as soon as possible.

Thank you.

Sincerely,



James S. Alves

/kkm
Attachment
cc: Bruce Mitchell

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation (Department) hereby gives notice of its intent to issue to Tarmac Florida, Inc. (TFI) an amendment to the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, authorizing performance tests for pollutant emissions on the No. 3 cement kiln, as detailed in the application package. The Department is issuing this Intent to Issue for the reasons stated below and in the proposed amendment.

The applicant, TFI, Post Office Box 2998, Hialeah, Florida 33012, submitted a request on November 4, 1991, to the Department's Bureau of Air Regulation (BAR) for authorization to conduct pollutant emissions tests on the facility's No. 3 cement kiln. The performance tests for pollutant emissions will be conducted while at baseline conditions (utilizing coal ash) and while utilizing bottom and fly ash from the Dade County Resource Recovery Incinerator (DCRRI). The amount of the DCRRI ash to be utilized is 3,000 tons, which is approximately the amount of ash produced by the DCRRI in a 1-week period. The No. 3 cement kiln's emissions were evaluated in the modification of the No. 2 cement kiln (PSD-FL-142). The No. 3 cement kiln is permitted to utilize ash in the process of making cement.

Screening for actual pollutant emission increases for modification purposes and PSD/NAA (Prevention of Significant Deterioration/Nonattainment Area) applicability will be in accordance with Title 40 Code of Federal Regulations (CFR) Part 52.21 (July, 1990 version), Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. If, after the performance test results are evaluated by the Department's Bureau of Air Regulation (BAR) and involved parties (i.e., Department's Southeast District, U.S. EPA, National Park Service, and Dade County Environmental Resources Management) and it is determined that actual pollutant emissions did not increase while utilizing the ash, then the Department will amend the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, to authorize continued utilization of the ash (PSD-FL-142A). However, if there is an actual emissions increase in pollutant emissions, TFI will not be permitted to utilize the DCRRI ash or any other municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties.

The proposed project will occur at the applicant's facility located at 11000 N.W. 121 Way, Hialeah, Dade County, Florida.

The Department has permitting jurisdiction under Chapter 403, F.S., F.A.C. Chapters 17-2 and 17-4, and Title 40 CFR (July, 1990 version). The project is not exempt from permitting procedures. The Department has determined that an amendment is required for the proposed activity.

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, within fourteen (14) days of publication of this notice. 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 Amendment 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 Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/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 publication of this notice 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 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.

The request/application is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Department of Environmental Regulation
Southeast District Office
1900 S. Congress Avenue, Suite A
West Palm Beach, Florida 33406

Dade County Environmental Resources Management
801 S.W. 3rd Avenue
Miami, Florida 33130

Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments received within 14 days of the publication of this notice will be considered in the Department's final determination.

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET
POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

FAX (904) 224-8551

CHARLES A. CULP
JAMES C. GOODLETT
RICHARD W. MOORE
ANGELA R. MORRISON
MARIBEL N. NICHOLSON
LAURA BOYD PEARCE
GARY V. PERKO
MICHAEL P. PETROVICH
DAVID L. POWELL
DOUGLAS S. ROBERTS
JULIE B. ROME
KRISTIN C. RUBIN
CECELIA C. SMITH

OF COUNSEL
W. ROBERT FOKES

CARLOS ALVAREZ
JAMES S. ALVES
BRIAN H. BIBEAU
KATHLEEN BLIZZARD
ELIZABETH C. BOWMAN
WILLIAM L. BOYD, IV
RICHARD S. BRIGHTMAN
PETER C. CUNNINGHAM
THOMAS M. DEROSE
WILLIAM H. GREEN
WADE L. HOPPING
FRANK E. MATTHEWS
RICHARD D. MELSON
WILLIAM D. PRESTON
CAROLYN S. RAEPPLE
GARY P. SAMS
ROBERT P. SMITH
CHERYL G. STUART

November 25, 1991

RECEIVED
NOV 25 1991
Division of Air
Resources Management

BY HAND-DELIVERY

Mr. Clair H. Fancy, P.E.
Chief, Bureau of Air Regulation
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road, Room 306F
Tallahassee, Florida 32399-2400

Re: Tarmac Florida, Inc.

Dear Clair:

Tarmac Florida, Inc. sincerely appreciates the Department's expeditious handling of its application to conduct performance tests while utilizing incinerator ash as a substitute raw material in the No. 3 cement kiln at its facility in Dade County. We particularly appreciate Bruce Mitchell's willingness to put this matter on "the front burner" despite his heavy workload.

I called you -- Bruce is out of the office -- this morning to determine whether the Department would feel comfortable with a few minor changes to the "Notice" appended to the Intent To Issue the amendment to Tarmac's air permits. More specifically, Tarmac would prefer to see the second paragraph of that Notice (copy attached) read as follows as shown in a ~~strike-through~~/underscore format:

The applicant, TFI, Post Office Box 2998, Hialeah, Florida 33012, submitted a request on November 4, 1991, to the Department's Bureau of Air Regulation (BAR) for authorization to conduct pollutant emissions tests on the facility's No. 3 cement kiln. The performance tests for pollutant emissions will be conducted while at baseline conditions (utilizing the standard raw material (coal ash) and while utilizing as a substitute raw material combustor ash bottom and fly ash from

Mr. Clair H. Fancy, P.E.
November 25, 1991
Page 2

the Dade County Resource Recovery Incinerator (DCRRI). The amount of the DCRRI ash to be utilized is 3,000 tons, which is approximately the amount of the ash produced by the DCRRI in a 1-week period. The No. 3 cement kiln's emissions were evaluated in the modification of the No. 2 cement kiln (PSD-FL-142). The No. 3 cement kiln is permitted to utilize ash as a raw material in the process of making cement.

These minor changes would verify that Tarmac utilizes ash as a raw material in its manufacturing operations, and would avoid any potential misunderstanding to the effect that the cement kiln constitutes a disposal facility.

Clair, if at all possible I would greatly appreciate hearing from you on this today (hopefully confirming that these changes are acceptable), as Tarmac needs to make arrangements for publication as soon as possible.

Thank you.

Sincerely,



James S. Alves

/kkm
Attachment
cc: Bruce Mitchell

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation (Department) hereby gives notice of its intent to issue to Tarmac Florida, Inc. (TFI) an amendment to the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, authorizing performance tests for pollutant emissions on the No. 3 cement kiln, as detailed in the application package. The Department is issuing this Intent to Issue for the reasons stated below and in the proposed amendment.

The applicant, TFI, Post Office Box 2998, Hialeah, Florida 33012, submitted a request on November 4, 1991, to the Department's Bureau of Air Regulation (BAR) for authorization to conduct pollutant emissions tests on the facility's No. 3 cement kiln. The performance tests for pollutant emissions will be conducted while at baseline conditions (utilizing coal ash) and while utilizing bottom and fly ash from the Dade County Resource Recovery Incinerator (DCRRI). The amount of the DCRRI ash to be utilized is 3,000 tons, which is approximately the amount of ash produced by the DCRRI in a 1-week period. The No. 3 cement kiln's emissions were evaluated in the modification of the No. 2 cement kiln (PSD-FL-142). The No. 3 cement kiln is permitted to utilize ash in the process of making cement.

Screening for actual pollutant emission increases for modification purposes and PSD/NAA (Prevention of Significant Deterioration/Nonattainment Area) applicability will be in accordance with Title 40 Code of Federal Regulations (CFR) Part 52.21 (July, 1990 version), Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. If, after the performance test results are evaluated by the Department's Bureau of Air Regulation (BAR) and involved parties (i.e., Department's Southeast District, U.S. EPA, National Park Service, and Dade County Environmental Resources Management) and it is determined that actual pollutant emissions did not increase while utilizing the ash, then the Department will amend the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, to authorize continued utilization of the ash (PSD-FL-142A). However, if there is an actual emissions increase in pollutant emissions, TFI will not be permitted to utilize the DCRRI ash or any other municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties.

The proposed project will occur at the applicant's facility located at 11000 N.W. 121 Way, Hialeah, Dade County, Florida.

The Department has permitting jurisdiction under Chapter 403, F.S., F.A.C. Chapters 17-2 and 17-4, and Title 40 CFR (July, 1990 version). The project is not exempt from permitting procedures. The Department has determined that an amendment is required for the proposed activity.

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, within fourteen (14) days of publication of this notice. 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 Amendment 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 Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/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 publication of this notice 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 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.

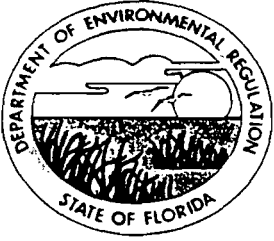
The request/application is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Department of Environmental Regulation
Southeast District Office
1900 S. Congress Avenue, Suite A
West Palm Beach, Florida 33406

Dade County Environmental Resources Management
801 S.W. 3rd Avenue
Miami, Florida 33130

Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments received within 14 days of the publication of this notice will be considered in the Department's final determination.



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

FAX TRANSMITTAL SHEET

DATE: 11-22-91

NAME(S): David Buff

DEPARTMENT/COMPANY: KBN Engineering

PHONE: FAX 904/332-4189

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 4

FROM: Bruce Mitchell

DEPARTMENT: BAR

OFFICE PHONE: 904/464-1344 FAX PHONE: 904/922-6979

SENDER: Patty Adams

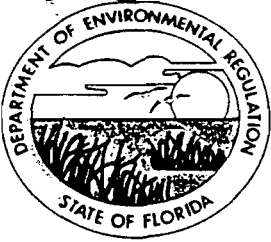
COMMENTS: Intent package sent Fed. Ex. today

DEPARTMENT OF ENVIRONMENTAL REGULATION

NOV 22 1991 15:13

11-22-91

11-22-91



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

FAX TRANSMITTAL SHEET

DATE: 11-22-91

NAME(S): Al Townsend

DEPARTMENT/COMPANY: Sarmac Florida, Inc.

PHONE: FAX 305/421-0296

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 4

FROM: Bruce Mitchell

DEPARTMENT: BAR

OFFICE PHONE: 904/448-1344 FAX PHONE: 904/922-6979

SENDER: Patty Adams

COMMENTS: Intent Package sent Fed. Ex. today

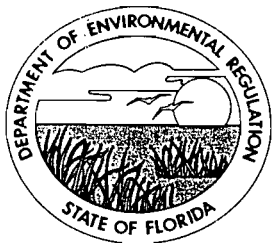
DEPT. OF ENVIRONMENTAL REGULATION

11-22-91 FRI 16:17

TELE. NO.: 904-922-6979 FAX NO.: 904-922-6979

TELE. NO.: 904-922-6979

DATE	TIME	NAME	ID	DEPT CODE	CH	NS
11-22-91	16:17	BRUCE MITCHELL			04	05



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

November 21, 1991

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

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

Dear Mr. Townsend:

Re: Request for Authorization to Conduct Pollutant Emissions Performance Tests While Utilizing Ash from the Dade County Resource Recovery Incinerator in TFI's No. 3 Cement Kiln

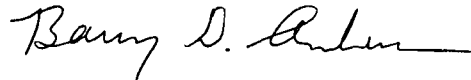
Attached is one copy of the proposed performance test authorization amendment to the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, for Tarmac Florida, Inc. (TFI) to conduct pollutant emissions tests on the facility's No. 3 cement kiln. The proposed performance tests for pollutant emissions will be conducted while at baseline conditions (utilizing coal ash) and while utilizing bottom and fly ash from the Dade County Resource Recovery Incinerator (DCRRI). The No. 3 cement kiln's emissions were modeled in the modification evaluation for the No. 2 cement kiln (PSD-FL-142). The source is permitted to utilize ash in the process of making cement.

Screening for actual pollutant emission increases for modification purposes and PSD/NAA (Prevention of Significant Deterioration/Nonattainment Area) applicability will be in accordance with Title 40 Code of Federal Regulations Part 52.21 (July, 1990 version), Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. If, after the performance test results are evaluated by the Department's Bureau of Air Regulation (BAR) and involved parties (i.e., Department's Southeast District, U.S. EPA, National Park Service, and Dade County Environmental Resources Management) and it is determined that actual pollutant emissions did not increase while utilizing the ash, then the Department will amend the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, to authorize continued utilization of the ash (PSD-FL-142A). However, if there is an actual increase in pollutant emissions, TFI will not be permitted to utilize the DCRRI ash or any other municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties.

Mr. Al Townsend
Page Two

If there are any questions, please call Mr. Bruce Mitchell at (904)488-1344 or submit any written comments you wish to have considered concerning the Department's proposed action to me.

Sincerely,



for C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/BM/rbm

Attachments

c: I. Goldman, SE District
P. Wong, DERM
D. Buff, P.E., KBN
C. Shaver, NPS
J. Harper, EPA
G. Smallridge, Esq., DER
J. Alves, Esq., HBG&S
J. Reese, DER
S. Kastury, DER

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Application for Amendment by:

Tarmac Florida, Inc.
455 Fairway Drive
Deerfield Beach, Florida 33441

DER File No. AO 13-157297
PSD-FL-142

INTENT TO ISSUE

The Department of Environmental Regulation (Department) hereby gives notice of its intent to issue an amendment to the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, to Tarmac Florida, Inc. (TFI) authorizing performance tests for pollutant emissions on the No. 3 cement kiln, as detailed in the application package specified above. The Department is issuing this Intent to Issue for the reasons stated below and in the attached proposed amendment.

The applicant, TFI, submitted a request on November 4, 1991, to the Department's Bureau of Air Regulation (BAR) for authorization to conduct pollutant emissions tests on the No. 3 cement kiln. The performance tests for pollutant emissions will be conducted while at baseline conditions (utilizing coal ash) and while utilizing Dade County Resource Recovery Incinerator (DCRRI) ash. The amount of DCRRI ash to be utilized is 3,000 tons, which is approximately the amount of ash produced by the DCRRI in a 1-week period. The production time to process the ash through the cement plant is 9 days. The No. 3 cement kiln's emissions were evaluated in the modification of the No. 2 cement kiln (PSD-FL-142). The No. 3 cement kiln is permitted to utilize ash in the process of making cement.

Screening for actual pollutant emission increases for modification purposes and PSD/NAA (Prevention of Significant Deterioration/Nonattainment Area) applicability will be in accordance with Title 40 Code of Federal Regulations (CFR) Part 52.21 (July, 1990 version), Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. If, after the performance test results are evaluated by the Department's Bureau of Air Regulation (BAR) and involved parties (i.e., Department's Southeast District, U.S. EPA, National Park Service, and Dade County Environmental Resources Management) and it is determined that actual pollutant emissions did not increase while utilizing the ash, then the Department will amend the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142,

to authorize continued utilization of the ash (PSD-FL-142A). However, if there is an actual increase in pollutant emissions, TFI will not be permitted to utilize the DCRRI ash or any other municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties.

The proposed project will occur at the applicant's facility located at 11000 N.W. 121 Way, Hialeah, Dade County, Florida.

The Department has permitting jurisdiction under Chapter 403, F.S., F.A.C. Chapters 17-2 and 17-4, and Title 40 CFR (July, 1990 version). The project is not exempt from permitting procedures. The Department has determined that a permitting action (amendment) is required for the proposed activity.

Pursuant to Section 403.815, F.S., and Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Amendment. 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 amendment.

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

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 amendment 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 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 Amendment 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;

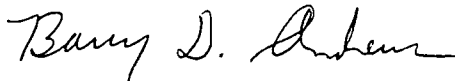
(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,

(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 notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/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 publication of this notice in the Office in 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 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 REGULATION



for C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

Copies furnished to:

I. Goldman, SE District
P. Wong, DERM
J. Harper, EPA
C. Shaver, NPS
D. Buff, P.E., KBN
G. Smallridge, Esq., DER
J. Alves, Esq., HBG&S
J. Reese, DER
S. Kastury, DER

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on Nov. 22, 1991.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statute, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Charlotte J. Hayes 11/22/91
Clerk Date

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation (Department) hereby gives notice of its intent to issue to Tarmac Florida, Inc. (TFI) an amendment to the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, authorizing performance tests for pollutant emissions on the No. 3 cement kiln, as detailed in the application package. The Department is issuing this Intent to Issue for the reasons stated below and in the proposed amendment.

The applicant, TFI, Post Office Box 2998, Hialeah, Florida 33012, submitted a request on November 4, 1991, to the Department's Bureau of Air Regulation (BAR) for authorization to conduct pollutant emissions tests on the facility's No. 3 cement kiln. The performance tests for pollutant emissions will be conducted while at baseline conditions (utilizing coal ash) and while utilizing bottom and fly ash from the Dade County Resource Recovery Incinerator (DCRRI). The amount of the DCRRI ash to be utilized is 3,000 tons, which is approximately the amount of ash produced by the DCRRI in a 1-week period. The No. 3 cement kiln's emissions were evaluated in the modification of the No. 2 cement kiln (PSD-FL-142). The No. 3 cement kiln is permitted to utilize ash in the process of making cement.

Screening for actual pollutant emission increases for modification purposes and PSD/NAA (Prevention of Significant Deterioration/Nonattainment Area) applicability will be in accordance with Title 40 Code of Federal Regulations (CFR) Part 52.21 (July, 1990 version), Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. If, after the performance test results are evaluated by the Department's Bureau of Air Regulation (BAR) and involved parties (i.e., Department's Southeast District, U.S. EPA, National Park Service, and Dade County Environmental Resources Management) and it is determined that actual pollutant emissions did not increase while utilizing the ash, then the Department will amend the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, to authorize continued utilization of the ash (PSD-FL-142A). However, if there is an actual emissions increase in pollutant emissions, TFI will not be permitted to utilize the DCRRI ash or any other municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties.

The proposed project will occur at the applicant's facility located at 11000 N.W. 121 Way, Hialeah, Dade County, Florida.

The Department has permitting jurisdiction under Chapter 403, F.S., F.A.C. Chapters 17-2 and 17-4, and Title 40 CFR (July, 1990 version). The project is not exempt from permitting procedures. The Department has determined that an amendment is required for the proposed activity.

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, within fourteen (14) days of publication of this notice. 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 Amendment 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 Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/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 publication of this notice 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 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.

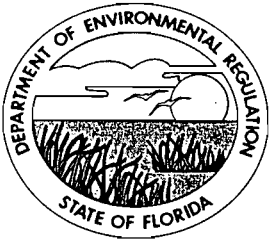
The request/application is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Department of Environmental Regulation
Southeast District Office
1900 S. Congress Avenue, Suite A
West Palm Beach, Florida 33406

Dade County Environmental Resources Management
801 S.W. 3rd Avenue
Miami, Florida 33130

Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments received within 14 days of the publication of this notice will be considered in the Department's final determination.



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

December xx, 1991

DRAFT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Townsend:

Re: Amendment to the Operation Permit, No. AO 13-157297, and the Federal Permit, No. PSD-FL-142, to Conduct Performance Tests for Pollutant Emissions on the Facility's No. 3 Cement Kiln While Utilizing Ash from the Dade County Resource Recovery Incinerator

The Department has reviewed the request that you provided on November 4, 1991. We have also considered the Department's legal authority to allow Tarmac Florida, Inc. (TFI) to conduct the requested performance tests. Paragraph 403.061(15), Florida Statutes (F.S.) authorizes the Department to consult with any person proposing to construct, install, or otherwise acquire a pollution control device or system concerning the efficacy of such device or system, or the pollution problem which may be related to the source, device, or system. Paragraph 403.061(16), F.S., authorizes the Department to encourage voluntary cooperation by persons in order to achieve the purposes of the state environmental control act. Paragraph 403.061(18), F.S., authorizes the Department to encourage and conduct studies, investigations, and research relating to the causes and control of pollution. Florida Administrative Code (F.A.C.) Rule 17-2.250(5) authorizes the Department to consider variation in industrial equipment and make allowances for excess emissions that provide practical regulatory controls consistent with the public interest.

In accordance with the provisions of Paragraphs 403.061(15), (16), and (18), F.S., and F.A.C. Rule 17-2.250(5), you are hereby authorized to conduct performance tests for pollutant emissions on TFI's No. 3 cement kiln while at baseline conditions (utilizing coal ash) and while utilizing bottom and fly ash from the Dade County Resource Recovery Incinerator (DCRRI). The No. 3 cement kiln's emissions were modeled in the modification evaluation for the No. 2 cement kiln (PSD-FL-142). The source is permitted to utilize ash in the process of making cement.

DRAFT

Mr. Al Townsend
Page Two

Screening for actual pollutant emission increases for modification purposes and PSD/NAA (Prevention of Significant Deterioration/Nonattainment Area) applicability will be in accordance with Title 40 Code of Federal Regulations Part 52.21 (July, 1990 version), Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. If, after the performance test results are evaluated by the Department's Bureau of Air Regulation (BAR) and involved parties (i.e., Department's Southeast District, U.S. EPA, National Park Service, and Dade County Environmental Resources Management) and it is determined that actual pollutant emissions did not increase while utilizing the ash, then the Department will amend the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, to authorize continued utilization of the ash (PSD-FL-142A). However, if there is an actual emissions increase in pollutant emissions, TFI will not be permitted to utilize the DCRRI ash or any municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties.

The performance tests shall be subject to the following conditions:

1. The permittee shall notify, in writing, the Department's Southeast District and Bureau of Air Regulation (BAR) offices at least 15 days prior to commencement of the performance tests. A written report shall be submitted to these offices within 45 days upon completion of the last test run.
2. Prior to conducting performance tests for pollutant emissions while utilizing the DCRRI ash facility's No. 3 cement kiln (Post-tests), performance tests (Pre-tests/baseline) for pollutant emissions shall be conducted while operating under normal operating conditions with the presently permitted kiln fuels and feed material. The pollutant emissions results of the "Pre-tests" shall be compared to the pollutant emissions results of the "Post-tests" to determine if:
 - a) actual pollutant emissions increased [(baseline versus DCRRI ash utilization (Pre vs. Post-tests)] for modification purposes and PSD applicability, which, if required, includes the submittal of a permit application and the appropriate processing fee, at a minimum; or,
 - b) the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, can be amended to allow the utilization of the DCRRI ash (PSD-FL-142A) in the facility's No. 3 cement kiln.

DRAFT

Mr. Al Townsend
Page Three

3. The contents of Mr. David A. Buff's letter received November 4, 1991, are adopted by reference, with the following exceptions:
 - a. From the initial date of utilizing the DCRRI ash in the facility's No. 3 cement kiln, which shall be documented in writing to the Department, the permittee shall be limited to a maximum of 14 days, which is to include 9 days of continuous utilization of DCRRI ash, to conduct performance tests. If additional time is needed, the permittee shall provide the Department with documentation of the progress accomplished to date and shall identify what is left to be done to complete the performance tests.
 - b. A Department Type I audit is required and shall be coordinated with the Department.
 - c. Documentation of the utilization rates of the DCRRI ash in the No. 3 cement kiln shall be required.
 - d. Emissions measurements shall also be required for the following pollutants using the following test methods:

<u>Pollutants/Pollutant Category</u>	<u>Test Method</u>
o PM10/PM2.5	EPA Method 5 or EPA Method 201/201A
o Visible Emissions	EPA Method 9 EPA Method 22

Note: Stack tests for particulate matter and visible emissions are to be run concurrently, weather permitting. EPA Method 22 will apply to fugitive particulate matter emissions from the DCRRI ash pile and shall not exceed 10 minutes, total cumulative time observed, in any 1-hour period.

5. These authorized performance tests shall not result in the release of objectionable odors pursuant to F.A.C. Rule 17-2.620(2).
6. Performance testing shall immediately cease upon the occurrence of a valid environmental complaint by a citizen or other party, or a nuisance or danger to public health or welfare. Performance testing shall not resume until appropriate measures to correct the problem have been implemented.
7. The performance tests for pollutant emissions shall be conducted under the direct supervision and responsible charge of a professional engineer registered in Florida.

DRAFT

Mr. Al Townsend
Page Four

8. This Department action is just to authorize the performance tests for pollutant emissions on the facility's No. 3 cement kiln while at baseline conditions (utilizing coal ash) and while utilizing the DCRRI ash.
9. Complete documentation (recording) of any utilization of the DCRRI ash in the facility's No. 3 cement kiln shall be required (i.e., testing results; materials utilized, by weight; etc.) and kept on file for a minimum of two years.
10. The Department shall be notified in writing on the date of the last test run completion.
11. Attachments (See Attachment Section) are incorporated.

The Department has relied on the information referenced in the attachments and conversations with representatives of the TFI, U.S. EPA-Region IV, Department of Interior's National Park Service, Department's Southeast District, and Dade County's Environmental Resources Management, in authorizing this amendment to the operation permit, No. AC 13-157297, and the federal permit, No. PSD-FL-142.

This letter must be attached to the operation permit, No. AO 13-157297, and the federal permit, No. PSD-FL-142, and shall become a part of the permit.

Sincerely,

STEVE SMALLWOOD, P.E.
Director
Division of Air Resources
Management

SS/BM/rbm

Attachments

- c: I. Goldman, SE District
P. Wong, DERM
J. Harper, EPA
C. Shaver, NPS
D. Buff, P.E., KBN
G. Smallridge, Esq., DER
J. Alves, Esq., HBG&S
J. Reese, DER
S. Kastury, DER

Attachment Section

1. Mr. Tanhum Goldshmid's letter with attachment received June 7, 1991.
2. Ms. Delores Smith's letter received June 10, 1991.
3. Mr. Steve Smallwood's letter dated July 1, 1991.
4. Mr. John A. Reese's letter dated July 16, 1991.
5. Mr. David A. Buff's letter received October 18, 1991, via FAX.
6. Mr. David A. Buff's letter with attachments received November 4, 1991.
7. Mr. David A. Buff's letter with enclosures received November 6, 1991, via FAX.
8. Mr. David A. Buff's letter with enclosures received November 12, 1991.
9. Mr. David A. Buff's Letter of Transmittal with attachment received November 18, 1991.
10. Title 40 Code of Federal Regulations (July, 1990 version).
11. Intent to Issue package dated November 21, 1991.

Attachment 1



RECEIVED

JUN 07 1991

Division of Air
Resources Management

May 28, 1991

Mr. Steve Smallwood, Director
Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Smallwood:

The Dade County Department of Solid Waste Management (DSWM) is currently investigating recycling of ash residue generated from our Resources Recovery Facility. One possible way to utilize the ash is to incorporate it into cement which would subsequently be used in building materials such as concrete blocks. The Department has conducted preliminary meetings with local companies expressing interest in this idea, along with DERM representatives.

John Glunn of DER has indicated that a trial burn must be conducted prior to utilization of waste materials by an existing facility. Test parameters are determined by the composition of the waste and the potential for generation of secondary pollutants. The DSWM has taken the initiative in characterizing the source material by processing a representative ash sample and having it analyzed for the parameters recommended by DER. The sample was sized to a 3/4-inch diameter and a portion of the ferrous component removed by magnets. The sample was then coned and quartered according to ASTM Standards, and analyzed for metals and various organics (see attached).

The TCLP results indicate that the ash does not contain toxic levels of metals. The concentrations of the five metals with TCLP standards were well below the regulatory level. Based on a comparison of the total quantity of these metals to the TCLP quantity, the leaching potential appears to be minimal.

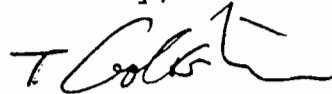
The presence of total cadmium, chromium, lead and arsenic in quantities above the previous DER guidance levels (BAQM, 1987) for decontamination of soils in asphalt plants does warrant further consideration. The ash will be incorporated into the cement process in approximately a one to seven ratio, however, which will bring the concentration of chromium and arsenic below the guidance level.

The organics analyses indicate no phthalates, dioxins, or furans present in the sample. Napthalene was the only polyaromatic hydrocarbon detected, at a concentration of less than 1 ppm. Based on the fact that organics generally were not detected in the source material, and conditions in the cement rotary kiln (temperature and residence time) which would effectively destroy fugitive organics, we do not feel that further testing of organics is warranted.

The preliminary results are encouraging and do not indicate that incorporation of Resource Recovery ash residue into cement would endanger human health or the environment. The ratio at which the ash will be incorporated into the cement will further minimize environmental impacts. The focus in stack testing should be on the metals which may have a negative impact on air quality. The results of the stack test will be the determining factor in whether this process is acceptable and if modifications in existing air permits will be required at the facilities.

The DSWM intends to strictly comply with criteria listed in DER 17-702.600 for recycling of ash residue. I am confident that we can work together to establish an outstanding program. Utilizing the ash in this manner will help the County to meet its 1994 recycling goal, and reduce the need to site additional ash monofills. I look forward to your concurrence on the stack test parameters.

Sincerely,



Tanhum Goldshmid
Assistant Director
Technical Services

DS/CD

Attachment

cc: Carl Pfaffenberger, DERM
Pat Wong, DERM
Rick Poley, DERM
John Glunn, DER
Buck Oven, DER
II. F207



Laboratories, Inc.

FORT LAUDERDALE • SAVANNAH

CLIENT DCSW
 SAMPLE LOCATION #1 ASH
 SAMPLE NUMBER 001-041891
 DATE RECEIVED 04/18/91
 DATE SAMPLED 04/11/91
 SAMPLE TYPE SOIL
 SUBMITTER RALPH TARDIF

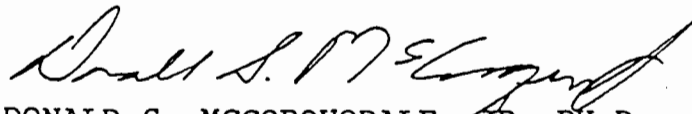
DATE REPORTED: 05/15/91
 EPA: # FLO95
 FL DRINKING WATER: # 86144
 FL ENVIRONMENTAL: # E86006
 GEORGIA: # 828
 SOUTH CAROLINA: # 96015

TEST

RESULTS

TCLP EXTRACTION - METALS 05/01/91
 CADMIUM TCLP SM 304 0.03 MG/L
 CHROMIUM TCLP SM 304 0.04 MG/L
 LEAD TCLP SM 303A 0.24 MG/L
 MERCURY TCLP SM 303F <0.0002 MG/L
 ARSENIC TCLP SM 304 0.006 MG/L
 COPPER TCLP EPA 220.1 0.32 MG/L
 CADMIUM, T 3050/7131 30.00 MG/KG D.W.
 CHROMIUM, T 3050/7191 54.0 MG/KG D.W.
 LEAD, T 3050/7421 1500.0 MG/KG D.W.
 MERCURY, T 7471 <0.1 MG/KG D.W.
 ARSENIC, T 3050/7060 25.00 MG/KG D.W.
 IRON, T 3050/7380 27300 MG/KG D.W.
 COPPER, T 3050/7210 5800.0 MG/KG D.W.
 NICKEL, T 3050/7520 86.0 MG/KG D.W.
 VANADIUM, T 3050/7911 38 MG/KG D.W.
 BERYLLIUM, T 3050/7091 0.9 MG/KG D.W.
 IRON TCLP 0.05 MG/L
 NICKEL TCLP <0.03 MG/L
 VANADIUM TCLP 0.55 MG/L
 BERYLLIUM TCLP <0.002 MG/L
 CHLORIDE IN SOLID SAMPLE 7000 MG/KG
 EPA 8280 NEGATIVE
 EPA 8100 POSITIVE
 EPA 8060 NEGATIVE
 DIOXIN EPA 625 <0.1 UG/L

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ME.


 DONALD S. MCCORQUODALE, JR. PH.D.
 MICROBIOLOGIST



Laboratories, Inc.

FORT LAUDERDALE • SAVANNAH

-CERTIFICATIONS-

CLIENT: D.C.S.W./001-041891

SAMPLE: #1 ASH

DATA FILE: >5A84A::D5

DATE ANALYZED: 5/11/91 0:42

DILUTION FACTOR: 100.00

EPA: #FLO95

FL DRINKING WATER: #86144

FL ENVIRONMENTAL: #E86006

GA # 828

SC # 96015

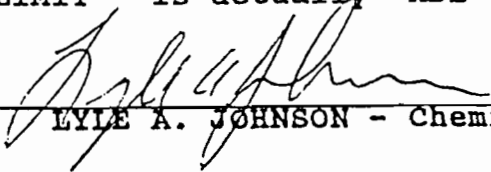
EPA METHOD 8100

CAS NO.	PARAMETER	CONCENTRATION (ug/kg)	* MDL (ug/kg)
83-32-9	ACENAPHTHENE	0.0	0.50
208-96-8	ACENAPHTHYLENE	0.0	0.50
120-12-7	ANTHRACENE	0.0	1.00
56-55-3	BENZO (a) ANTHRACENE	0.0	1.00
50-32-8	BENZO (a) PYRENE	0.0	2.00
205-99-2	BENZO (b) FLUORANTHENE	0.0	1.25
191-24-2	BENZO (ghi) PERYLENE	0.0	2.50
207-08-9	BENZO (k) FLUORANTHENE	0.0	1.25
218-01-9	CHRYSENE	0.0	2.50
53-70-32	DIBENZO (ah) ANTHRACENE	0.0	1.00
206-44-0	FLUORANTHENE	0.0	1.00
86-73-7	FLUORENE	0.0	0.50
193-39-5	INDENO (1,2,3-cd) PYRENE	0.0	0.50
91-20-3	NAPHTHALENE	550.0	0.50
85-01-8	PHENANTHRENE	0.0	1.00
129-00-0	PYRENE	0.0	1.00

MISCELLANEOUS ANALYTES

1-METHYLNAPHTHALENE	0.0	0.50
2-METHYLNAPHTHALENE	0.0	0.50

* MDL METHOD DETECTION LIMIT - Is actually MDL * DILUTION FACTOR.



LYLE A. JOHNSON - Chemist



Laboratories, Inc.

FORT LAUDERDALE • SAVANNAH

CLIENT: D.C.S.W./001-041891
SAMPLE: #1 ASH
DATA FILE: >5A84A::D5
DATE REPORTED: 5/11/91 0:42
DILUTION FACT: 100.0

-CERTIFICATIONS-

EPA: # FLO95
FL DRINKING WATER: #86144
FL ENVIRONMENTAL: #E86006
GA # 828
SC # 96015

EPA METHOD 8060
PHthalATES IN - SOILS

CAS No.	PARAMETER	CONCENTRATION (ug/kg)	* MDL (ug/kg)
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	0.0	0.50
85-68-7	BUTYLBENZYL PHTHALATE	0.0	0.50
84-74-2	DI-n-BUTYL PHTHALATE	0.0	1.00
84-66-2	DIETHYL PHTHALATE	0.0	1.00
131-11-3	DIMETHYL PHTHALATE	0.0	0.50
117-84-0	DI-n-OCTYL PHTHALATE	0.0	0.50

* MDL METHOD DETECTION LIMIT - Is actually MDL x DILUTION FACTOR.
A CONCENTRATION OF 0.0 = BMDL (BELOW METHOD DETECTION LIMIT)

LYLE A. JOHNSON - Chemist

Analyte	50-m CP-S11-88	30-m DB-5	3--m SP-2250
2,3,7,8-TCDF	25.2	17.8	26.7
2,3,7,8-TCDD	23.6	17.4	26.7
1,2,3,4-TCDD	24.1	17.3	26.5
1,2,3,4,7-PeCDD	30.0	20.1	28.1
1,2,3,4,7,8-HxCDD	39.5	22.1	30.6
1,2,3,4,6,7,8-HpCDD	57.0	24.1	33.7
OCDD	NM	25.6	NM

*Retention time in min, using temperature programs shown below.

NM = not measured.

Temperature Programs:

CP-S11-88 60°C-190°C at 20°/min; 190°-240° at 5°/min.

DB-5
30 m x 0.25 mm 170°, 10 min; then at 8°/min to 320°C, hold
Thin film (0.25 um) at 320°C 20 min (until OCDD elutes).

SP-2250 70°-320° at 10°/minute.

Column Manufacturers

CP-S11-88	Chrompack, Incorporated, Bridgewater, New Jersey
DB-5,	J and W Scientific, Incorporated, Rancho Cordova, California
SP-2250	Supelco, Incorporated, Bellefonte, Pennsylvania

Attachment 2



RECEIVED

JUN 10 1991

June 6, 1991

Division of Air
Resources Management

Mr. Hamilton Oven
P.E. Administrator
Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Oven:

As you are aware, the Dade County Department of Solid Waste Management (DSWM) is currently investigating recycling of ash residue generated from our Resources Recovery Facility. The steps taken by the DSWM to date are characterization of the ash and subsequent formulation of a parameter list for stack testing.

In order to determine the proper quantity and ratio of ash to be utilized in the cement manufacturing process, the DSWM now wishes to proceed with a test (process) run. The process run will be conducted using 3000 tons of ash, which is the minimum quantity required to produce a representative batch of cement. The ash will be incorporated into the cement in approximately a one to seven ratio. Operational and handling information gathered during the process run will be used to finalize standard operating procedures for conducting the run during which the stack test will be conducted to determine air quality effects.

The purpose of this letter is to request permission from FDER to proceed with the above described course of action. The DSWM believes that this would be the most prudent and effective procedure to follow in order to achieve reliable results from the future stack test. The stack test will be performed with the concurrence of all appropriate agencies and in compliance with DER 17-702.

Sincerely,

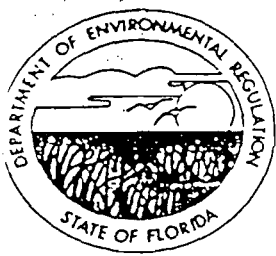
A handwritten signature in cursive script that reads "Dolores Smith".

Dolores Smith, Chief
Environmental Compliance

Tarmac?

cc: Alex Padva, DER
Bob Johns, DERM
II F206

Attachment 3



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

July 1, 1991

Tanhum Goldshmid
Assistant Director
Technical Services
Metro Dade Solid Waste Management
Suite 201
8675 Northwest 53rd Street
Miami, Florida 33166

RE: Proposed Recycling Of Incinerator Ash

Dear Mr. Goldshmid:

We have reviewed your letter of May 28, concerning the proposed recycling of incinerator ash residue from the Dade County Resource Recovery Facility. The Division of Air Resources Management does not object to the proposed use of incinerator ash providing the owner or operator of each affected facility applies for and receives all required permits.

Any company which proposes to consider the use of incinerator ash residue in their manufacturing process must apply for and obtain a federally enforceable permit to construct/modify an air pollution source prior to conducting a test burn. The company will need to provide the Department with reasonable assurance that the proposed operation of the source will not emit criteria pollutants, hazardous air pollutants, and toxic air pollutants in sufficient quantities to endanger public health and welfare. Ambient air quality modeling of projected downwind pollutant concentrations will be one element of the required reasonable assurance. The conditions of the construction permit will include limitations on hours of operation, process rates, and emissions; and, a trial burn protocol.

Based on the analytical results that you supplied, the incinerator ash residue does not appear to contain toxic concentrations of leachable arsenic, cadmium, chrome, and lead. The analytical results further indicate that the concentration of total lead (leachable plus fixed) is about 20 times the level that the Department considers toxic. Even at a final mix ratio

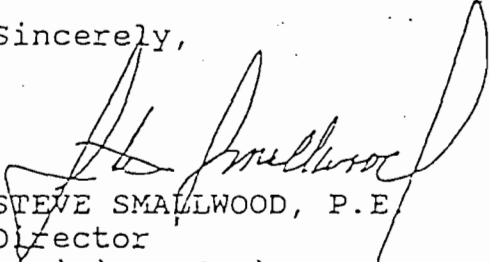
Tanhum Goldshmid
July 1, 1991
Page Two

of one to seven, the total lead concentration would exceed the lead toxic levels established by the Department. We do not know whether the incinerator ash residue contains toxic concentrations of the remaining metals (barium, selenium, and silver) and organic compounds listed in Table 1 of 40 CFR 261.45, because analytical results were not included. The concentration of the compounds (both total and leachable) listed in Table 1 of 40 CFR 261.45 will be needed. The concentrations of total volatile organic aromatics, volatile organic halocarbons, sulfur, and nitrogen in the incinerator ash residue will be needed by the Department's air permit review engineers when a company applies for the necessary air construction permits.

The permittee may be required to perform emission tests for particulate, arsenic, beryllium, cadmium, chromium, lead, mercury, hydrogen chloride, carbon monoxide, sulfur dioxide, nitrogen oxide and specific volatile organic compounds during the test burn as a condition of the required air construction permit.

Please call Clair Fancy at (904) 488-1344, if you have any questions about the above.

Sincerely,

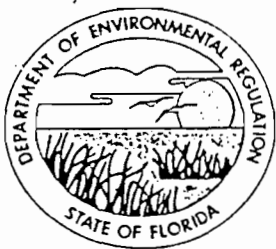


STEVE SMALLWOOD, P.E.
Director
Division Of Air Resources Management

SS/MH/ht

cc: Clair Fancy, FDER
Barry Andrews, FDER
Don Ehlenbeck, FDER
Scott Benyon, FDER SE FL District
Isadore Goldman, FDER SE FL District
Carl Pfaffenberger, DERM
Pat Wong, DERM

Attachment 4



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

July 16, 1991

Ms. Delores Smith, Chief
Environmental Compliance
Metro Dade Solid Waste Management
8675 Northwest 53rd Street
Suite 201
Miami, Florida 33166

Dear Ms. Smith:

This is in response to your letter to Hamilton S. Owen, June 6, 1991, about recycling ash from the Resource Recovery Facility into a cement manufacturing process. Recycling of solid waste combustor ash residue is encouraged provided it is done so that the recycling process or resultant products will not cause discharges of pollutants to the environment. Before approval can be given for the proposed test burn, it is necessary to provide a detailed description of the process that will be undertaken, in accordance with Rule 17-702.600, Florida Administrative Code. It is not clear in the June 6 letter exactly what is involved in the process. It is assumed that it will involve the use of a cement kiln and a stack test for that facility. Management of the ash from the generation point through the recycling process and testing of the final product to determine effects on the environment should be documented in any operating procedure.

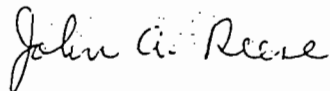
If transportation or processing of the ash has the potential to produce air emissions, appropriate air permits are required.

For your information, a copy of a letter from the Director of the Division of Air Resources Management to TanHum GoldSchmid on the subject, is enclosed.

Ms. Delores Smith
Page Two
July 16, 1991

It is recommended that you consult with the district office in West Palm Beach which has the responsibility for approving the recycling process. Please contact Alex Padva, Waste Program Administrator, and Vic Kamath, P.E., for the Solid Waste Program at (407) 433-2650.

Sincerely,



John A. Reese, Engineer
Solid Waste Section

JAR/tkm
Enc: Rule 17-702
cc: John Ruddell
Bill Hinkley
Buck Oven
Alex Padva
Vic Kamath
Chris McGuire
Mike Harley

Attachment 5



Post-It™ brand fax transmittal memo 7671		# of pages	2
To	Clair Fancy	From	Dave Buff
Co.	FDER	Co.	KBN Engineering
Dept.	90086	Phone #	332 9000
Fax #	922 6979	Fax #	332 8189

October 18, 1991

Mr. Clair Fancy
 Division of Air Resources Management
 Florida Department of Environmental Regulation
 2600 Blair Stone Road
 Tallahassee, FL

Re: Proposed Utilization of Incinerator Ash as Raw Material
 Tarmac Cement Plant
 Dade County, Florida

Dear Mr. Fancy:

In May of this year, Metro Dade County Division of Solid Waste informed the Department as to its desire to utilize ash from the Dade County Resources Recovery facility as a raw material in Tarmac Florida's portland cement plant (refer to letter from Tanhum Goldshmid to Steve Smallwood dated May 28, 1991). The Department responded to this inquiry in a letter dated July 1, 1991. The response indicated that a federally enforceable air construction permit would have to be obtained prior to implementing this change, and even prior to a trial run with this material.

I have reviewed Dade County's request to the Department, and Tarmac's most recent operating permit renewal application and subsequent operating permit. Based on this review, it is apparent that the incinerator ash Tarmac desires to utilize is already approved for use. The previous applications submitted by Tarmac have stated a raw material used in the process is "ash/mineral aggregates". Clearly, Dade County incinerator ash would fall under this raw material category. Therefore, I do not believe that a permit modification or amendment is needed in order for Tarmac to use this raw material.

Although Tarmac and I do not believe any FDER approvals are necessary to utilize this ash, Tarmac has asked me to provide you with information to allow a better understanding of the utilization of this ash. Tarmac currently uses combustor ashes as a raw material in the manufacture of Portland cement clinker. The ashes are needed to provide the required alumina, iron and silica components of the raw mix. These components, along with high calcium carbonate limestone, undergo a chemical transformation in the kiln to produce portland cement clinker.

In order to present an absolute worst case estimate of the potential effect of utilizing the Dade County ash in the process, I have taken a very conservative approach. Tarmac currently projects to utilize a limestone-to-ash ratio of 7 to 1 in the process. This equates to a maximum of 14.3% ash in the raw feed. Tarmac currently is permitted to emit 42.6 lb/hr of particulate at a feed rate of 142 tons/hr for kiln 3. It was assumed that Tarmac currently emits no trace metals, and that 14.3% of the particulate emitted from the kiln is ash (same proportion as in the raw feed). This 14.3% of the particulate

Mr. Clair Fancy
October 18, 1991
Page 2



emission was then assumed to contain trace metals in the same concentration as indicated in the attached analysis of Dade County ash. The following conservative emission estimates were obtained:

Arsenic-	$42.6 \text{ lb/hr} \times 0.143 \times 25 \text{ ppm} = 0.00015 \text{ lb/hr}$
Beryllium-	$42.6 \text{ lb/hr} \times 0.143 \times 0.9 \text{ ppm} = 0.0000055 \text{ lb/hr}$
Cadmium-	$42.6 \text{ lb/hr} \times 0.143 \times 30 \text{ ppm} = 0.00018 \text{ lb/hr}$
Chromium-	$42.6 \text{ lb/hr} \times 0.143 \times 54 \text{ ppm} = 0.00033 \text{ lb/hr}$
Lead-	$42.6 \text{ lb/hr} \times 0.143 \times 1,500 \text{ ppm} = 0.0091 \text{ lb/hr}$
Mercury-	$42.6 \text{ lb/hr} \times 0.143 \times 0.1 \text{ ppm} = 0.00000061 \text{ lb/hr}$
Chloride-	$42.6 \text{ lb/hr} \times 0.143 \times 7,000 \text{ ppm} = 0.043 \text{ lb/hr}$
Copper-	$42.6 \text{ lb/hr} \times 0.143 \times 5,800 \text{ ppm} = 0.035 \text{ lb/hr}$
Nickel-	$42.6 \text{ lb/hr} \times 0.143 \times 86 \text{ ppm} = 0.00052 \text{ lb/hr}$
Vanadium-	$42.6 \text{ lb/hr} \times 0.143 \times 38 \text{ ppm} = 0.00023 \text{ lb/hr}$
Iron-	$42.6 \text{ lb/hr} \times 0.143 \times 27,300 \text{ ppm} = 0.17 \text{ lb/hr}$

As shown, these emissions are extremely small.

Pursuant to DER Rule 17-2.210, any "modification" to an existing source must be the subject of an air construction permit. Rule 17-2.100(127) provides that a "modification" is any "change in the method of operation of" an existing source. Utilizing incinerator ash is not a "change" because Tarmac's previous applications identified "ash/mineral aggregates" as the contemplated raw material, and the conditions of Tarmac's permits authorize operation in accordance with the representations made in the applications.

Tarmac desires to move forward with this project. Please advise if this is acceptable, since Tarmac is proceeding with a test burn and stack testing as recommended in your letter.

Sincerely,

David A. Buff
David A. Buff, M.E., P.E.
Principal Engineer

cc: Al Townsend

Attachment 6

Hand Delivered



November 1, 1991

Mr. Clair Fancy
Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

NOV 1 1991

Bureau of
Air Regulation

Re: Proposed Use of Incinerator Ash as Raw Material
Tarmac Florida, Inc., Cement Plant
Dade County, Florida

Dear Mr. Fancy:

On October 24, 1991, representatives of Tarmac Florida, Inc., met with members of your staff to discuss the use of Dade County Resource Recovery (DCRR) incinerator ash as a raw material at Tarmac's cement plant. The Department's recommendation on this proposed action, as described by Mr. Bruce Mitchell of your staff, was for Tarmac to request a "minor modification" to Tarmac Florida's Kiln 3 current operating permit. The minor modification request would allow Tarmac to conduct a trial burn with the DCRR ash to determine if further permitting requirements apply. This also would inform the public of the test through the required public notice.

The purpose of this letter is to request the "minor modification" permit for Kiln 3 at Tarmac. The DCRR incinerator ash would be brought to Tarmac for incorporation into the raw feed for Kiln 3. A test burn plan is described in Attachment A. The plan describes the testing that will be conducted to determine "baseline" emissions as well as emissions when the DCRR ash is being used.

Although Tarmac does not believe any permit modification is necessary to utilize the DCRR ash, Tarmac is submitting this request in order to proceed with the test burn in an expeditious manner. The \$250 application processing fee is enclosed. Your cooperation in this matter is appreciated.

Sincerely,

David A. Buff

David A. Buff, M.E., P.E.
Principal Engineer

Enclosures

- cc: Al Townsend
- Jim Alves
- ✓ Bruce Mitchell
- Tahnum Goldschmid
- Charlie Strong
- Project File

90086A1/3

KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 Northwest 57th Street Gainesville, Florida 32605 904/331-9000 FAX: 904/332-4189

Attachment A

**TARMAC FLORIDA, INC.
ASH RECYCLING TEST BURN PLAN**

I. INTRODUCTION

Metro-Dade County owns the Dade County Resource Recovery (DCRR) facility located in northern Dade County at N.W. 66th Street and 97th Avenue. The facility is currently operated under a 23-year contract with Montenay Power Corporation. Activities conducted at DCRR encompass municipal solid waste (MSW) processing and recovery of ferrous metal and aluminum, combustion of the resultant fuel, steam production, and subsequent electric generation. A landfill adjacent to DCRR is operated by Metro-Dade County as an ash monofill for disposal of combustion ash.

Tarmac Florida, Inc., is negotiating with Montenay Power to use the resource recovery ash as a substitute raw material in its cement-making process. This proposal could reduce Dade County's reliance on landfills as a method of disposal of ash. Tarmac will be conducting a test burn of bottom and fly ash generated from the Montenay plant to determine if recycling the ash for use in cement is feasible. The test burn will use 3,000 tons of ash, which is approximately the amount of ash produced by DCRR in a 1-week period. This amount of ash will allow the cement plant to operate at full capacity with the DCRR ash during the test burn. The production time to process the ash through the cement plant is 9 days.

Samples of the ash and the final cement product will be taken to verify that use of the ash in cement is environmentally safe. Stack testing will determine if released air emissions comply with state regulated levels. Samples also will be taken when the cement plant is using its normal supply of ash to determine "baseline" conditions.

Tarmac Florida, Inc., is a cement plant located on N.W. 121st Way in Medley. Tarmac is currently using coal ash to produce its cement. It has been using the coal ash for cement production for the past 20 years. At this time, the ash is being transported from northern Florida to the Medley plant by way of rail freight. Presently, Tarmac is buying the ash in bulk from power plants and stockpiling it outside its facility. Tarmac purchases enough ash to last

approximately 6 months. If Tarmac is able to use the ash from DCRR, the transportation costs will be reduced, and the need for long-term stockpiling will be eliminated. Metro-Dade County also would benefit from the program by significantly reducing the amount of space needed to landfill the ash.

The ash produced at DCRR has a high concentration of silica. This silica is combined with the calcium carbonate in limestone to make the primary compound needed to produce portland cement. The cement compound also must contain a sufficient amount of iron and aluminum. The DCRR ash contains less of these compounds than the ash Tarmac historically has been using. To compensate for this deficiency, Tarmac will supplement the ash received from DCRR with iron and with bauxite, which is high in aluminum.

II. TRANSPORTATION AND STORAGE

The ash will be transported by Dade County vehicles or private haulers. The ash will be delivered over a 3-day period. The total round-trip distance is approximately 17 miles. Trucks used to transport the ash will have roll canvas tops to prevent the ash from becoming airborne. The ash delivered by the trucks will be deposited on the ground at Tarmac next to a loading hopper.

III. CEMENT PRODUCTION

Immediately after ash arrives at the Tarmac plant, it is mixed with limestone. This prevents the ash from caking and solidifying. Front-end loaders will transfer the premixed materials from the ground into an existing hopper. This premix is then transported by way of a belt conveyor to raw material storage silos. The ash is then mixed with additional limestone, which is housed in a separate silo, to produce a raw mix. The limestone, which contains 89 percent calcium carbonate, is mixed with the ash to produce the proper alumina, iron, silica, and calcium carbonate content needed to make the cement.

The limestone/ash premix and the limestone from the silo are fed through weigh-belt conveyors to the grinding mill for slurry production. The raw mix is ground with water to produce a slurry. The slurry is stored and blended in large, steel tanks. Next, it is pumped to the feed end of an inclined, coal-fired, rotary kiln. The slurry passes through the kiln, where it is first heated, driving off the moisture, then calcined. The mixture reaches the critical temperature of 2,800°F,

and calcium silicates and calcium aluminates form. These are the fundamental compounds required to produce portland cement clinker.

The hot clinker is cooled to 150°F and conveyed to silos. It is then withdrawn, gypsum is added, and the mix is interground in grinding mills to produce portland cement. This cement is pneumatically pumped to storage silos. From these silos, it is shipped by truck and rail to customers.

The attached flow chart describes the cement production rates. The cement clinkers will contain a total of 3,000 tons of ash during a 7-day period. There will be approximately 13 percent ash, by weight, in the raw mix (slurry); 20 percent ash, by weight, in the clinker; 19 percent ash, by weight, in the cement; and 3.4 percent ash, by weight, in the concrete.

IV. SAMPLING PROTOCOL

Samples will be taken to represent both baseline conditions (current operation) and conditions when DCRR ash is being used. The baseline sampling program will consist of the following:

1. Sample of ash currently being used,
2. Sample of clinker currently produced by Kiln 3,
3. Sample of finished cement product currently produced,
4. Sample of Kiln 3 stack emissions, and
5. Sample of dust collected in electrostatic precipitator (ESP) serving Kiln 3.

The parameters to be sampled and/or analyzed for each media are presented in Table A-1.

The sampling program for the DCRR incinerator ash test burn will consist of the following:

1. Sample of ash, immediately before it is transported to Tarmac;
2. Sample of clinker produced by Kiln 3;
3. Sample of finished cement product;
4. Stack testing of Kiln 3; and
5. Sample of Kiln 3 ESP dust.

The initial ash sample will be taken by Dade County Department of Solid Waste Management Environmental Compliance personnel. The clinker, cement, and ESP dust samples will be

collected by Tarmac laboratory personnel while taking quality control samples. All samples will be tested by Spectrum Laboratories, Inc., located in Fort Lauderdale, Florida.

Stack testing will start on day 7 of the test burn. This is to assure that no residue from the previously used coal ash is present. Emissions testing for multimetals will consist of three test runs of two hours in duration. All multimetal samples, including one blank, will be analyzed in accordance with methods of atomic absorption. Emissions will be tested for the parameters shown in Table A-1.

SO₂, NO_x, and CO emissions will not be sampled for the test burn. SO₂ emissions from Kiln 3 are known to be dependent on the sulfur content of the coal burned in the kiln and the SO₃ content of the raw feed (primarily limestone). Four samples of DCRR incineration ash have been analyzed previously for equivalent SO₃ content. The results were as follows: 0.22 percent, 0.76 percent, 0.75 percent, and 1.45 percent, with an average of 0.8 percent. Between 12 and 16 percent of the raw feed mix Tarmac uses is ash, with bauxite and iron oxide as sweeteners. Neither bauxite or iron oxide contains any sulphur. At the anticipated substitution rate of 16 percent of the raw dry feed, the SO₃ content would then be 0.13 percent, which is the same as Tarmac's historic average raw feed SO₃ content. Therefore, the total sulfur content of the raw feed is not expected to change as a result of using DCRR ash, and SO₂ emissions should not be affected.

NO_x emissions from Kiln 3 are dependent upon the nitrogen content of the coal, the combustion temperature in the kiln, and the amount of excess air in the kiln. Since these parameters will not change as a result of using an alternative ash supply, NO_x emissions are not expected to change as a result of using the DCRR ash.

CO emissions from the kiln are limited because of safety considerations related to the ESP. The use of an alternative ash source will not affect CO emissions.

V. SCHEDULE

A. Baseline sampling - Conducted 15 days after public notice is published

B. Test Burn Sampling

Day 1: Ash is sampled by Dade County. Ash is then transported by truck to Tarmac and is blended with raw feed.

Day 2: Same as day 1.

Day 3: Same as day 1; raw mill grinding has begun.

Day 4: Raw mill is operating.

Day 5: Raw mill is operating, and use of old and new slurry has begun.

Day 6: Old and new slurry is used.

Day 7: New slurry is used containing new ash only. Samples of clinker and ESP dust are obtained. Stack testing will begin on this day.

Day 8: Same as day 7; stack testing is continued as necessary.

Day 9: Same as day 7; stack testing is continued as necessary.

Day 12: Sample of finished cement product is obtained.

Professional Engineer Certification

Name: David A. Buff

Signature: *David A. Buff*

Florida P.E. Registration No.: 19011

Seal:

Table A-1. Test Burn Sampling Plan

I. DCRR Ash; Tarmac Clinker, Cement, and ESP Dust

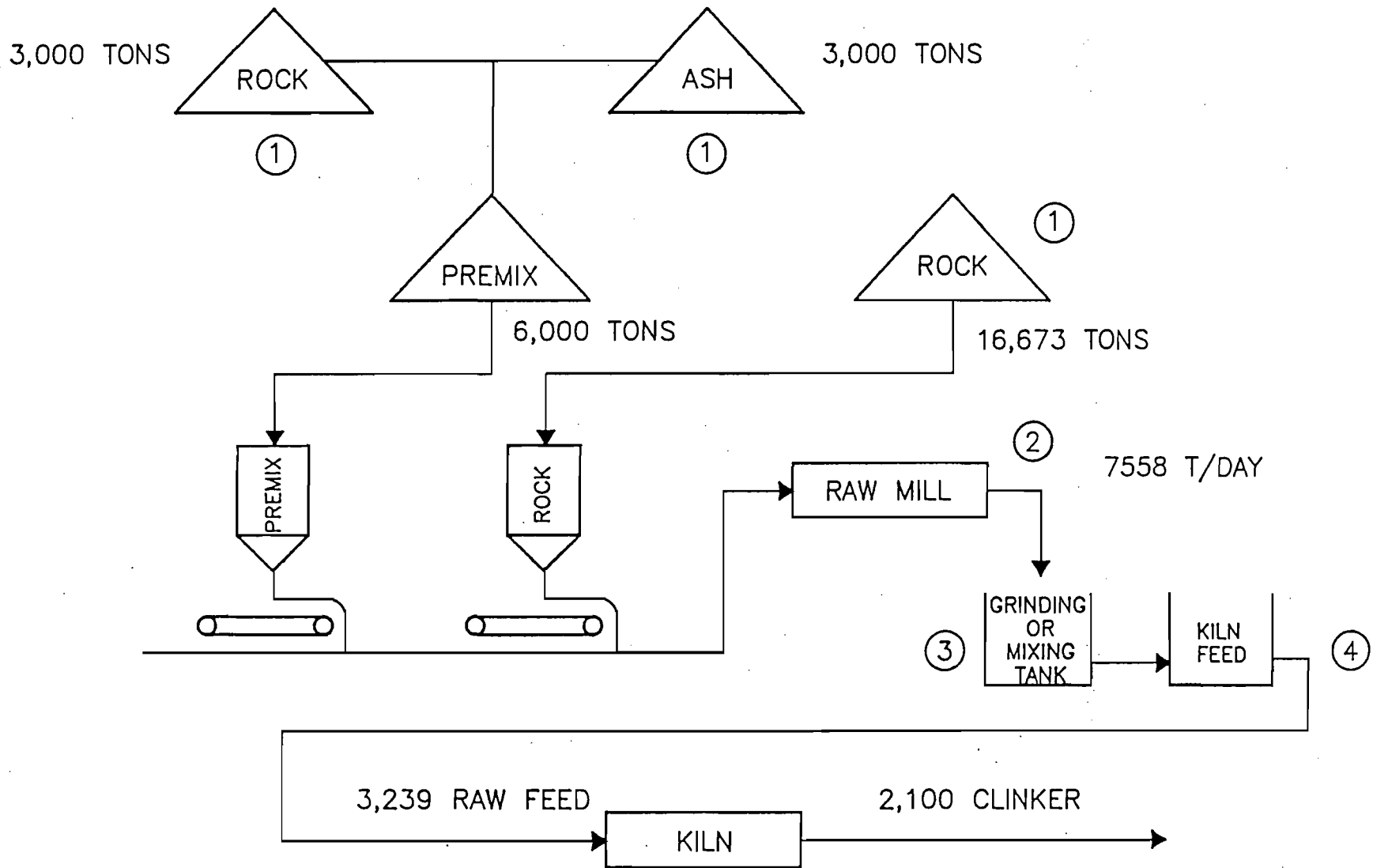
<u>A. Metals</u>	<u>Method</u>
Arsenic	3050/7060
Barium	3050/7080
Beryllium	3050/7091
Cadmium	3050/7131
Chromium (Total)	3050/7191
Copper	3050/7210
Iron	3050/7380
Lead	3050/7421
Mercury	7471
Nickel	3050/7520
Silver	3050/7760
Vanadium	3050/7911
Zinc	3050/7950
<u>B. Nonmetals</u>	
Chloride	9252
Dioxin	625
Nitrogen	SM417-420
PAHs	8100
Pthalates	8060
Sulfur	SM304

II. Kiln 3 Stack

<u>A. Metals</u>	
EPA multi-metals train for sample collection, and methods listed above for analysis.	
<u>B. Nonmetals</u>	
CO ₂ /O ₂	EPA Method 3
Dioxin/Furans	EPA Method 23/EPA 8290
Hydrogen Chloride	Method 0050
PAHs	Modified Method 5/8100
Particulate Matter	Modified Method 5
Semi-Volatile Organic Compounds	Modified Method 5/8270
Stack Gas Flow/Moisture/Temperature	EPA Methods 2, 4, and 5
Volatile Organic Compounds (including benzene)	VOST

RAW MATERIAL FLOW CHART

PENNSUCO ASH



SAMPLE FREQUENCY

- ① - WEEKLY
- ② - EVERY TWO HOURS
- ③ - EVERY FOUR HOURS
- ④ - EVERY EIGHT HOURS

LOCAL ASH WOULD BE GROUND INTO KILN FEED IN 3 DAYS AND BE CONSUMED BY THE KILN IN 7 DAYS.

Attachment 7



FACSIMILE COVER SHEET

DATE: Nov 6, 91

TO: Bruce Mitchell

ORGANIZATION: FDER

FAX NUMBER: 1-922-6979

TELEPHONE NUMBER: _____

FROM: Dave Buff

TOTAL NUMBER OF PAGES: 6 (including cover page)

MESSAGE/INSTRUCTIONS:

PROJECT NUMBER: 90086

FAX OPERATOR: _____

() This is the ONLY form of delivery of the transmitted document.

() The original of the transmitted document will be sent by:

- () US Mail
- () Overnight delivery
- () Other: _____

Return original to _____

Mary Lynn

cc: Project File _____ yes _____ no _____



November 6, 1991

Mr. Clair Fancy
Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399

Re: Proposed Utilization of Incinerator Ash as Raw Material
Tarmac Florida, Inc. Cement Plant
Dade County, Florida

Dear Mr. Fancy:

In response to Bruce Mitchell's request, I am enclosing an analysis of trace elements and other pollutants for the Dade County incinerator ash. This is the ash which Tarmac will use in the test burn. Please review this information and advise if we can proceed with the public notice.

Sincerely,

A handwritten signature in cursive script that reads "David A. Buff".

David A. Buff, M.E., P.E.
Principal Engineer

cc: Al Townsend
Jim Alves
Bruce Mitchell

BEST AVAILABLE COPY



Laboratories, Inc.

FORT LAUDERDALE • SAVANNAH

CLIENT	DCSW	DATE REPORTED:	05/15/91
SAMPLE LOCATION	#1 ASH	EPA:	# FLO95
SAMPLE NUMBER	001-041891	FL DRINKING WATER:	# 86144
DATE RECEIVED	04/18/91	FL ENVIRONMENTAL:	# E86006
DATE SAMPLED	04/11/91	GEORGIA:	# 828
SAMPLE TYPE	SOIL	SOUTH CAROLINA:	# 96015
SUBMITTER	RALPH TARDIF		

TEST

RESULTS

TCLP EXTRACTION - METALS		05/01/91	
CADMIUM TCLP	SM 304	0.03	MG/L
CHROMIUM TCLP	SM 304	0.04	MG/L
LEAD TCLP	SM 303A	0.24	MG/L
MERCURY TCLP	SM 303F	<0.0002	MG/L
ARSENIC TCLP	SM 304	0.006	MG/L
COPPER TCLP	EPA 220.1	0.32	MG/L
CADMIUM, T	3050/7131	30.00	MG/KG D.W.
CHROMIUM, T	3050/7191	54.0	MG/KG D.W.
LEAD, T	3050/7421	1500.0	MG/KG D.W.
MERCURY, T	7471	<0.1	MG/KG D.W.
ARSENIC, T	3050/7060	25.00	MG/KG D.W.
IRON, T	3050/7380	27300	MG/KG D.W.
COPPER, T	3050/7210	5800.0	MG/KG D.W.
NICKEL, T	3050/7520	86.0	MG/KG D.W.
VANADIUM, T	3050/7911	38	MG/KG D.W.
BERYLLIUM, T	3050/7091	0.9	MG/KG D.W.
IRON TCLP		0.05	MG/L
NICKEL TCLP		<0.03	MG/L
VANADIUM TCLP		0.55	MG/L
BERYLLIUM TCLP		<0.002	MG/L
CHLORIDE IN SOLID SAMPLE		7000	MG/KG
EPA 8280		NEGATIVE	
EPA 8100		POSITIVE	
EPA 8060		NEGATIVE	
DIOXIN	EPA 625	<0.1	UG/L

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ME.

Donald S. McCorquodale, Jr.
 DONALD S. MCCORQUODALE, JR. PH.D.
 MICROBIOLOGIST

BEST AVAILABLE COPY



Laboratories, Inc.

FORT LAUDERDALE • SAVANNAH

-CERTIFICATIONS-

EPA: #FLO95

FL DRINKING WATER: #86144

FL ENVIRONMENTAL: #E86006

GA # 828

SC # 96015

CLIENT: D.C.S.W./001-041891

SAMPLE: #1 ASH

DATA FILE: >5A84A::D5

ANALYZED: 5/11/91 0:42

DILUTION FACTOR: 100.00

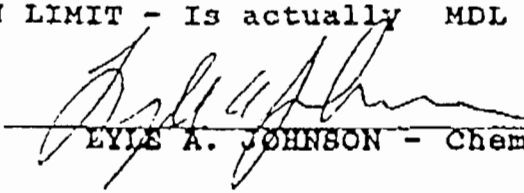
EPA METHOD 8100

NO.	PARAMETER	CONCENTRATION (ug/kg)	* MDL (ug/kg)
83-32-9	ACENAPHTHENE	0.0	0.50
208-96-8	ACENAPHTHYLENE	0.0	0.50
120-12-7	ANTHRACENE	0.0	1.00
56-55-3	BENZO (a) ANTHRACENE	0.0	1.00
50-32-8	BENZO (a) PYRENE	0.0	2.00
205-99-2	BENZO (b) FLUORANTHENE	0.0	1.25
191-24-2	BENZO (ghi) PERYLENE	0.0	2.50
207-08-9	BENZO (k) FLUORANTHENE	0.0	1.25
218-01-9	CHRYSENE	0.0	2.50
53-70-32	DIBENZO (ah) ANTHRACENE	0.0	1.00
206-44-0	FLUORANTHENE	0.0	1.00
86-73-7	FLUORENE	0.0	0.50
193-39-5	INDENO (1,2,3-cd) PYRENE	0.0	0.50
91-20-3	NAPHTHALENE	550.0	0.50
85-01-8	PHENANTHRENE	0.0	1.00
129-00-0	PYRENE	0.0	1.00

MISCELLANEOUS ANALYTES

1-METHYLNAPHTHALENE	0.0	0.50
2-METHYLNAPHTHALENE	0.0	0.50

MDL METHOD DETECTION LIMIT - Is actually MDL * DILUTION FACTOR.



 EYLE A. JOHNSON - Chemist

BEST AVAILABLE COPY



Laboratories, Inc.

FORT LAUDERDALE - SAVANNAH

-CERTIFICATIONS-

EPA: # FLO95
 FL DRINKING WATER: #86144
 FL ENVIRONMENTAL: #E86006
 GA # 828
 SC # 96015

CLIENT: D.C.S.W./001-041891
 SAMPLE: #1 ASH
 DATA FILE: >5A84A::D5
 REPORTED: 5/11/91 0:42
 DILUTION FACT: 100.0

EPA METHOD 8060
PHthalATES IN - SOILS

<u>JAS No.</u>	<u>PARAMETER</u>	<u>CONCENTRATION</u> <u>(ug/kg)</u>	<u>* MDL</u> <u>(ug/kg)</u>
17-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	0.0	0.50
15-68-7	BUTYLBENZYLPHthalATE	0.0	0.50
14-74-2	DI-n-BUTYLPHthalATE	0.0	1.00
14-66-2	DIETHYLPHthalATE	0.0	1.00
131-11-3	DIMETHYLPHthalATE	0.0	0.50
17-84-0	DI-n-OCTYL PHTHALATE	0.0	0.50

MDL METHOD DETECTION LIMIT - Is actually MDL x DILUTION FACTOR.
 A CONCENTRATION OF 0.0 = BMDL (BELOW METHOD DETECTION LIMIT)

LYLE A. JOHNSON - Chemist

BEST AVAILABLE COPY

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue (31404) • P.O. Box 13548 • Savannah, GA 31416-0548 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-32797

Received: 19 APR 91

Ms. Melanie Thum
Spectrum
4350 N. Dixie Hwy.
Ft. Lauderdale, FL 3334

Project: D.C.S.W.

REPORT OF RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION ; SOLID OR SEMISOLID SAMPLES	SAMPLED BY
32797-1	001-041891 (4/11/91)	Client
PARAMETER	32797-1	
Dioxin/Furans (8280)		
Tetra CDD, ug/kg	<5.9	
Tetra CDF, ug/kg	<5.9	
Penta CDD, ug/kg	<5.9	
Penta CDF, ug/kg	<5.9	
Hexa CDD, ug/kg	10.0	
Hexa CDF, ug/kg	<5.9	
Hepta CDD, ug/kg	<5.9	
Hepta CDF, ug/kg	<5.9	
Octa CDD, ug/kg	<5.9	
Octa CDF, ug/kg	<5.9	
Percent Solids, %	82	

Attachment 8



November 6, 1991

RECEIVED
NOV 12 1991
Division of Air
Resources Management

Mr. Clair Fancy
Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399

Re: Proposed Utilization of Incinerator Ash as Raw Material
Tarmac Florida, Inc. Cement Plant
Dade County, Florida

Dear Mr. Fancy:

In response to Bruce Mitchell's request, I am enclosing an analysis of trace elements and other pollutants for the Dade County incinerator ash. This is the ash which Tarmac will use in the test burn. Please review this information and advise if we can proceed with the public notice.

Sincerely,

A handwritten signature in cursive script that reads "David A. Buff".

David A. Buff, M.E., P.E.
Principal Engineer

cc: Al Townsend
Jim Alves
Bruce Mitchell

90086A1/4

KBN ENGINEERING AND APPLIED SCIENCES, INC.
1034 Northwest 57th Street Gainesville, Florida 32605 904/331-9000 FAX: 904/332-4189

EQUAL EMPLOYMENT OPPORTUNITY / AN AFFIRMATIVE ACTION EMPLOYER



Laboratories, Inc.

FORT LAUDERDALE • SAVANNAH

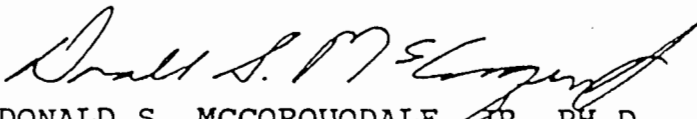
CLIENT	DCSW	DATE REPORTED:	05/15/91
SAMPLE LOCATION	#1 ASH	EPA:	# FLO95
SAMPLE NUMBER	001-041891	FL DRINKING WATER:	# 86144
DATE RECEIVED	04/18/91	FL ENVIRONMENTAL:	# E86006
DATE SAMPLED	04/11/91	GEORGIA:	# 828
SAMPLE TYPE	SOIL	SOUTH CAROLINA:	# 96015
SUBMITTER	RALPH TARDIF		

TEST

RESULTS

TCLP EXTRACTION - METALS		05/01/91	
CADMIUM TCLP	SM 304	0.03	MG/L
CHROMIUM TCLP	SM 304	0.04	MG/L
LEAD TCLP	SM 303A	0.24	MG/L
MERCURY TCLP	SM 303F	<0.0002	MG/L
ARSENIC TCLP	SM 304	0.006	MG/L
COPPER TCLP	EPA 220.1	0.32	MG/L
CADMIUM, T	3050/7131	30.00	MG/KG D.W.
CHROMIUM, T	3050/7191	54.0	MG/KG D.W.
LEAD, T	3050/7421	1500.0	MG/KG D.W.
MERCURY, T	7471	<0.1	MG/KG D.W.
ARSENIC, T	3050/7060	25.00	MG/KG D.W.
IRON, T	3050/7380	27300	MG/KG D.W.
COPPER, T	3050/7210	5800.0	MG/KG D.W.
NICKEL, T	3050/7520	86.0	MG/KG D.W.
VANADIUM, T	3050/7911	38	MG/KG D.W.
BERYLLIUM, T	3050/7091	0.9	MG/KG D.W.
IRON TCLP		0.05	MG/L
NICKEL TCLP		<0.03	MG/L
VANADIUM TCLP		0.55	MG/L
BERYLLIUM TCLP		<0.002	MG/L
CHLORIDE IN SOLID SAMPLE		7000	MG/KG
EPA 8280		NEGATIVE	
EPA 8100		POSITIVE	
EPA 8060		NEGATIVE	
DIOXIN	EPA 625	<0.1	UG/L

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ME.


DONALD S. MCCORQUODALE, JR. PH.D.
MICROBIOLOGIST



Laboratories, Inc.

FORT LAUDERDALE • SAVANNAH

-CERTIFICATIONS-

EPA: #FLO95

FL DRINKING WATER: #86144

FL ENVIRONMENTAL: #E86006

GA # 828

SC # 96015

CLIENT: D.C.S.W./001-041891

SAMPLE: #1 ASH

DATA FILE: >5A84A::D5

DATE ANALYZED: 5/11/91 0:42

DILUTION FACTOR: 100.00

EPA METHOD 8100

CAS NO.	PARAMETER	CONCENTRATION (ug/kg)	* MDL (ug/kg)
83-32-9	ACENAPHTHENE	0.0	0.50
208-96-8	ACENAPHTHYLENE	0.0	0.50
120-12-7	ANTHRACENE	0.0	1.00
56-55-3	BENZO (a) ANTHRACENE	0.0	1.00
50-32-8	BENZO (a) PYRENE	0.0	2.00
205-99-2	BENZO (b) FLUORANTHENE	0.0	1.25
191-24-2	BENZO (ghi) PERYLENE	0.0	2.50
207-08-9	BENZO (k) FLUORANTHENE	0.0	1.25
218-01-9	CHRYSENE	0.0	2.50
53-70-32	DIBENZO (ah) ANTHRACENE	0.0	1.00
206-44-0	FLUORANTHENE	0.0	1.00
86-73-7	FLUORENE	0.0	0.50
193-39-5	INDENO (1,2,3-cd) PYRENE	0.0	0.50
91-20-3	NAPHTHALENE	550.0	0.50
85-01-8	PHENANTHRENE	0.0	1.00
129-00-0	PYRENE	0.0	1.00

MISCELLANEOUS ANALYTES

1-METHYLNAPHTHALENE	0.0	0.50
2-METHYLNAPHTHALENE	0.0	0.50

* MDL METHOD DETECTION LIMIT - Is actually MDL * DILUTION FACTOR.



 LYLE A. JOHNSON - Chemist



Laboratories, Inc.

FORT LAUDERDALE • SAVANNAH

-CERTIFICATIONS-

CLIENT: D.C.S.W./001-041891
 SAMPLE: #1 ASH
 DATA FILE: >5A84A::D5
 TIME REPORTED: 5/11/91 0:42
 DILUTION FACT: 100.0

EPA: # FLO95
 FL DRINKING WATER: #86144
 FL ENVIRONMENTAL: #E86006
 GA # 828
 SC # 96015

EPA METHOD 8060
PHthalATES IN - SOILS

<u>CAS No.</u>	<u>PARAMETER</u>	<u>CONCENTRATION</u> <u>(ug/kg)</u>	<u>* MDL</u> <u>(ug/kg)</u>
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	0.0	0.50
85-68-7	BUTYLBENZYLPHthalATE	0.0	0.50
84-74-2	DI-n-BUTYLPHthalATE	0.0	1.00
84-66-2	DIETHYLPHthalATE	0.0	1.00
131-11-3	DIMETHYLPHthalATE	0.0	0.50
117-84-0	DI-n-OCTYL PHTHALATE	0.0	0.50

MDL METHOD DETECTION LIMIT - Is actually MDL x DILUTION FACTOR.
 A CONCENTRATION OF 0.0 = BMDL (BELOW METHOD DETECTION LIMIT)

LYLE A. JOHNSON - Chemist

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue (31404) • P.O. Box 13548 • Savannah, GA 31416-0548 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-32797

Received: 19 APR 91

Ms. Melanie Thum
Spectrum
4550 N. Dixie Hwy.
Ft. Lauderdale, FL 3334

Project: D.C.S.W.

REPORT OF RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION ; SOLID OR SEMISOLID SAMPLES	SAMPLED BY
32797-1	001-041891 (4/11/91)	Client
PARAMETER	32797-1	
Cl-Dioxin/Furans (8280)		
Tetra CDD, ug/kg	<5.9	
Tetra CDF, ug/kg	<5.9	
Penta CDD, ug/kg	<5.9	
Penta CDF, ug/kg	<5.9	
Hexa CDD, ug/kg	10.0	
Hexa CDF, ug/kg	<5.9	
Hepta CDD, ug/kg	<5.9	
Hepta CDF, ug/kg	<5.9	
Octa CDD, ug/kg	<5.9	
Octa CDF, ug/kg	<5.9	
Percent Solids, %	82	

Attachment 9



KBN ENGINEERING AND APPLIED SCIENCES, INC.
 1034 Northwest 57th Street FAX: 904/332-4189
 Gainesville, Florida 32605 Telephone: 904/331-9000

Letter of Transmittal

Date: 11/15/91

Project No.: 90086

To: Bruce Mitchell

Re: Tarmac Incinerator Ash Test Burn

RECEIVED

NOV 18 1991

Division of Air Resources Management

The following items are being sent to you: with this letter under separate cover

Copies	Description
1	Tarmac Site Map

These are transmitted:

- As requested
- For review
- For review and comment
- For approval
- For your information
- _____

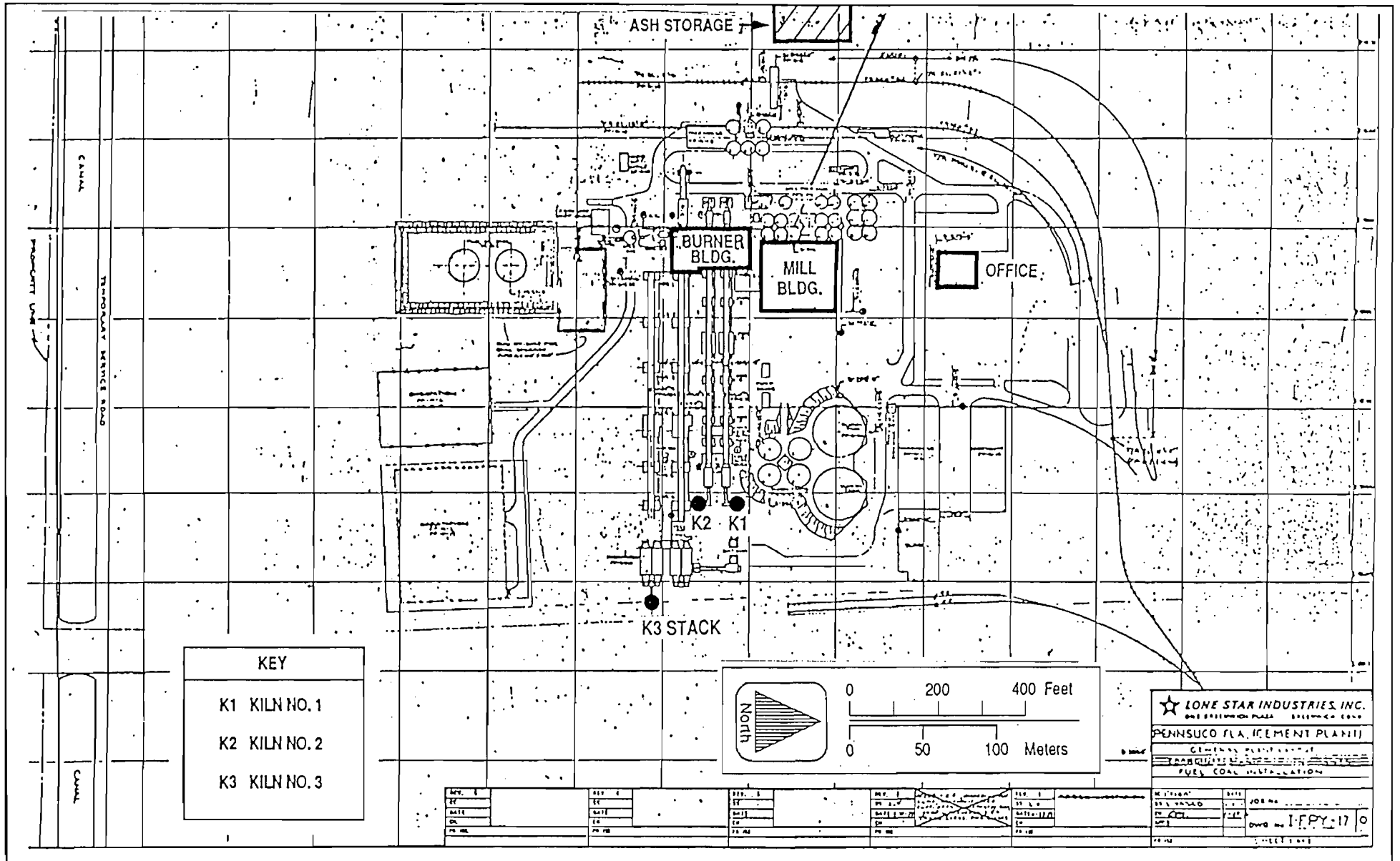
Remarks: Attached is the site map for Tarmac which identifies the location where the DCRR ash will be stored.

Please call if you have any questions.

Signed: D. A. Buff

Copy to: Tom Tittle
Al Townsend
Jim Alves

Best Available Copy



PLOT PLAN OF TARMAC FACILITY (DCRR ASH STORAGE AREA INDICATED)



Attachment 10
Available Upon Request



KBN ENGINEERING AND APPLIED SCIENCES, INC.
 1034 Northwest 57th Street FAX: 904/332-4189
 Gainesville, Florida 32605 Telephone: 904/331-9000

Letter of Transmittal

Date: 11/15/91

Project No.: 90086

To: Bruce Mitchell

Re: Tarmac Incinerator Ash Test Burn

RECEIVED

NOV 18 1991

Division of Air Resources Management

The following items are being sent to you: with this letter under separate cover

Copies	Description
1	Tarmac Site Map

These are transmitted:

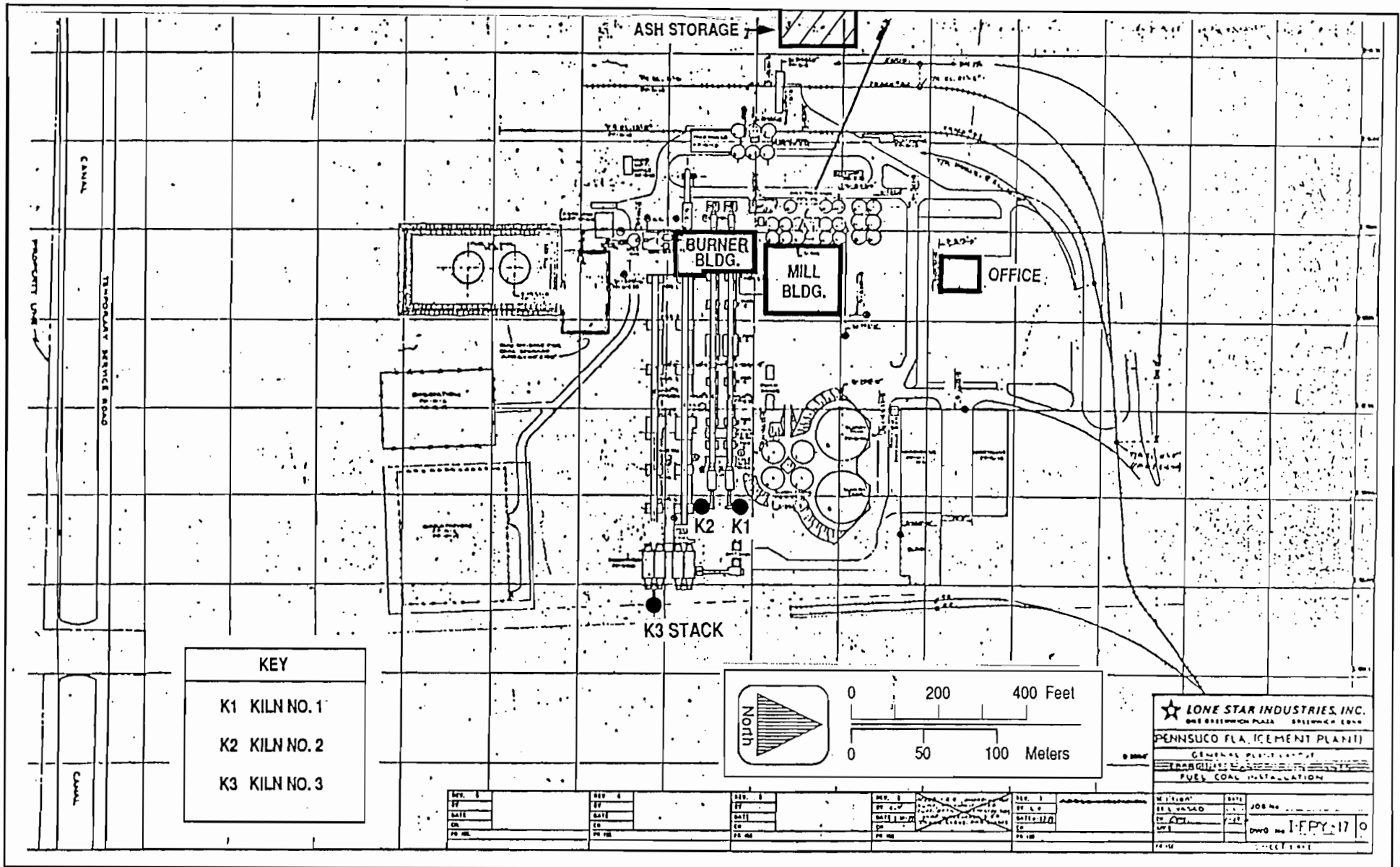
- As requested
- For review
- For review and comment
- For approval
- For your information
- _____

Remarks: Attached is the site map for Tarmac which identifies the location where the DCRR ash will be stored.

Please call if you have any questions.

Signed: D. A. Buff

Copy to: Tom Tittle
Al Townsend
Jim Alves



PLOT PLAN OF TARMAC FACILITY (DCRR ASH STORAGE AREA INDICATED)



Best Available Copy



QUESTIONS? CALL 800-238-5335 TOLL FREE.

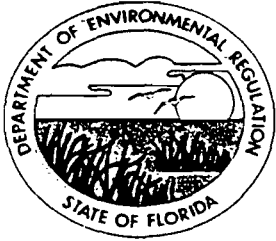
AIRBILL
PACKAGE
TRACKING NUMBER

1028820144

1028820144

RECIPIENT'S COPY

From (Your Name) Please Print David A. Buff Company Street Address City State ZIP Required		Your Phone Number (Very Important) Department/Floor No.		To (Recipient's Name) Please Print Bruce Mitchell Company Street Address City State ZIP Required		Recipient's Phone Number (Very Important) Department/Floor No.	
YOUR INTERNAL BILLING REFERENCE INFORMATION (First 24 characters will appear on invoice.) 90086				IF HOLD FOR PICK-UP, Print FEDEX Address Here Street Address City State ZIP Required			
PAYMENT 1 <input checked="" type="checkbox"/> Bill Sender 2 <input type="checkbox"/> Bill Recipient's FedEx Acct. No. 3 <input type="checkbox"/> Bill 3rd Party FedEx Acct. No. 4 <input type="checkbox"/> Bill Credit Card 5 <input type="checkbox"/> Cash/Check		SERVICES (Check only one box) 11 <input type="checkbox"/> YOUR PACKAGING 16 <input checked="" type="checkbox"/> FEDEX LETTER * 12 <input type="checkbox"/> FEDEX PAK * 13 <input type="checkbox"/> FEDEX BOX 14 <input type="checkbox"/> FEDEX TUBE 30 <input type="checkbox"/> ECONOMY		DELIVERY AND SPECIAL HANDLING (Check services required) 1 <input type="checkbox"/> HOLD FOR PICK-UP (if all in Box H) 2 <input checked="" type="checkbox"/> DELIVER WEEKDAY 3 <input type="checkbox"/> DELIVER SATURDAY (Extra charge) 4 <input type="checkbox"/> DANGEROUS GOODS (Extra charge) 5 <input type="checkbox"/> 6 <input type="checkbox"/> DRY ICE Lbs 7 <input type="checkbox"/> OTHER SPECIAL SERVICE 8 <input type="checkbox"/> 9 <input type="checkbox"/> SATURDAY PICK-UP (Extra charge) 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> HOLIDAY DELIVERY (if offered) (Extra charge)		PACKAGES WEIGHT (in Pounds Only) Total Total DIM SHIPMENT (Chargeable Weight) Received At: 1 <input type="checkbox"/> Regular Stop 3 <input type="checkbox"/> Drop Box 2 <input type="checkbox"/> On-Call Stop 4 <input type="checkbox"/> BSC 5 <input type="checkbox"/> Station	
Economy Two-Day (Delivery by second business day) 30 <input type="checkbox"/> ECONOMY		Government Overnight (Restricted to authorized users only) 46 <input type="checkbox"/> GOVT LETTER 41 <input type="checkbox"/> GOVT PACKAGE		Freight Service (For Extra Large or Heavy Package over 150 lbs) 70 <input type="checkbox"/> OVERNIGHT FREIGHT ** 80 <input type="checkbox"/> TWO-DAY FREIGHT **		Federal Express Use Base Charges Declared Value Charge Other 1 Other 2 Total Charges: REVISION DATE 4/91 DATED 01/22/94 EXEM 5933 FORMAT #082 1990-91 F.E.C. PRINTED IN U.S.A.	



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

FAX TRANSMITTAL SHEET

DATE: 11-14-91

NAME(S): Mr. Gregg Worley

DEPARTMENT/COMPANY: U.S. EPA, Region IV - Air

PHONE: 404-347-2130

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 6

FROM: Bruce Mitchell

DEPARTMENT: FWER/DARM/BAR

OFFICE PHONE: 904-488-1344 FAX PHONE: 904-922-6979

SENDER: Sam

COMMENTS: Tarmac - supplementary information
(ash analysis)

PM
11-7-91
Gainesville, FL

File Copy



RECEIVED

NOV 08 1991

Division of Air
Resources Management

November 6, 1991

Mr. Clair Fancy
Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399

Re: Proposed Utilization of Incinerator Ash as Raw Material
Tarmac Florida, Inc. Cement Plant
Dade County, Florida

Dear Mr. Fancy:

In response to Bruce Mitchell's request, I am enclosing an analysis of trace elements and other pollutants for the Dade County incinerator ash. This is the ash which Tarmac will use in the test burn. Please review this information and advise if we can proceed with the public notice.

Sincerely,

A handwritten signature in cursive script that reads "David A. Buff".

David A. Buff, M.E., P.E.
Principal Engineer

cc: Al Townsend
Jim Alves
Bruce Mitchell

90086A1/4

KBN ENGINEERING AND APPLIED SCIENCES, INC.
1034 Northwest 57th Street Gainesville, Florida 32605 904/331-9000 FAX: 904/332-4189

EQUAL EMPLOYMENT OPPORTUNITY / AN AFFIRMATIVE ACTION EMPLOYER

RECEIVED

NOV 08 1991

Division of Air
Resources Management



Laboratories, Inc.

FORT LAUDERDALE • SAVANNAH

CLIENT DCSW
 SAMPLE LOCATION #1 ASH
 SAMPLE NUMBER 001-041891
 DATE RECEIVED 04/18/91
 DATE SAMPLED 04/11/91
 SAMPLE TYPE SOIL
 SUBMITTER RALPH TARDIF

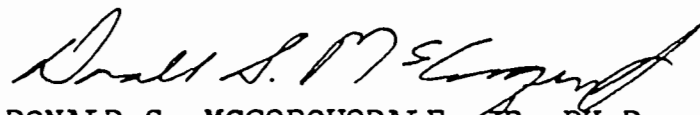
DATE REPORTED: 05/15/91
 EPA: # FLO95
 FL DRINKING WATER: # 86144
 FL ENVIRONMENTAL: # E86006
 GEORGIA: # 828
 SOUTH CAROLINA: # 96015

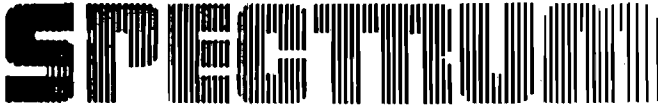
TEST

RESULTS

TEST	RESULTS
TCLP EXTRACTION - METALS	05/01/91
CADMIUM TCLP SM 304	0.03 MG/L
CHROMIUM TCLP SM 304	0.04 MG/L
LEAD TCLP SM 303A	0.24 MG/L
MERCURY TCLP SM 303F	<0.0002 MG/L
ARSENIC TCLP SM 304	0.006 MG/L
COPPER TCLP EPA 220.1	0.32 MG/L
CADMIUM, T 3050/7131	30.00 MG/KG D.W.
CHROMIUM, T 3050/7191	54.0 MG/KG D.W.
LEAD, T 3050/7421	1500.0 MG/KG D.W.
MERCURY, T 7471	<0.1 MG/KG D.W.
ARSENIC, T 3050/7060	25.00 MG/KG D.W.
IRON, T 3050/7380	27300 MG/KG D.W.
COPPER, T 3050/7210	5800.0 MG/KG D.W.
NICKEL, T 3050/7520	86.0 MG/KG D.W.
VANADIUM, T 3050/7911	38 MG/KG D.W.
BERYLLIUM, T 3050/7091	0.9 MG/KG D.W.
IRON TCLP	0.05 MG/L
NICKEL TCLP	<0.03 MG/L
VANADIUM TCLP	0.55 MG/L
BERYLLIUM TCLP	<0.002 MG/L
CHLORIDE IN SOLID SAMPLE	7000 MG/KG
EPA 8280	NEGATIVE
EPA 8100	POSITIVE
EPA 8060	NEGATIVE
DIOXIN EPA 625	<0.1 UG/L

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ME.


 DONALD S. MCCORQUODALE, JR. PH.D.
 MICROBIOLOGIST



Laboratories, Inc.

FORT LAUDERDALE • SAVANNAH

-CERTIFICATIONS-

EPA: #FLO95

FL DRINKING WATER: #86144

FL ENVIRONMENTAL: #E86006

GA # 828

SC # 96015

CLIENT: D.C.S.W./001-041891

SAMPLE: #1 ASH

DATA FILE: >5A84A::D5

DATE ANALYZED: 5/11/91 0:42

DILUTION FACTOR: 100.00

EPA METHOD 8100

<u>CAS NO.</u>	<u>PARAMETER</u>	<u>CONCENTRATION (ug/kg)</u>	<u>* MDL (ug/kg)</u>
83-32-9	ACENAPHTHENE	0.0	0.50
208-96-8	ACENAPHTHYLENE	0.0	0.50
120-12-7	ANTHRACENE	0.0	1.00
56-55-3	BENZO (a) ANTHRACENE	0.0	1.00
50-32-8	BENZO (a) PYRENE	0.0	2.00
205-99-2	BENZO (b) FLUORANTHENE	0.0	1.25
191-24-2	BENZO (ghi) PERYLENE	0.0	2.50
207-08-9	BENZO (k) FLUORANTHENE	0.0	1.25
218-01-9	CHRYSENE	0.0	2.50
53-70-32	DIBENZO (ah) ANTHRACENE	0.0	1.00
206-44-0	FLUORANTHENE	0.0	1.00
86-73-7	FLUORENE	0.0	0.50
193-39-5	INDENO (1,2,3-cd) PYRENE	0.0	0.50
91-20-3	NAPHTHALENE	550.0	0.50
85-01-8	PHENANTHRENE	0.0	1.00
129-00-0	PYRENE	0.0	1.00

MISCELLANEOUS ANALYTES

1-METHYLNAPHTHALENE	0.0	0.50
2-METHYLNAPHTHALENE	0.0	0.50

* MDL METHOD DETECTION LIMIT - Is actually MDL * DILUTION FACTOR.



 EYLE A. JOHNSON - Chemist



Laboratories, Inc.

FORT LAUDERDALE - SAVANNAH

-CERTIFICATIONS-

EPA: # FLO95

FL DRINKING WATER: #86144

FL ENVIRONMENTAL: #E86006

GA # 828

SC # 96015

CLIENT: D.C.S.W./001-041891

SAMPLE: #1 ASH

DATA FILE: >5A84A::D5

TE REPORTED: 5/11/91 0:42

LUTION FACT: 100.0

EPA METHOD 8060
PHTHALATES IN - SOILS

<u>CAS No.</u>	<u>PARAMETER</u>	<u>CONCENTRATION</u> <u>(ug/kg)</u>	<u>* MDL</u> <u>(ug/kg)</u>
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	0.0	0.50
85-68-7	BUTYLBENZYLPHTHALATE	0.0	0.50
84-74-2	DI-n-BUTYLPHTHALATE	0.0	1.00
84-66-2	DIETHYLPHTHALATE	0.0	1.00
131-11-3	DIMETHYLPHTHALATE	0.0	0.50
117-84-0	DI-n-OCTYL PHTHALATE	0.0	0.50

* MDL METHOD DETECTION LIMIT - Is actually MDL x DILUTION FACTOR.
A CONCENTRATION OF 0.0 = BMDL (BELOW METHOD DETECTION LIMIT)



LYLE A. JOHNSON - Chemist

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue (31404) • P.O. Box 13548 • Savannah, GA 31416-0548 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-32797

Received: 19 APR 91

Ms. Melanie Thum
Spectrum
4550 N. Dixie Hwy.
Ft. Lauderdale, FL 3334

Project: D.C.S.W.

REPORT OF RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION ; SOLID OR SEMISOLID SAMPLES	SAMPLED BY
32797-1	001-041891 (4/11/91)	Client
PARAMETER	32797-1	
Cl-Dioxin/Furans (8280)		
Tetra CDD, ug/kg	<5.9	
Tetra CDF, ug/kg	<5.9	
Penta CDD, ug/kg	<5.9	
Penta CDF, ug/kg	<5.9	
Hexa CDD, ug/kg	10.0	
Hexa CDF, ug/kg	<5.9	
Hepta CDD, ug/kg	<5.9	
Hepta CDF, ug/kg	<5.9	
Octa CDD, ug/kg	<5.9	
Octa CDF, ug/kg	<5.9	
Percent Solids, %	82	



FACSIMILE COVER SHEET

DATE: Nov 6, 91

TO: Bruce Mitchell

ORGANIZATION: EDER

FAX NUMBER: 1-922-6979

TELEPHONE NUMBER: _____

FROM: Dave Buff

TOTAL NUMBER OF PAGES: 6 (including cover page)

MESSAGE/INSTRUCTIONS:

- * cc'd: Satish Kastung, DER-H&W
- John Reese, DER-SW
- Chris Shaver, NPS
- Fewell Harner, EPA
- Isidore Goldman, SED
- Patrick Wong, DERM
- Bruce

11-6-91 RAL 3 PA

PROJECT NUMBER: 90086

FAX OPERATOR: _____

() This is the ONLY form of delivery of the transmitted document.

() The original of the transmitted document will be sent by:

- () US Mail
- () Overnight delivery
- () Other: _____

Return original to Mary Lynn

cc: Project File _____ yes _____ no _____



November 1, 1991

Mr. Clair Fancy
Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

NOV 4 1991

Bureau of
Air Regulation

Re: Proposed Use of Incinerator Ash as Raw Material
Tarmac Florida, Inc., Cement Plant
Dade County, Florida

Dear Mr. Fancy:

On October 24, 1991, representatives of Tarmac Florida, Inc., met with members of your staff to discuss the use of Dade County Resource Recovery (DCRR) incinerator ash as a raw material at Tarmac's cement plant. The Department's recommendation on this proposed action, as described by Mr. Bruce Mitchell of your staff, was for Tarmac to request a "minor modification" to Tarmac Florida's Kiln 3 current operating permit. The minor modification request would allow Tarmac to conduct a trial burn with the DCRR ash to determine if further permitting requirements apply. This also would inform the public of the test through the required public notice.

The purpose of this letter is to request the "minor modification" permit for Kiln 3 at Tarmac. The DCRR incinerator ash would be brought to Tarmac for incorporation into the raw feed for Kiln 3. A test burn plan is described in Attachment A. The plan describes the testing that will be conducted to determine "baseline" emissions as well as emissions when the DCRR ash is being used.

Although Tarmac does not believe any permit modification is necessary to utilize the DCRR ash, Tarmac is submitting this request in order to proceed with the test burn in an expeditious manner. The \$250 application processing fee is enclosed. Your cooperation in this matter is appreciated.

Sincerely,

David A. Buff

David A. Buff, M.E., P.E.
Principal Engineer

Enclosures

cc: Al Townsend
Jim Alves
Bruce Mitchell
Tahnum Goldschmid
Charlie Strong
Project File

*S. Brooks, SE Dist.
P. Hong, DERM
G. Harper, EPA
C. Shaver, UPS
G. Reese
S. Kastury*

KBN ENGINEERING AND APPLIED SCIENCES, INC.

90086A1/3

1034 Northwest 57th Street Gainesville, Florida 32605 904/331-9000 FAX: 904/332-4189

Attachment A

**TARMAC FLORIDA, INC.
ASH RECYCLING TEST BURN PLAN**

I. INTRODUCTION

Metro-Dade County owns the Dade County Resource Recovery (DCRR) facility located in northern Dade County at N.W. 66th Street and 97th Avenue. The facility is currently operated under a 23-year contract with Montenay Power Corporation. Activities conducted at DCRR encompass municipal solid waste (MSW) processing and recovery of ferrous metal and aluminum, combustion of the resultant fuel, steam production, and subsequent electric generation. A landfill adjacent to DCRR is operated by Metro-Dade County as an ash monofill for disposal of combustion ash.

Tarmac Florida, Inc., is negotiating with Montenay Power to use the resource recovery ash as a substitute raw material in its cement-making process. This proposal could reduce Dade County's reliance on landfills as a method of disposal of ash. Tarmac will be conducting a test burn of bottom and fly ash generated from the Montenay plant to determine if recycling the ash for use in cement is feasible. The test burn will use 3,000 tons of ash, which is approximately the amount of ash produced by DCRR in a 1-week period. This amount of ash will allow the cement plant to operate at full capacity with the DCRR ash during the test burn. The production time to process the ash through the cement plant is 9 days.

Samples of the ash and the final cement product will be taken to verify that use of the ash in cement is environmentally safe. Stack testing will determine if released air emissions comply with state regulated levels. Samples also will be taken when the cement plant is using its normal supply of ash to determine "baseline" conditions.

Tarmac Florida, Inc., is a cement plant located on N.W. 121st Way in Medley. Tarmac is currently using coal ash to produce its cement. It has been using the coal ash for cement production for the past 20 years. At this time, the ash is being transported from northern Florida to the Medley plant by way of rail freight. Presently, Tarmac is buying the ash in bulk from power plants and stockpiling it outside its facility. Tarmac purchases enough ash to last

approximately 6 months. If Tarmac is able to use the ash from DCRR, the transportation costs will be reduced, and the need for long-term stockpiling will be eliminated. Metro-Dade County also would benefit from the program by significantly reducing the amount of space needed to landfill the ash.

The ash produced at DCRR has a high concentration of silica. This silica is combined with the calcium carbonate in limestone to make the primary compound needed to produce portland cement. The cement compound also must contain a sufficient amount of iron and aluminum. The DCRR ash contains less of these compounds than the ash Tarmac historically has been using. To compensate for this deficiency, Tarmac will supplement the ash received from DCRR with iron and with bauxite, which is high in aluminum.

II. TRANSPORTATION AND STORAGE

The ash will be transported by Dade County vehicles or private haulers. The ash will be delivered over a 3-day period. The total round-trip distance is approximately 17 miles. Trucks used to transport the ash will have roll canvas tops to prevent the ash from becoming airborne. The ash delivered by the trucks will be deposited on the ground at Tarmac next to a loading hopper.

III. CEMENT PRODUCTION

Immediately after ash arrives at the Tarmac plant, it is mixed with limestone. This prevents the ash from caking and solidifying. Front-end loaders will transfer the premixed materials from the ground into an existing hopper. This premix is then transported by way of a belt conveyor to raw material storage silos. The ash is then mixed with additional limestone, which is housed in a separate silo, to produce a raw mix. The limestone, which contains 89 percent calcium carbonate, is mixed with the ash to produce the proper alumina, iron, silica, and calcium carbonate content needed to make the cement.

The limestone/ash premix and the limestone from the silo are fed through weigh-belt conveyors to the grinding mill for slurry production. The raw mix is ground with water to produce a slurry. The slurry is stored and blended in large, steel tanks. Next, it is pumped to the feed end of an inclined, coal-fired, rotary kiln. The slurry passes through the kiln, where it is first heated, driving off the moisture, then calcined. The mixture reaches the critical temperature of 2,800°F,

and calcium silicates and calcium aluminates form. These are the fundamental compounds required to produce portland cement clinker.

The hot clinker is cooled to 150°F and conveyed to silos. It is then withdrawn, gypsum is added, and the mix is interground in grinding mills to produce portland cement. This cement is pneumatically pumped to storage silos. From these silos, it is shipped by truck and rail to customers.

The attached flow chart describes the cement production rates. The cement clinkers will contain a total of 3,000 tons of ash during a 7-day period. There will be approximately 13 percent ash, by weight, in the raw mix (slurry); 20 percent ash, by weight, in the clinker; 19 percent ash, by weight, in the cement; and 3.4 percent ash, by weight, in the concrete.

IV. SAMPLING PROTOCOL

Samples will be taken to represent both baseline conditions (current operation) and conditions when DCRR ash is being used. The baseline sampling program will consist of the following:

1. Sample of ash currently being used,
2. Sample of clinker currently produced by Kiln 3,
3. Sample of finished cement product currently produced,
4. Sample of Kiln 3 stack emissions, and
5. Sample of dust collected in electrostatic precipitator (ESP) serving Kiln 3.

The parameters to be sampled and/or analyzed for each media are presented in Table A-1.

The sampling program for the DCRR incinerator ash test burn will consist of the following:

1. Sample of ash, immediately before it is transported to Tarmac;
2. Sample of clinker produced by Kiln 3;
3. Sample of finished cement product;
4. Stack testing of Kiln 3; and
5. Sample of Kiln 3 ESP dust.

The initial ash sample will be taken by Dade County Department of Solid Waste Management Environmental Compliance personnel. The clinker, cement, and ESP dust samples will be

collected by Tarmac laboratory personnel while taking quality control samples. All samples will be tested by Spectrum Laboratories, Inc., located in Fort Lauderdale, Florida.

Stack testing will start on day 7 of the test burn. This is to assure that no residue from the previously used coal ash is present. Emissions testing for multimetals will consist of three test runs of two hours in duration. All multimetal samples, including one blank, will be analyzed in accordance with methods of atomic absorption. Emissions will be tested for the parameters shown in Table A-1.

SO₂, NO_x, and CO emissions will not be sampled for the test burn. SO₂ emissions from Kiln 3 are known to be dependent on the sulfur content of the coal burned in the kiln and the SO₃ content of the raw feed (primarily limestone). Four samples of DCRR incineration ash have been analyzed previously for equivalent SO₃ content. The results were as follows: 0.22 percent, 0.76 percent, 0.75 percent, and 1.45 percent, with an average of 0.8 percent. Between 12 and 16 percent of the raw feed mix Tarmac uses is ash, with bauxite and iron oxide as sweeteners. Neither bauxite or iron oxide contains any sulphur. At the anticipated substitution rate of 16 percent of the raw dry feed, the SO₃ content would then be 0.13 percent, which is the same as Tarmac's historic average raw feed SO₃ content. Therefore, the total sulfur content of the raw feed is not expected to change as a result of using DCRR ash, and SO₂ emissions should not be affected.

NO_x emissions from Kiln 3 are dependent upon the nitrogen content of the coal, the combustion temperature in the kiln, and the amount of excess air in the kiln. Since these parameters will not change as a result of using an alternative ash supply, NO_x emissions are not expected to change as a result of using the DCRR ash.

CO emissions from the kiln are limited because of safety considerations related to the ESP. The use of an alternative ash source will not affect CO emissions.

V. SCHEDULE

- A. Baseline sampling - Conducted 15 days after public notice is published
- B. Test Burn Sampling
 - Day 1: Ash is sampled by Dade County. Ash is then transported by truck to Tarmac and is blended with raw feed.
 - Day 2: Same as day 1.
 - Day 3: Same as day 1; raw mill grinding has begun.
 - Day 4: Raw mill is operating.
 - Day 5: Raw mill is operating, and use of old and new slurry has begun.
 - Day 6: Old and new slurry is used.
 - Day 7: New slurry is used containing new ash only. Samples of clinker and ESP dust are obtained. Stack testing will begin on this day.
 - Day 8: Same as day 7; stack testing is continued as necessary.
 - Day 9: Same as day 7; stack testing is continued as necessary.
 - Day 12: Sample of finished cement product is obtained.

Professional Engineer Certification

Name: David A. Buff

Signature: *David A. Buff*

Florida P.E. Registration No.: 19011

Seal:

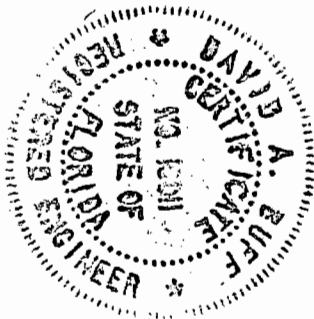


Table A-1. Test Burn Sampling Plan

I. DCRR Ash; Tarmac Clinker, Cement, and ESP Dust

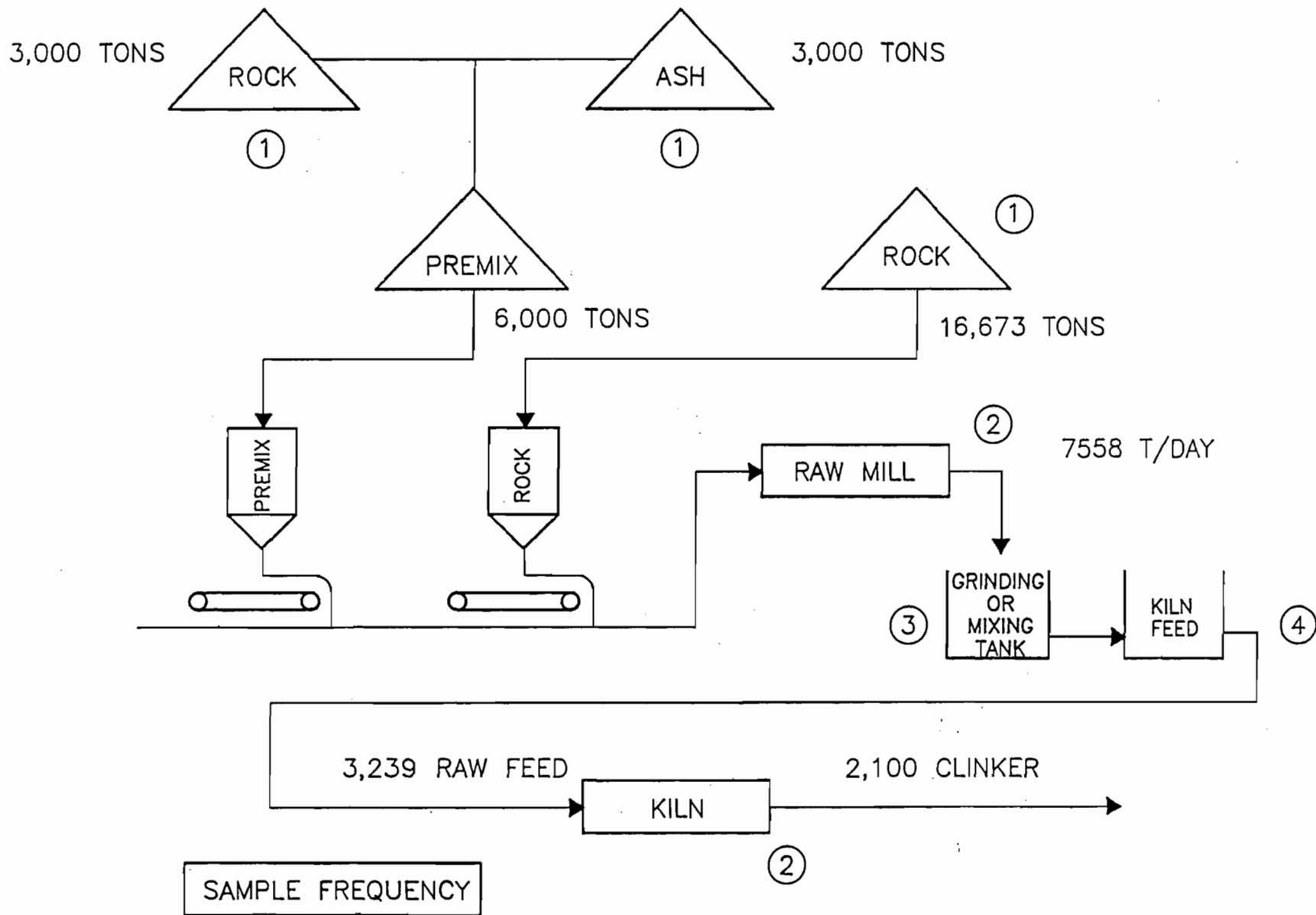
A. <u>Metals</u>	<u>Method</u>
Arsenic	3050/7060
Barium	3050/7080
Beryllium	3050/7091
Cadmium	3050/7131
Chromium (Total)	3050/7191
Copper	3050/7210
Iron	3050/7380
Lead	3050/7421
Mercury	7471
Nickel	3050/7520
Silver	3050/7760
Vanadium	3050/7911
Zinc	3050/7950
B. <u>Nonmetals</u>	
Chloride	9252
Dioxin	625
Nitrogen	SM417-420
PAHs	8100
Pthalates	8060
Sulfur	SM304

II. Kiln 3 Stack

A. <u>Metals</u>	
EPA multi-metals train for sample collection, and methods listed above for analysis.	
B. <u>Nonmetals</u>	
CO ₂ /O ₂	EPA Method 3
Dioxin/Furans	EPA Method 23/EPA 8290
Hydrogen Chloride	Method 0050
PAHs	Modified Method 5/8100
Particulate Matter	Modified Method 5
Semi-Volatile Organic Compounds	Modified Method 5/8270
Stack Gas Flow/Moisture/Temperature	EPA Methods 2, 4, and 5
Volatile Organic Compounds (including benzene)	VOST

RAW MATERIAL FLOW CHART

PENNSUCO ASH



SAMPLE FREQUENCY

- ① - WEEKLY
- ② - EVERY TWO HOURS
- ③ - EVERY FOUR HOURS
- ④ - EVERY EIGHT HOURS

LOCAL ASH WOULD BE GROUND INTO KILN FEED IN 3 DAYS AND BE CONSUMED BY THE KILN IN 7 DAYS.



Posi-It™ brand fax transmittal memo 7671		# of pages • 2	
To	Clair Fancy	From	Dave Buff
Co.	FDER	Co.	KBN Engineering
Dept.	90086	Phone #	331 9000
Fax #	904 922 6979	Fax #	332 7189

October 18, 1991

Mr. Clair Fancy
 Division of Air Resources Management
 Florida Department of Environmental Regulation
 2600 Blair Stone Road
 Tallahassee, FL

Re: Proposed Utilization of Incinerator Ash as Raw Material
 Tarmac Cement Plant
 Dade County, Florida

Dear Mr. Fancy:

In May of this year, Metro Dade County Division of Solid Waste informed the Department as to its desire to utilize ash from the Dade County Resources Recovery facility as a raw material in Tarmac Florida's portland cement plant (refer to letter from Tanhum Goldshmid to Steve Smallwood dated May 28, 1991). The Department responded to this inquiry in a letter dated July 1, 1991. The response indicated that a federally enforceable air construction permit would have to be obtained prior to implementing this change, and even prior to a trial run with this material.

I have reviewed Dade County's request to the Department, and Tarmac's most recent operating permit renewal application and subsequent operating permit. Based on this review, it is apparent that the incinerator ash Tarmac desires to utilize is already approved for use. The previous applications submitted by Tarmac have stated a raw material used in the process is "ash/mineral aggregates". Clearly, Dade County incinerator ash would fall under this raw material category. Therefore, I do not believe that a permit modification or amendment is needed in order for Tarmac to use this raw material.

Although Tarmac and I do not believe any FDER approvals are necessary to utilize this ash, Tarmac has asked me to provide you with information to allow a better understanding of the utilization of this ash. Tarmac currently uses combustor ashes as a raw material in the manufacture of Portland cement clinker. The ashes are needed to provide the required alumina, iron and silica components of the raw mix. These components, along with high calcium carbonate limestone, undergo a chemical transformation in the kiln to produce portland cement clinker.

In order to present an absolute worst case estimate of the potential effect of utilizing the Dade County ash in the process, I have taken a very conservative approach. Tarmac currently projects to utilize a limestone-to-ash ratio of 7 to 1 in the process. This equates to a maximum of 14.3% ash in the raw feed. Tarmac currently is permitted to emit 42.6 lb/hr of particulate at a feed rate of 142 tons/hr for kiln 3. It was assumed that Tarmac currently emits no trace metals, and that 14.3% of the particulate emitted from the kiln is ash (same proportion as in the raw feed). This 14.3% of the particulate

Mr. Clair Fancy
October 18, 1991
Page 2



emission was then assumed to contain trace metals in the same concentration as indicated in the attached analysis of Dade County ash. The following conservative emission estimates were obtained:


Arsenic-	$42.6 \text{ lb/hr} \times 0.143 \times 25 \text{ ppm} = 0.00015 \text{ lb/hr}$
Beryllium-	$42.6 \text{ lb/hr} \times 0.143 \times 0.9 \text{ ppm} = 0.0000055 \text{ lb/hr}$
Cadmium-	$42.6 \text{ lb/hr} \times 0.143 \times 30 \text{ ppm} = 0.00018 \text{ lb/hr}$
Chromium-	$42.6 \text{ lb/hr} \times 0.143 \times 54 \text{ ppm} = 0.00033 \text{ lb/hr}$
Lead-	$42.6 \text{ lb/hr} \times 0.143 \times 1,500 \text{ ppm} = 0.0091 \text{ lb/hr}$
Mercury-	$42.6 \text{ lb/hr} \times 0.143 \times 0.1 \text{ ppm} = 0.00000061 \text{ lb/hr}$
Chloride-	$42.6 \text{ lb/hr} \times 0.143 \times 7,000 \text{ ppm} = 0.043 \text{ lb/hr}$
Copper-	$42.6 \text{ lb/hr} \times 0.143 \times 5,800 \text{ ppm} = 0.035 \text{ lb/hr}$
Nickel-	$42.6 \text{ lb/hr} \times 0.143 \times 86 \text{ ppm} = 0.00052 \text{ lb/hr}$
Vanadium-	$42.6 \text{ lb/hr} \times 0.143 \times 38 \text{ ppm} = 0.00023 \text{ lb/hr}$
Iron-	$42.6 \text{ lb/hr} \times 0.143 \times 27,300 \text{ ppm} = 0.17 \text{ lb/hr}$

As shown, these emissions are extremely small.

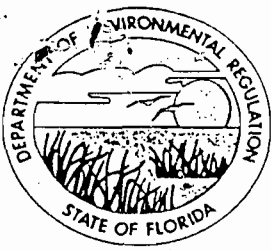
Pursuant to DER Rule 17-2.210, any "modification" to an existing source must be the subject of an air construction permit. Rule 17-2.100(127) provides that a "modification" is any "change in the method of operation of" an existing source. Utilizing incinerator ash is not a "change" because Tarmac's previous applications identified "ash/mineral aggregates" as the contemplated raw material, and the conditions of Tarmac's permits authorize operation in accordance with the representations made in the applications.

Tarmac desires to move forward with this project. Please advise if this is acceptable, since Tarmac is proceeding with a test burn and stack testing as recommended in your letter.

Sincerely,


David A. Buff, M.E., P.E.
Principal Engineer

cc: Al Townsend



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

July 16, 1991

Ms. Delores Smith, Chief
Environmental Compliance
Metro Dade Solid Waste Management
8675 Northwest 53rd Street
Suite 201
Miami, Florida 33166

Dear Ms. Smith:

This is in response to your letter to Hamilton S. Owen, June 6, 1991, about recycling ash from the Resource Recovery Facility into a cement manufacturing process. Recycling of solid waste combustor ash residue is encouraged provided it is done so that the recycling process or resultant products will not cause discharges of pollutants to the environment. Before approval can be given for the proposed test burn, it is necessary to provide a detailed description of the process that will be undertaken, in accordance with Rule 17-702.600, Florida Administrative Code. It is not clear in the June 6 letter exactly what is involved in the process. It is assumed that it will involve the use of a cement kiln and a stack test for that facility. Management of the ash from the generation point through the recycling process and testing of the final product to determine effects on the environment should be documented in any operating procedure.

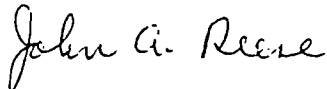
If transportation or processing of the ash has the potential to produce air emissions, appropriate air permits are required.

For your information, a copy of a letter from the Director of the Division of Air Resources Management to TanHum GoldSchmid on the subject, is enclosed.

Ms. Delores Smith
Page Two
July 16, 1991

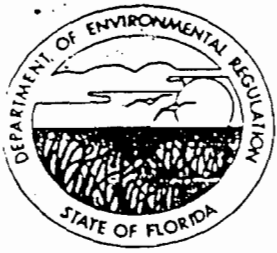
It is recommended that you consult with the district office in West Palm Beach which has the responsibility for approving the recycling process. Please contact Alex Padva, Waste Program Administrator, and Vic Kamath, P.E., for the Solid Waste Program at (407) 433-2650.

Sincerely,



John A. Reese, Engineer
Solid Waste Section

JAR/tkm
Enc: Rule 17-702
cc: John Ruddell
Bill Hinkley
Buck Oven
Alex Padva
Vic Kamath
Chris McGuire
Mike Harley



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

July 1, 1991

Tanhum Goldshmid
Assistant Director
Technical Services
Metro Dade Solid Waste Management
Suite 201
8675 Northwest 53rd Street
Miami, Florida 33166

RE: Proposed Recycling Of Incinerator Ash

Dear Mr. Goldshmid:

We have reviewed your letter of May 28, concerning the proposed recycling of incinerator ash residue from the Dade County Resource Recovery Facility. The Division of Air Resources Management does not object to the proposed use of incinerator ash providing the owner or operator of each affected facility applies for and receives all required permits.

Any company which proposes to consider the use of incinerator ash residue in their manufacturing process must apply for and obtain a federally enforceable permit to construct/modify an air pollution source prior to conducting a test burn. The company will need to provide the Department with reasonable assurance that the proposed operation of the source will not emit criteria pollutants, hazardous air pollutants, and toxic air pollutants in sufficient quantities to endanger public health and welfare. Ambient air quality modeling of projected downwind pollutant concentrations will be one element of the required reasonable assurance. The conditions of the construction permit will include limitations on hours of operation, process rates, and emissions; and, a trial burn protocol.

Based on the analytical results that you supplied, the incinerator ash residue does not appear to contain toxic concentrations of leachable arsenic, cadmium, chrome, and lead. The analytical results further indicate that the concentration of total lead (leachable plus fixed) is about 20 times the level that the Department considers toxic. Even at a final mix ratio

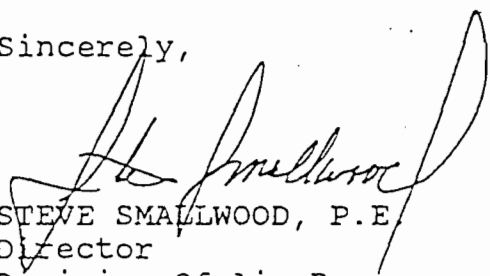
Tanhum Goldshmid
July 1, 1991
Page Two

of one to seven, the total lead concentration would exceed the lead toxic levels established by the Department. We do not know whether the incinerator ash residue contains toxic concentrations of the remaining metals (barium, selenium, and silver) and organic compounds listed in Table 1 of 40 CFR 261.45, because analytical results were not included. The concentration of the compounds (both total and leachable) listed in Table 1 of 40 CFR 261.45 will be needed. The concentrations of total volatile organic aromatics, volatile organic halocarbons, sulfur, and nitrogen in the incinerator ash residue will be needed by the Department's air permit review engineers when a company applies for the necessary air construction permits.

The permittee may be required to perform emission tests for particulate, arsenic, beryllium, cadmium, chromium, lead, mercury, hydrogen chloride, carbon monoxide, sulfur dioxide, nitrogen oxide and specific volatile organic compounds during the test burn as a condition of the required air construction permit.

Please call Clair Fancy at (904) 488-1344, if you have any questions about the above.

Sincerely,



STEVE SMALLWOOD, P.E.
Director
Division Of Air Resources Management

SS/MH/ht

cc: Clair Fancy, FDER
Barry Andrews, FDER
Don Ehlenbeck, FDER
Scott Benyon, FDER SE FL District
Isadore Goldman, FDER SE FL District
Carl Pfaffenberger, DERM
Pat Wong, DERM

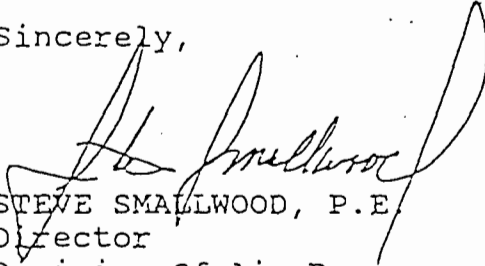
Tanhum Goldshmid
July 1, 1991
Page Two

of one to seven, the total lead concentration would exceed the lead toxic levels established by the Department. We do not know whether the incinerator ash residue contains toxic concentrations of the remaining metals (barium, selenium, and silver) and organic compounds listed in Table 1 of 40 CFR 261.45, because analytical results were not included. The concentration of the compounds (both total and leachable) listed in Table 1 of 40 CFR 261.45 will be needed. The concentrations of total volatile organic aromatics, volatile organic halocarbons, sulfur, and nitrogen in the incinerator ash residue will be needed by the Department's air permit review engineers when a company applies for the necessary air construction permits.

The permittee may be required to perform emission tests for particulate, arsenic, beryllium, cadmium, chromium, lead, mercury, hydrogen chloride, carbon monoxide, sulfur dioxide, nitrogen oxide and specific volatile organic compounds during the test burn as a condition of the required air construction permit.

Please call Clair Fancy at (904) 488-1344, if you have any questions about the above.

Sincerely,



STEVE SMALLWOOD, P.E.
Director
Division Of Air Resources Management

SS/MH/ht

cc: Clair Fancy, FDER
Barry Andrews, FDER
Don Ehlenbeck, FDER
Scott Benyon, FDER SE FL District
Isadore Goldman, FDER SE FL District
Carl Pfaffenberger, DERM
Pat Wong, DERM



RECEIVED

JUN 10 1991

June 6, 1991

Division of Air
Resources Management

Mr. Hamilton Oven
P.E. Administrator
Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Oven:

As you are aware, the Dade County Department of Solid Waste Management (DSWM) is currently investigating recycling of ash residue generated from our Resources Recovery Facility. The steps taken by the DSWM to date are characterization of the ash and subsequent formulation of a parameter list for stack testing.

In order to determine the proper quantity and ratio of ash to be utilized in the cement manufacturing process, the DSWM now wishes to proceed with a test (process) run. The process run will be conducted using 3000 tons of ash, which is the minimum quantity required to produce a representative batch of cement. The ash will be incorporated into the cement in approximately a one to seven ratio. Operational and handling information gathered during the process run will be used to finalize standard operating procedures for conducting the run during which the stack test will be conducted to determine air quality effects.

The purpose of this letter is to request permission from FDER to proceed with the above described course of action. The DSWM believes that this would be the most prudent and effective procedure to follow in order to achieve reliable results from the future stack test. The stack test will be performed with the concurrence of all appropriate agencies and in compliance with DER 17-702.

Sincerely,

Tarmac?

A handwritten signature in cursive script that reads "Dolores Smith".

Dolores Smith, Chief
Environmental Compliance

cc: Alex Padva, DER
Bob Johns, DERM
II F206



RECEIVED
JUN 07 1991
Division of Air
Resources Management

May 28, 1991

Mr. Steve Smallwood, Director
Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Smallwood:

The Dade County Department of Solid Waste Management (DSWM) is currently investigating recycling of ash residue generated from our Resources Recovery Facility. One possible way to utilize the ash is to incorporate it into cement which would subsequently be used in building materials such as concrete blocks. The Department has conducted preliminary meetings with local companies expressing interest in this idea, along with DERM representatives.

John Glunn of DER has indicated that a trial burn must be conducted prior to utilization of waste materials by an existing facility. Test parameters are determined by the composition of the waste and the potential for generation of secondary pollutants. The DSWM has taken the initiative in characterizing the source material by processing a representative ash sample and having it analyzed for the parameters recommended by DER. The sample was sized to a 3/4-inch diameter and a portion of the ferrous component removed by magnets. The sample was then coned and quartered according to ASTM Standards, and analyzed for metals and various organics (see attached).

The TCLP results indicate that the ash does not contain toxic levels of metals. The concentrations of the five metals with TCLP standards were well below the regulatory level. Based on a comparison of the total quantity of these metals to the TCLP quantity, the leaching potential appears to be minimal.

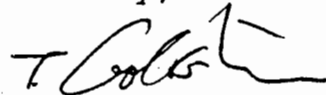
The presence of total cadmium, chromium, lead and arsenic in quantities above the previous DER guidance levels (BAQM, 1987) for decontamination of soils in asphalt plants does warrant further consideration. The ash will be incorporated into the cement process in approximately a one to seven ratio, however, which will bring the concentration of chromium and arsenic below the guidance level.

The organics analyses indicate no phthalates, dioxins, or furans present in the sample. Napthalene was the only polyaromatic hydrocarbon detected, at a concentration of less than 1 ppm. Based on the fact that organics generally were not detected in the source material, and conditions in the cement rotary kiln (temperature and residence time) which would effectively destroy fugitive organics, we do not feel that further testing of organics is warranted.

The preliminary results are encouraging and do not indicate that incorporation of Resource Recovery ash residue into cement would endanger human health or the environment. The ratio at which the ash will be incorporated into the cement will further minimize environmental impacts. The focus in stack testing should be on the metals which may have a negative impact on air quality. The results of the stack test will be the determining factor in whether this process is acceptable and if modifications in existing air permits will be required at the facilities.

The DSWM intends to strictly comply with criteria listed in DER 17-702.600 for recycling of ash residue. I am confident that we can work together to establish an outstanding program. Utilizing the ash in this manner will help the County to meet its 1994 recycling goal, and reduce the need to site additional ash monofills. I look forward to your concurrence on the stack test parameters.

Sincerely,



Tanhum Goldshmid
Assistant Director
Technical Services

DS/CD

Attachment

cc: Carl Pfaffenberger, DERM
Pat Wong, DERM
Rick Poley, DERM
John Glunn, DER
Buck Oven, DER
II. F207



Laboratories, Inc.

FORT LAUDERDALE • SAVANNAH

CLIENT DCSW
 SAMPLE LOCATION #1 ASH
 SAMPLE NUMBER 001-041891
 DATE RECEIVED 04/18/91
 DATE SAMPLED 04/11/91
 SAMPLE TYPE SOIL
 SUBMITTER RALPH TARDIF

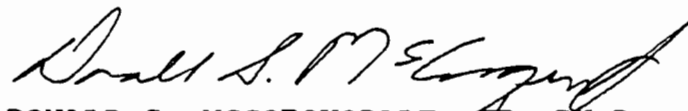
DATE REPORTED: 05/15/91
 EPA: # FLO95
 FL DRINKING WATER: # 86144
 FL ENVIRONMENTAL: # E86006
 GEORGIA: # 828
 SOUTH CAROLINA: # 96015

TEST

RESULTS

TCLP EXTRACTION - METALS		05/01/91	
CADMIUM TCLP	SM 304	0.03	MG/L
CHROMIUM TCLP	SM 304	0.04	MG/L
LEAD TCLP	SM 303A	0.24	MG/L
MERCURY TCLP	SM 303F	<0.0002	MG/L
ARSENIC TCLP	SM 304	0.006	MG/L
COPPER TCLP	EPA 220.1	0.32	MG/L
CADMIUM, T	3050/7131	30.00	MG/KG D.W.
CHROMIUM, T	3050/7191	54.0	MG/KG D.W.
LEAD, T	3050/7421	1500.0	MG/KG D.W.
MERCURY, T	7471	<0.1	MG/KG D.W.
ARSENIC, T	3050/7060	25.00	MG/KG D.W.
IRON, T	3050/7380	27300	MG/KG D.W.
COPPER, T	3050/7210	5800.0	MG/KG D.W.
NICKEL, T	3050/7520	86.0	MG/KG D.W.
VANADIUM, T	3050/7911	38	MG/KG D.W.
BERYLLIUM, T	3050/7091	0.9	MG/KG D.W.
IRON TCLP		0.05	MG/L
NICKEL TCLP		<0.03	MG/L
VANADIUM TCLP		0.55	MG/L
BERYLLIUM TCLP		<0.002	MG/L
CHLORIDE IN SOLID SAMPLE		7000	MG/KG
EPA 8280		NEGATIVE	
EPA 8100		POSITIVE	
EPA 8060		NEGATIVE	
DIOXIN	EPA 625	<0.1	UG/L

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ME.


 DONALD S. MCCORQUODALE, JR. PH.D.
 MICROBIOLOGIST



Laboratories, Inc.

FORT LAUDERDALE • SAVANNAH

-CERTIFICATIONS-

EPA: #FLO95

FL DRINKING WATER: #86144

FL ENVIRONMENTAL: #E86006

GA # 828

SC # 96015

CLIENT: D.C.S.W./001-041891

SAMPLE: #1 ASH

DATA FILE: >5A84A::D5

DATE ANALYZED: 5/11/91 0:42

DILUTION FACTOR: 100.00

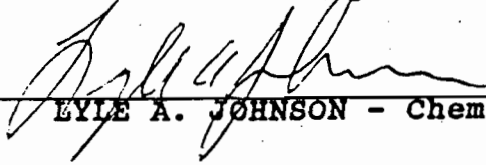
EPA METHOD 8100

<u>CAS NO.</u>	<u>PARAMETER</u>	<u>CONCENTRATION (ug/kg)</u>	<u>* MDL (ug/kg)</u>
83-32-9	ACENAPHTHENE	0.0	0.50
208-96-8	ACENAPHTHYLENE	0.0	0.50
120-12-7	ANTHRACENE	0.0	1.00
56-55-3	BENZO (a) ANTHRACENE	0.0	1.00
50-32-8	BENZO (a) PYRENE	0.0	2.00
205-99-2	BENZO (b) FLUORANTHENE	0.0	1.25
191-24-2	BENZO (ghi) PERYLENE	0.0	2.50
207-08-9	BENZO (k) FLUORANTHENE	0.0	1.25
218-01-9	CHRYSENE	0.0	2.50
53-70-32	DIBENZO (ah) ANTHRACENE	0.0	1.00
206-44-0	FLUORANTHENE	0.0	1.00
86-73-7	FLUORENE	0.0	0.50
193-39-5	INDENO (1,2,3-cd) PYRENE	0.0	0.50
91-20-3	NAPHTHALENE	550.0	0.50
85-01-8	PHENANTHRENE	0.0	1.00
129-00-0	PYRENE	0.0	1.00

MISCELLANEOUS ANALYTES

1-METHYLNAPHTHALENE	0.0	0.50
2-METHYLNAPHTHALENE	0.0	0.50

* MDL METHOD DETECTION LIMIT - Is actually MDL * DILUTION FACTOR.



 LYLE A. JOHNSON - Chemist



CLIENT: D.C.S.W./001-041891
 SAMPLE: #1 ASH
 DATA FILE: >5A84A::D5
 DATE REPORTED: 5/11/91 0:42
 DILUTION FACT: 100.0


-CERTIFICATIONS-

EPA: # FLO95
 FL DRINKING WATER: #86144
 FL ENVIRONMENTAL: #E86006
 GA # 828
 SC # 96015

EPA METHOD 8060
PHthalATES IN - SOILS

CAS No.	PARAMETER	CONCENTRATION (ug/kg)	* MDL (ug/kg)
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	0.0	0.50
85-68-7	BUTYLBENZYL PHTHALATE	0.0	0.50
84-74-2	DI-n-BUTYL PHTHALATE	0.0	1.00
84-66-2	DIETHYL PHTHALATE	0.0	1.00
131-11-3	DIMETHYL PHTHALATE	0.0	0.50
117-84-0	DI-n-OCTYL PHTHALATE	0.0	0.50

* MDL METHOD DETECTION LIMIT - Is actually MDL x DILUTION FACTOR.
 A CONCENTRATION OF 0.0 = BMDL (BELOW METHOD DETECTION LIMIT)



 LYLE A. JOHNSON - Chemist

Analyte	50-m CP-S11-88	30-m DB-5	3--m SP-2250
2,3,7,8-TCDF	25.2	17.8	26.7
2,3,7,8-TCDD	23.6	17.4	26.7
1,2,3,4-TCDD	24.1	17.3	26.5
1,2,3,4,7-PeCDD	30.0	20.1	28.1
1,2,3,4,7,8-HxCDD	39.5	22.1	30.6
1,2,3,4,6,7,8-HpCDD	57.0	24.1	33.7
OCDD	NM	25.6	NM

*Retention time in min, using temperature programs shown below.

NM = not measured.

Temperature Programs:

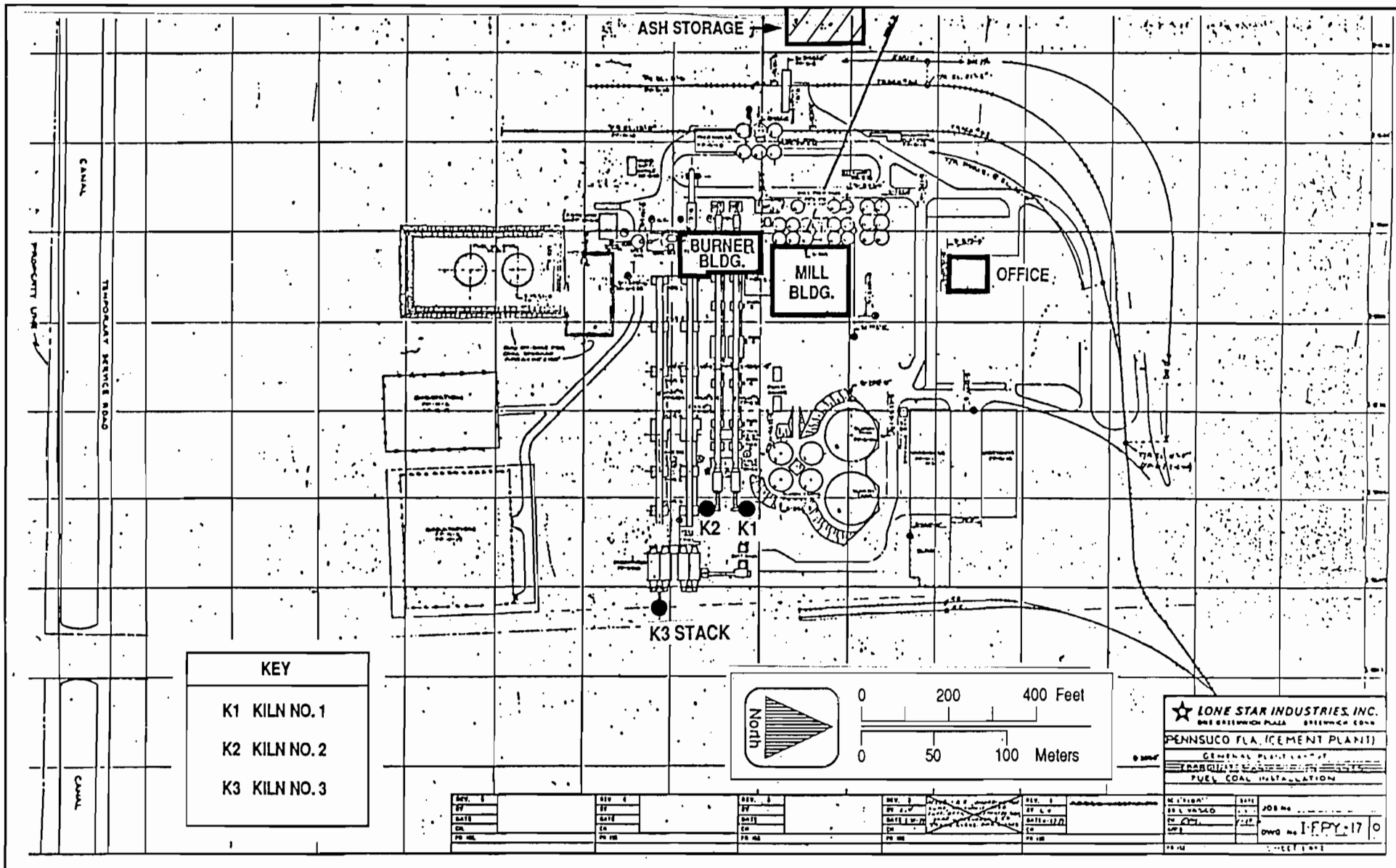
CP-S11-88 60°C-190°C at 20°/min; 190°-240° at 5°/min.

DB-5 170°, 10 min; then at 8°/min to 320°C, hold
30 m x 0.25 mm at 320°C 20 min (until OCDD elutes).
thin film (0.25 um)

SP-2250 70°-320° at 10°/minute.

Column Manufacturers

CP-S11-88	Chrompack, Incorporated, Bridgewater, New Jersey
DB-5,	J and W Scientific, Incorporated, Rancho Cordova, California
SP-2250	Supelco, Incorporated, Bellefonte, Pennsylvania



PLOT PLAN OF TARMAC FACILITY (DCRR ASH STORAGE AREA INDICATED)



FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5335 TOLL FREE.

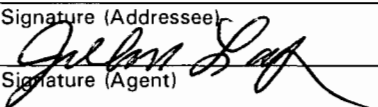
AIRBILL PACKAGE TRACKING NUMBER

1028820144

1028820144

RECIPIENT'S COPY

From (Your Name) Please Print David A. Buff		Your Phone Number (Very Important) (904) 331-9000	To (Recipient's Name) Please Print Bruce Mitchell		Recipient's Phone Number (Very Important) (904) 488-1344
Company MEN ENG & APPLIED SCIENCES		Department/Floor No.	Company Fla. Dept. Of Env. Reg.		Department/Floor No.
Street Address 1034 NW 57TH ST			Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.) 2600 Blair Stone Road, Room 338		
City GAINESVILLE	State FL	ZIP Required 32003	City Tallahassee,	State FL	ZIP Required 32399-2400
YOUR INTERNAL BILLING REFERENCE INFORMATION (First 24 characters will appear on invoice.) 90086			IF HOLD FOR PICK-UP, Print FEDEX Address Here Street Address City State ZIP Required		
PAYMENT 1 <input checked="" type="checkbox"/> Bill Sender 2 <input type="checkbox"/> Bill Recipient's FedEx Acct. No. 3 <input type="checkbox"/> Bill 3rd Party FedEx Acct. No. 4 <input type="checkbox"/> Bill Credit Card			5 <input type="checkbox"/> Cash/Check		
4 SERVICES (Check only one box)		5 DELIVERY AND SPECIAL HANDLING (Check services required)		6 PACKAGES WEIGHT (In Pounds Only)	
Priority Overnight (Delivery by next business morning) 11 <input type="checkbox"/> YOUR PACKAGING 16 <input checked="" type="checkbox"/> FEDEX LETTER* 12 <input type="checkbox"/> FEDEX PAK* 13 <input type="checkbox"/> FEDEX BOX 14 <input type="checkbox"/> FEDEX TUBE Economy Two-Day (Delivery by second business day) 30 <input type="checkbox"/> ECONOMY Government Overnight (Restricted for authorized users only) 46 <input type="checkbox"/> GOVT LETTER 41 <input type="checkbox"/> GOVT PACKAGE Freight Service (For Extra Large or Heavy Package Over 150 lbs.) 70 <input type="checkbox"/> OVERNIGHT FREIGHT** 80 <input type="checkbox"/> TWO-DAY FREIGHT**	Standard Overnight (Delivery by next business afternoon) 51 <input type="checkbox"/> YOUR PACKAGING 56 <input type="checkbox"/> FEDEX LETTER* 52 <input type="checkbox"/> FEDEX PAK* 53 <input type="checkbox"/> FEDEX BOX 54 <input type="checkbox"/> FEDEX TUBE 1 <input type="checkbox"/> HOLD FOR PICK-UP (Fill in Box #) 2 <input type="checkbox"/> DELIVER WEEKDAY 3 <input type="checkbox"/> DELIVER SATURDAY (Extra charge) (Not available to all locations) 4 <input type="checkbox"/> DANGEROUS GOODS (Extra charge) 5 <input type="checkbox"/> 6 <input type="checkbox"/> DRY ICE _____ Lbs 7 <input type="checkbox"/> OTHER SPECIAL SERVICE _____ 8 <input type="checkbox"/> 9 <input type="checkbox"/> SATURDAY PICK-UP (Extra charge) 10 <input type="checkbox"/> 11 <input type="checkbox"/> DESCRIPTION _____ 12 <input type="checkbox"/> HOLIDAY DELIVERY (if offered) (Extra charge)	Total Total DIM SHIPMENT (Chargeable Weight) <input type="checkbox"/> _____ lbs. Received At 1 <input checked="" type="checkbox"/> Regular Stop 3 <input type="checkbox"/> Drop Box 2 <input type="checkbox"/> On-Call Stop 5 <input type="checkbox"/> Station 4 <input type="checkbox"/> B.S.C.	Emp. No. Date <input type="checkbox"/> Cash Received <input type="checkbox"/> Return Shipment <input type="checkbox"/> Third Party <input type="checkbox"/> Chg To Del. <input type="checkbox"/> Chg To Hold Street Address City State Zip Received By: <input checked="" type="checkbox"/> X Date/Time Received FedEx Employee Number Release Signature FedEx Emp. No. Date/Time	Federal Express Use Base Charges Declared Value Charge Other 1 Other 2 Total Charges REVISION DATE 4/91 PART #137204 FXEM 6/91 FORMAT #082 082 © 1990-91 F.E.C. PRINTED IN U.S.A.	


SENDER: • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece next to the article number.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. Al Townsend Director of Technical Services Tarmac Florida, Inc. 455 Fairway Drive Deerfield Beach, FL 33441		4a. Article Number) 832 538 749	
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
		7. Date of Delivery 12-7	
5. Signature (Addressee) 		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent)			

PS Form 3811, October 1990

U.S. GPO: 1990-273-861

DOMESTIC RETURN RECEIPT

P 832 538 749



Certified Mail Receipt
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to	
Mr. Al Townsend, Tarmac FLA	
Street & No.	
455 Fairway Drive	
P.O., State & ZIP Code	
Deerfield Beach, FL 33441	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	
Mailed: 11-26-91	

PS Form 3800, June 1990



RECEIVED
DER - MAIL ROOM

1992 SEP 28 AM 10: 57

September 25, 1992

Mr. Clair Fancy
Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Proposed Retest of Incinerator Ash as Raw Material
Tarmac Florida, Inc., Cement Plant
Dade County, Florida

Dear Mr. Fancy:

Mr. Al Townsend of Tarmac and I recently discussed with Mr. Bruce Mitchell of your staff the retesting of Tarmac Kiln #3 using Dade County Resources Recovery Facility (DCRRF) incinerator ash as a substitute raw material. As we presented to Mr. Mitchell, EPA Region IV has reviewed the test results from the trial burn tests of January and February 1992 and concluded that the pollutants particulate matter (PM) and mercury (Hg) resulted in an increase in emissions when utilizing the DCRRF ash.

Tarmac believes the increase in PM emissions as reflected in the tests is not a result of the DCRRF ash; Tarmac now utilizes power plant ash in the raw feed and there should be no difference in PM emissions from the kiln. Instead, the difference in PM emissions is a result of the variability of the process and ESP operation. This is demonstrated in the varying PM emissions reflected in the PM compliance tests conducted over the past 10 years for Kiln #3. As a result, Tarmac wishes to retest the kiln for PM when using DCRRF ash to demonstrate no increase in PM emissions under similar operating conditions.

Tarmac is also concerned about Hg emissions in south Florida. As a result, Tarmac has investigated the situation with Dade County. DCRRF ash consists of two components: about 80 percent is bottom ash and 20 percent is fly ash. Each ash stream was analyzed for Hg content. The bottom ash was found to contain virtually no Hg, whereas the fly ash contained measurable quantities of Hg. This result is consistent with combustion theory, which indicates that all the Hg in the solid waste would be vaporized in the boiler and exit the boiler in the flue gases. Little if any Hg would be retained in the bottom ash. As the flue gas temperature decreases downstream of the boiler to less than about 500°F, Hg begins to condense out onto the fly ash particles. PM control with an ESP, which operates at about 400-450°F, would result in some collection of Hg in the ESP ash.

As a result, Tarmac desires to conduct a second trial burn utilizing only DCRRF bottom ash (no ESP ash included) in order to demonstrate that neither PM or Hg emissions increase when utilizing this ash. The retest protocol (Attachment A) is essentially the same as the initial trial burn, except that only PM and Hg will be tested. A description of the Tarmac cement production process was provided in the original test protocol and, therefore, is not repeated in Attachment A.

1031. AIR

12034A1/1

KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 Northwest 57th Street Gainesville, Florida 32605 904/331-9000 FAX: 904/332-4189

EQUAL EMPLOYMENT OPPORTUNITY / AN AFFIRMATIVE ACTION EMPLOYER

6080262851

10

E
R



WEIGHT



KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 N.W. 57th Street Gainesville, Florida 32605
Telephone: (904) 331-9000 FAX: (904) 332-4189

904/488-1344

DABuff/VJP
12034

AM Prior

Mr. Clair Fancy
Division of Air Resources Mgmt
Florida Dept of Environmental Reg
2600 Blair Stone Road
Tallahassee, FL 32399-2400

SENDER: • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. Al Townsend Director of Technical Services Tarmac Florida, Inc. 455 Fairway Drive Deerfield Beach, FL 33441		4a. Article Number P 062 922 023	
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
		7. Date of Delivery 1-15-92	
5. Signature (Addressee)		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent)			
PS Form 3811, November 1990 ☆ U.S. GPO: 1991-287-066 DOMESTIC RETURN RECEIPT			

P 062 922 023



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, June 1991

Sent to Mr. Al Townsend, Tarmac Inc.	
Street and No. 455 Fairway Drive	
P.O., State and ZIP Code Deerfield Beach, FL 33441	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 1-14-92 Permit: AO 13-157297 PSD-FL-142	

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Mr. Albert W. Townsend
 Director of Technical Services
 Tarmac Florida, Inc.
 455 Fairway Drive
 Deerfield Beach, FL 33441

4a. Article Number
 P 230 524 301

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 5-20-93

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 *U.S. GPO: 1992-323-402

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

P 230 524 301



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to	
Mr. Albert W. Townsend	
Street and No. Tarmac Florida 455 Fairway Drive	
P.O., State and ZIP Code Deerfield Beach, FL 33441	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 5-17-93	

PS Form 3800, June 1991

Check Sheet

Company Name: Tarmac Florida Inc
Permit Number: AO 93-757297, =204383
PSD Number: PSD FL-142A
Permit Engineer: _____

Application:

- Initial Application
- Incompleteness Letters
- Responses
- Waiver of Department Action
- Department Response
- Other

Cross References:

- PSDFL-142
-
-

Intent:

- Intent to Issue
- Notice of Intent to Issue
- Technical Evaluation
- BACT or LAER Determination
- Unsigned Permit

Correspondence with:

- EPA
- Park Services
- Other
- Proof of Publication
 - Petitions - (Related to extensions, hearings, etc.)
 - Waiver of Department Action
 - Other

General

Final

Determination:

- Final Determination
- Signed Permit
- BACT or LAER Determination
- Other

Post Permit Correspondence:

- Extensions/Amendments/Modifications
- Other

The Miami Herald

PUBLISHED DAILY
MIAMI - DADE - FLORIDA

STATE OF FLORIDA
COUNTY OF DADE:

Before the undersigned authority personally appeared

ANN MARTULA

who on oath says that he/she is

CUSTODIAN OF RECORDS

of The Miami Herald, a daily newspaper published at Miami in Dade County, Florida; that the attached copy of advertisement was published in said newspaper in the issues of

DECEMBER 3, 1991

Affiant further says that the said The Miami Herald is a newspaper published at Miami, in the said Dade County, Florida and that the said newspaper has heretofore been continuously published in said Dade County, Florida, each day and has been entered as second class mail matter at the post office in Miami, in said Dade County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Ann Martula

Sworn to and subscribed before me this 3rd

day of December A.D. 1991

My commission expires *See next page*

NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXP. MAR. 16, 1995
BONDED THRU GENERAL INS. UND.

State of Florida
Department of
Environmental
Regulation
Notice of Intent to Issue

The Department of Environmental Regulation (Department) hereby gives notice of its intent to issue to Tarmac Florida, Inc. (TFI) an amendment to the operation permit, No. AD 13-167297, and the Federal permit, No. PSD-FL-142, authorizing performance tests for pollutant emissions on the No. 3 cement kiln, as detailed in the application package. The Department is issuing this intent to issue for the reasons stated below and in the proposed amendment. The applicant, TFI, Post Office Box 2998, Hialeah, Florida 33012, submitted a request on November 4, 1991, to the Department's Bureau of Air Regulation (BAR) for authorization to conduct pollutant emissions tests on the facility's No. 3 cement kiln. The performance tests for pollutant emissions will be conducted while at baseline conditions utilizing the standard raw material (coal ash) and while utilizing as a substitute raw material combustion ash from the Dade County Resource Recovery Incinerator (DCRI). The amount of the DCRI ash to be utilized is 3,000 tons, which is approximately the amount of ash produced by the DCRI in a 1-week period. The No. 3 cement kiln's emissions were evaluated in the modification of the No. 2 cement kiln (PSD-FL-142). The No. 3 cement kiln is permitted to utilize ash as a raw material in the process of making cement. Screening for actual pollutant emission increases for modification purposes and PSD/NSAA (Prevention of Significant Deterioration/Nonattainment Area) applicability will be in accordance with Title 40 Code of Federal Regulations (CFR) Part 62.21 (July, 1990 version), Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, after the performance test results are evaluated by the Department's Bureau of Air Regulation (BAR) and involved parties (i.e., Department's Southeast District, U.S. EPA, National Service, and Dade County Environmental Resources Management) and it is determined that actual pollutant emissions did not increase while utilizing the ash, then the Department will amend the operation permit, No. AD 13-167297, and the Federal permit, No. PSD-FL-142A). However, if there is an actual emissions increase in pollutant emissions, TFI will not be permitted to utilize the DCRI ash or any other municipal waste incinerator ash without further evaluation by the Department's BAR and involved parties. The proposed project will occur at the applicant's facility located at 11000 N.W. 12th Way, Hialeah, Dade County, Florida. The Department is exercising permitting jurisdiction under Chapter 403, F.S., F.A.C. Chapters 17-2 and 17-4, and Title 40 CFR (July, 1990 version). The project is not exempt from permitting procedures. The Department has determined that an amendment is required for the proposed activity. A person whose substantial interests are affected by the Department's proposed decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within (14) days of publication of this notice. 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 (hearing) under Section 120.57, Florida Statutes. 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 the 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 Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to intervene in the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice 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 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 28-8.207, F.A.C. The request/application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at: Department of Environmental Regulation Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Department of Environmental Regulation Southeast District Office 1800 S. Congress Avenue Suite A West Palm Beach, Florida 33408 Dade County Environmental Resources Management 801 S.W. 3rd Avenue Miami, Florida 33130 Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address at:

Table A. Summary of SO2/NOx Emissions From Kiln No. 2, Tarmac Florida

Date	Run#	Kiln Feed (TPH)	Clinker (TPH)	Coal Usage (TPH)	Heat Input (a) (MMBtu/hr)	Coal Sulfur %	Sulfur Dioxide Emissions					Nitrogen Dioxide Emissions					Oxygen Level (%)		Stack Flow		
							ppm	lb/hr	lb/MMBtu	lb/ton kiln feed	lb/ton clinker	ppm	lb/hr	lb/MMBtu	lb/ton kiln feed	lb/ton clinker	Stack	Kiln	acfm	dscfm	
04/26/94	1	39.58	24.08	4.58	114.50	1.86	0.63	0.37	0.003	0.009	0.015	1,187	450	3.93	11.37	18.69			86,415	59,855	
04/26/94	2	39.58	24.08	4.58	114.50	1.86	0.61	0.36	0.003	0.009	0.015	1,092	427	3.73	10.79	17.73			91,144	59,855	
04/26/94	3	39.58	24.08	4.58	114.50	1.86	0.61	0.35	0.003	0.009	0.015	1,117	422	3.69	10.66	17.52			86,816	57,827	
06/28/94	1	38.33	23.6	5.33	133.25	1.75	54.18	32.33	0.243	0.843	1.370	610	255	1.91	6.65	10.81			93,138	59,875	
06/28/94	2	38.33	23.6	5.33	133.25	1.75	108.2	62.76	0.471	1.637	2.659	669	281	2.11	7.33	11.91			90,738	58,286	
06/28/94	3	38.33	23.6	5.33	133.25	1.75	88.07	51.46	0.386	1.343	2.181	655	282	2.12	7.36	11.95			92,633	58,642	
06/28/94	4	38.46	24.0	5.41	135.25	1.75						787	332	2.45	8.63	13.83				58,937	
06/28/94	5	38.46	24.0	5.41	135.25	1.75						579	246	1.82	6.40	10.25				59,280	
08/31/94	1	32.8	19.3	4.90	122.50	0.85	9.90	5.03	0.041	0.153	0.261	648	237	1.93	7.23	12.28	9.4		78,548	50,967	
08/31/94	2	32.8	19.3	4.90	122.50	0.85	20.60	10.89	0.089	0.332	0.564	514	195	1.59	5.95	10.10	9.4		80,268	51,988	
08/31/94	3	32.8	19.3	4.90	122.50	0.85	15.00	7.76	0.063	0.237	0.402	488	182	1.49	5.55	9.43	9.4		78,548	50,967	
10/27/94	1	38.9	24.7	5.10	127.50	0.76	4.39	2.56	0.020	0.066	0.104	754	316	2.48	8.12	12.79	9.72		115,146	58,456	
10/28/94	3	39.8	26.1	5.50	137.50	0.76	3.43	1.96	0.014	0.049	0.075	809	333	2.42	8.37	12.76	9.76		115,912	57,531	
10/28/94	4	39.8	26.1	5.50	137.50	0.76	30.52	16.75	0.122	0.421	0.642	544	215	1.56	5.40	8.24	9.28		113,480	55,094	
01/03/95	1	40.5	25.0	4.75	118.75	0.88	1.61	0.92	0.008	0.023	0.037	618	255	2.15	6.29	10.19	10.3		91,761	57,583	
01/03/95	2	40.5	25.0	4.75	118.75	0.88	1.26	0.7	0.006	0.017	0.028	988	398	3.35	9.84	15.93	10.3		88,956	56,308	
01/03/95	3	40.5	25.0	4.75	118.75	0.88	1.23	0.07	0.001	0.002	0.003	883	354	2.98	8.74	14.16	9.76		89,294	56,002	
05/31/95	1	38.5	24.0	5.30	132.50	0.67		4.23	0.032	0.110	0.176	923	347	2.62	9.01	14.45	10.7		105,551	52,186	
05/31/95	2	38.5	24.0	5.29	132.25	0.67		7.26	0.055	0.189	0.303	883	332	2.51	8.62	13.84	11.1		105,918	51,013	
05/31/95	3	38.5	24.0	5.29	132.25	0.67		1.81	0.014	0.047	0.075	821	322	2.43	8.35	13.40	11.2		107,367	53,963	
12/11/95	1	35.0	20.8	5.10	127.50		1.51	0.91	0.007	0.026	0.044	728	308	2.42	8.80	14.81	11.0		113,178	59,063	
12/11/95	2	35.0	20.8	5.10	127.50		1.53	0.91	0.007	0.026	0.044	824	355	2.78	10.14	17.07	11.3		120,039	60,164	
12/11/95	3	35.0	20.8	5.10	127.50		0.00	0.00	0.000	0.000	0.000	1,044	448	3.51	12.80	21.54	10.9		118,322	59,898	
							Minimum =	0.00	0.00	0.000	0.000	0.000	488	182	1.49	5.40	8.24	9.28		78,548	50,967
							Average =	19.07	9.97	0.076	0.264	0.429	790	317	2.52	8.37	13.64	10.23		98,246	56,684
							Maximum =	108.16	62.76	0.471	1.637	2.659	1,187	450	3.93	12.80	21.54	11.30		120,039	60,164

(A) Assumes 12,500 Btu/lb coal.

NA = Not available

P 265 659 421

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to	Scott Quas
Street & Number	Jarmac America
Post Office, State, & ZIP Code	Deerfield Bch, FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	2-12-99
0250020-007-AC PSD-FI-142A	

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Scott Quas, Emv. Mgr.
Jarmac America, Inc
455 Journey Drive
Deerfield Bch, FL
33441

4a. Article Number
P265 659 421

- 4b. Service Type
- | | |
|---|---|
| <input type="checkbox"/> Registered | <input checked="" type="checkbox"/> Certified |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Insured |
| <input type="checkbox"/> Return Receipt for Merchandise | <input type="checkbox"/> COD |

7. Date of Delivery
2/16/99

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)

X

Thank you for using Return Receipt Service.



MIAMI DAILY BUSINESS REVIEW

Published Daily except Saturday, Sunday and
Legal Holidays
Miami, Dade County, Florida.

STATE OF FLORIDA
COUNTY OF DADE:

Before the undersigned authority personally appeared Octelma V. Ferbeyre, who on oath says that she is the Supervisor, Legal Notices of the Miami Daily Business Review f/k/a Miami Review, a daily (except Saturday, Sunday and Legal Holidays) newspaper, published at Miami in Dade County, Florida; that the attached copy of advertisement, being a Legal Advertisement of Notice in the matter of

**NOTICE OF INTENT TO ISSUE AIR
CONSTRUCTION PERMIT MODIFICATION
DEP FILE NO. 0250020-007-AC
(PSD-FL-142A) TARMAC AMERICA INC.**

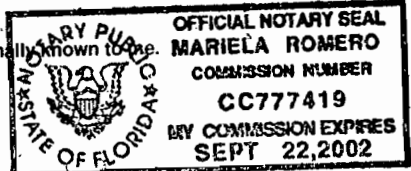
in the XXXXX Court,
was published in said newspaper in the issues of
Jan 13, 1999

Affiant further says that the said Miami Daily Business Review is a newspaper published at Miami in said Dade County, Florida, and that the said newspaper has heretofore been continuously published in said Dade County, Florida, each day (except Saturday, Sunday and Legal Holidays) and has been entered as second class mail matter at the post office in Miami in said Dade County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Octelma V. Ferbeyre
Sworn to and subscribed before me this 13 day of January, A.D. 1999

Wanda Romero
(SEAL)

Octelma V. Ferbeyre personally known to me



**PUBLIC NOTICE OF INTENT TO ISSUE
AIR CONSTRUCTION PERMIT
MODIFICATION
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL
PROTECTION
DEP FILE NO. 0250020-007-AC
(PSD-FL-142A)
TARMAC AMERICA INC.
PORTLAND CEMENT MANUFACTURING
FACILITY
MODIFICATION OF KILN NO. 2 COAL
CONVERSION PROJECT
MIAMI-DADE COUNTY**

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to Tarmac America Inc. The permit is to modify the previously approved natural gas to coal conversion project for Kiln No. 2 at Tarmac's portland cement manufacturing facility in Medley, Miami-Dade County. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. The applicant's name and address are Tarmac America, Inc. 455 Fairway Drive, Deerfield Beach, Florida 33441.

The modification includes installation of a new coal bin, baghouse, and ducting to support indirect firing to reduce nitrogen oxides emissions from Kiln No. 2. Kiln No. 2 already burns coal through direct firing and Tarmac is required by an agreement with the Miami-Dade Department of Environmental Resources Management to implement this project modification.

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

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

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

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

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

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

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

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

Department of Environmental Protection	Miami-Dade Department of Environmental Resources Mgt.	Department of Environmental Protection
Bureau of Air Regulation	Air Quality Division	Southeast District Office
111 S. Magnolia Drive, Suite 4	33 SW Second Avenue, Suite 900	400 North Congress Avenue
Tallahassee, Florida, 32301	Miami, Florida 33130-1540	West Palm Beach, Florida 33401
Telephone: 850/488-0114	Telephone: 305/372-6925	Telephone: 407/681-6600
Fax: 850/922-6979	Fax: 305/372-6954	Fax: 407/681-6755

The complete project file includes the application, Draft Permit Modification, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

Z 333 612 576

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to	Scott Quass
Street & Number	Iarmac America
Post Office, State, & ZIP Code	Deerfield Bch. FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	12-22-98
	0250020-007-AC
	PSD-FI-142A

PS Form 3800 April 1995

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Mr. Scott Quass, EM
 IARMAC America
 455 Fairway Dr.
 Deerfield Bch, FL
 33441

4a. Article Number
 2333 612 576

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)

She [Signature]

Thank you for using Return Receipt Service.

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece next to the article number.

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Al Townsend
 Director of Technical Services
 Tarmac Florida, Inc.
 Deerfield Beach, FL 33441

RECEIVED
 DEC 30 1991

4a. Article Number

P 832 538 754

4b. Service Type

- Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Sender)

TECHNICAL SERVICES

PS Form 3811, October 1990

☆U.S. GPO: 1990-273-861

DOMESTIC RETURN RECEIPT

P 832 538 754



Certified Mail Receipt

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to	
Mr. Al Townsend, Tarmac	
Street & No.	
455 Fairway Drive	
P.O., State & ZIP Code	
Deerfield Beach, FL 33441	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	
Mailed: 12-20-91	
Permit: AC 13-157297	
PSD-FL-142	

PS Form 3800, June 1990

Z 333 612 513

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to	
Scott Quass	
Street & Number	
Tarmac America	
Post Office, State, & ZIP Code	
Deerfield Bch, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
0250020-007-AC 9-21-98 PSD-FI-142A	

PS Form 3800, April, 1995

Fold at line over top of envelope to

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Scott Quass
Tarmac America
455 Fairway Dr
Deerfield Bch, FL
33441

4a. Article Number
7 333 612 513

4b. Service Type

<input type="checkbox"/> Registered	<input checked="" type="checkbox"/> Certified
<input type="checkbox"/> Express Mail	<input type="checkbox"/> Insured
<input type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> COD

7. Date of Delivery
9/23/98

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

P 265 659 302

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to	
Scott Quaas	
Street & Number	
Jarnac America	
Post Office, State, & ZIP Code	
Deerfield Bch, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
0250000-007-AC 3-6-98	

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Scott Quaas, Env. Mgr.
Jarnac America
455 Fairway Dr.
Deerfield Bch, FL
33441

4a. Article Number

P 265 659 302

4b. Service Type

- | | |
|---|---|
| <input type="checkbox"/> Registered | <input checked="" type="checkbox"/> Certified |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Insured |
| <input type="checkbox"/> Return Receipt for Merchandise | <input type="checkbox"/> COD |

7. Date of Delivery

3/6/98

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Addressee or Agent)

X *[Signature]*

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Scott Quaas, Env. Mgr.
Tarmac America
455 Fairway Dr
Deerfield Bch, FL
33441

4a. Article Number
P 339 251 169

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
10/18/96

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

Thank you for using Return Receipt Service.

P 339 251 169

US Postal Service
Receipt for Certified Mail
 No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

Sent to <i>Scott Quaas</i>	
Street & Number <i>Tarmac America</i>	
Post Office, State, & ZIP Code <i>Deerfield Bch, FL</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	<i>10/16/96</i>
<i>Nox Emissions</i> <i>Kiln No. 2</i>	

PS Form 3800, April 1995

Memorandum

Florida Department of
Environmental Protection

Fold at line over top of envelope to the

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Albert Townsend
 Pharmacia America, Inc
 455 Fairway Dr.
 Deerfield Bch, FL
 33441

4a. Article Number
 Z127 632 577

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 11/21/95

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Z 127 632 577



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to	Albert Townsend
Special No.	Pharmacia America
City, State and ZIP Code	Deerfield Bch, FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$

PS Form 3800, March 1993

Postmark or Date
 PCD-F1-142 11-21-95
 P. Cement Kelu #2
 ARMS040250617-003-AL



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

August 24, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Scott Quaas
Environmental Manager
Tarmac America, Inc.
455 Fairway Drive
Deerfield Beach, FL 33441

Dear Mr. Quaas:

The Department received your July 21 letter on July 25 requesting another extension of the construction permit for the Kiln No. 2 coal conversion (PSD-FL-142). It was also requested that the NO_x emission limit be increased by a factor of four.

Regarding the extension request, the required processing fee would have to be submitted before the Department could consider granting another one. We note that Tarmac stated in a letter dated April 24, 1995, that its operation permit would be ready for submittal by July 24, 1995.

As far as Tarmac's proposed NO_x limit is concerned, it is not representative of the Best Available Control Technology required under the Prevention of Significant Deterioration rules. Also, the NO_x test results are beyond the range of values for reevaluation set by Tarmac in the Stipulation for Dismissal of Tarmac's 1990 hearing petition.

As you requested, we will meet on August 30 at 1:30 p.m. to hear further input regarding this matter. We believe that the discussion should center on physical or operational changes that may be necessary to meet the NO_x limits in Tarmac's present permit. If further questions or issues arise before August 30, please call John Reynolds at 904-488-1344.

Sincerely,

A. A. Linero, P.E.
Administrator
New Source Review

CHF/JR/t

cc: P. Comer, OGC
E. Anderson, DCDERM
S. Brooks, SED
D. Buff, P.E.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Scott Quaas, EM.
 Tarnac America, Inc.
 455 Fairway Dr
 Deerfield Bch, FL
 33441

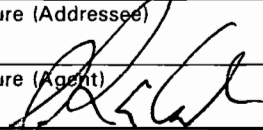
4a. Article Number
 Z 392 979 032

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 8/30/95

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)


Thank you for using Return Receipt Service.

Z 392 979 032



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, March 1993

See Reverse for Instructions	Scott Quaas	
Street and No.	Tarnac America	
P.O., State and ZIP Code	Deerfield Bch, FL	
Postage	\$	FL
Certified Fee		
Special Delivery Fee		
Restricted Delivery Fee		
Return Receipt Showing to Whom & Date Delivered		
Return Receipt Showing to Whom, Date, and Addressee's Address		
TOTAL Postage & Fees	\$	
Postmark or Date	8-25-95	
	PSO-FI-142	

BEST AVAILABLE COPY

Fold at line over top of envelope to the

Is your RETURN ADDRESS completed on the reverse side?

- SENDER:**
- Complete items 1 and/or 2 for additional services.
 - Complete items 3, and 4a & b.
 - Print your name and address on the reverse of this form so that we can return this card to you.
 - Attach this form to the front of the mailpiece, or on the back if space does not permit.
 - Write "Return Receipt Requested" on the mailpiece below the article number.
 - The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 David A. Buff, P.E.
 KBN Engineering + Applied Sc.
 6241 NW 23rd St. Suite 500
 Gainesville, FL 32653-1500

4a. Article Number
 Z 311 902 901

4b. Service Type

<input type="checkbox"/> Registered	<input type="checkbox"/> Insured
<input checked="" type="checkbox"/> Certified	<input type="checkbox"/> COD
<input type="checkbox"/> Express Mail	<input type="checkbox"/> Return Receipt for Merchandise

7. Date of Delivery
 6-19-93

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)
 [Signature]

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 311 902 901



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, March 1993

Sender's Name David Buff	
Street and No. KBN Engineering	
P.O., State and ZIP Code Gainesville FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Peteoke Tammac AD13-238048 AC13-169901	

Z 311 902 930



**Receipt for
Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

PS Form 3800, March 1993

Sent to Mr Albert W Townsend	
Street and No 455 Fairway Dr	
P. O., State and ZIP Code Deerfield Beach, FL 33441	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed 5/5/95	

Memorandum

Florida Department of
Environmental Protection

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

*Scott Quaas, Env. Mgr
Tarmac Fla. Inc.
455 Fairway Dr.
Deerfield Bch., FL
33441*

4a. Article Number

Z 311 902 926

4b. Service Type

- Registered Insured
- Certified COD
- Express Mail Return Receipt for Merchandise

7. Date of Delivery

5/5/95

5. Signature (Addressee)

6. Signature (Agent)

[Handwritten Signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991

U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Z 311 902 926



Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

PS Form 3800, March 1993

Sent to	<i>Scott Quaas</i>
Street and No.	<i>Tarmac Fla, Inc</i>
City, State and ZIP Code	<i>Deerfield Bch, FL</i>
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	<i>5-3-95</i>
	<i>AC13-169901</i>
	<i>PSD-F1-142</i>

is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Mr. Albert W. Townsend
 Director of Technical Services
 Tarmac Florida, Inc.
 455 Fairway Drive
 Deerfield Beach, Florida 33441

4a. Article Number
 P 872 562 482

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 10/25/93

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)
Mel Rankin

PS Form 3811, December 1991 *U.S. GPO: 1992-323-402 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

P 872 562 482



Receipt for Certified Mail
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to Mr. Albert W. Townsend	
Street and No. 455 Fairway Drive	
P.O., State and ZIP Code Deerfield Beach, FL 33441	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 10/20/93	
AC05 238127 PSP-FL-142 Brevard County KLN No-2 Tarmac, FL	

PS Form 3800, JUNE 1991

BEST AVAILABLE COPY

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Albert W. Townsend
Garnac Florida, Inc
455 Fairway Dr.
Deerfield Bch, FL
33441

4a. Article Number

P 710 058 457

4b. Service Type

- Registered Insured
- Certified COD
- Express Mail Return Receipt for Merchandise

7. Date of Delivery

4-27-92

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, November 1990 *U.S. GPO: 1991-287-066

DOMESTIC RETURN RECEIPT

P 710 058 457

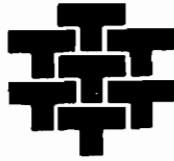


Certified Mail Receipt

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	Albert Townsend
Street & No.	Garnac Fl, Inc
P.O., State & ZIP Code	Deerfield Bch, FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1990



Tarmac

TARMAC FLORIDA, INC.

P.O. Box 2998
Hialeah, Florida 33012

Aug 13 1990
DER-BAQM

August 9, 1990

Mr. Clair Fancy, P.E., Chief
Bureau of Air Regulation
Fla. Dept. of Environmental Regulation
Twin Towers Office Bldg.
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Proposed Modification - Kiln No. 2 Coal Conversion
DER File No. AC13-169901

Dear Mr. Fancy:

Please find enclosed a copy of the affidavit of publication for the *Notice of Intent to Issue Permit* for the above referenced project. Should you have any questions please call me at (305)823-8800.

Sincerely,

Scott Quaas
Environmental Specialist

cc: J. Alves - Hopping Boyd Green & Sams

J. Reynolds
J. Goldman, SE Dist
P. Hong, DERM
M. Armentrout, EPA
C. Shaver, NPS

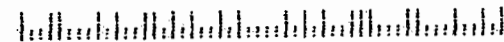
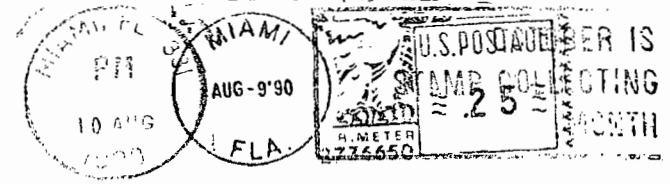


Tarmac

TARMAC FLORIDA, INC.

P.O. Box 2998
Hialeah, Florida 33012

Mr. Clair Fancy, P.E., Chief
Bureau of Air Regulation
Fla. Dept. of Environmental Regulation
Twin Towers Office Bldg.
2600 Blair Stone Road
Tallahassee, Florida 32399-2400





United States Department of the Interior

National Park Service
SOUTHEAST REGIONAL OFFICE

75 Spring Street, S. W.
Atlanta, Georgia, 30303

RECEIVED

JUN 05

DER - BAQM



IN REPLY REFER TO:

N3615 (475)

MAY 30 1990

Mr. Bill Thomas
Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Thomas:

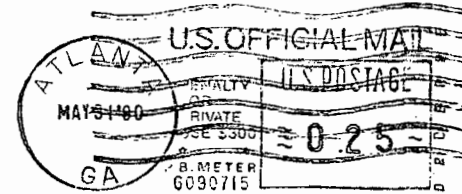
Thank you for sending us a copy of Tarmac Florida Inc.'s (Tarmac) permit application and your technical review document regarding Tarmac's proposal to modify its cement manufacturing facility in Medley, Dade County, Florida. The Tarmac facility is located approximately 30 km northeast of Everglades National Park (EVER), a class I air quality area administered by the National Park Service. We appreciate your continued cooperation in notifying us of proposed projects that may impact the air quality and related resources of our areas.

Tarmac proposes to convert kiln No. 2 from gas/oil firing to coal firing. The proposed project would result in significant increases in emissions of sulfur dioxide (SO₂), nitrogen oxides (NO_x), sulfuric acid mist (H₂SO₄), lead (Pb), and beryllium (Be). Consequently, PSD review is required for these five pollutants. Our comments on the best available control technology (BACT), air quality, and air quality related values (AQRVs) analyses with respect to the proposed project's potential impacts on EVER are discussed below. We ask that you consider our comments before you make a final determination on the proposed project.

We agree with Tarmac that the existing electrostatic precipitator represents BACT to minimize emissions of Pb and Be. For SO₂ and NO_x, we do not agree that the rates proposed by Tarmac represent BACT. Tarmac has proposed a SO₂ rate of 400 lb/hr (16 lb/ton of clinker produced). This rate is based on a 36 percent inherent removal efficiency associated with the limestone feed into the kiln and the particulate control device. As you point out in your BACT analysis, past BACT determinations for coal fired kilns have ranged from a low of

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
SOUTHEAST REGION
75 SPRING STREET, S.W.
ATLANTA, GEORGIA 30303

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



Mr. Bill Thomas
Bureau of Air Regulation
Florida Dept. of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400





April 19, 1990

RECEIVED
APR 24 1990
DER-L

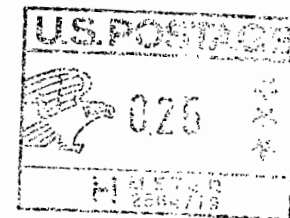
Mr. C.H. Fancy, P.E.
Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Proposed Modification--Kiln No. 2 Coal Conversion
PSD-FL-142--AC13-169901

Dear Mr. Fancy:

This correspondence is to summarize the outcome of our meeting on April 17, at your offices in Tallahassee, to discuss the above referenced permit application. The discussion centered on FDER's BACT determination, as set forth in the draft permit, and the proposed SO₂/NO_x emission limits for Kiln 2. Tarmac's major concerns, as expressed to you in the meeting, are as follows:

1. Dry process cement kilns cannot be compared with wet process cement kilns, such as Tarmac's;
2. NSPS for fossil fuel steam generators are not appropriate for comparison to portland cement plants because of the very different nature of the cement manufacturing process;
3. FDER must properly consider site-specific factors in their BACT determination- wet process plant, kiln size and capacity, raw feed sulfur content, coal sulfur content, existing precipitator for particulate control, and proper interpretation of historic test data from the kilns at the plant;
4. Past BACT determinations and test data from other wet process kilns (which is very limited) cannot be directly applied to Tarmac Kiln 2, because of the site-specific nature of SO₂/NO_x emissions from cement kilns;
5. EPA Region IV has approved in writing Tarmac's plan for a 1-year testing period to determine an acceptable BACT emission limit, with the applicant's proposed emission limits as the starting point for this determination; and



MR C H FANCY
BUREAU OF AIR REGULATION
FLORIDA DEPARTMENT OF ENVIRONMENTAL
REGULATION
2600 BLAIR STONE ROAD
TALLAHASSEE FL 32399-2400

KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 Northwest 57th Street

Gainesville, Florida 32605



SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

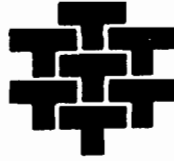
3. Article Addressed to: Scott Quaas Environmental Specialist Tarmac Florida, Inc. P. O. Box 2998 Hialeah, FL 33012	4. Article Number P 052 482 233 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X <i>[Signature]</i>	
7. Date of Delivery	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P 052 482 233
RECEIPT FOR CERTIFIED MAIL
 NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

Sent to Scott Quaas, Tarmac Florida	
Street and No. P. O. Box 2998	
P. O., State and ZIP Code Hialeah, FL 33012	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date Mailed: 3-30-90 Permit: AC 13-169901 PSD-FL-142	

PS Form 3800, June 1985



Tarmac

RECEIVED

P.O. Box 2998
Hialeah, Florida 33118
FEB 20 1990

TARMAC FLORIDA, INC.

February 15, 1990

DER - BAQM

Mr. John Reynolds
Permitting Engineer
Division of Air Resources Management
Fla. Dept. of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Proposed Modification - Kiln 2 Coal Conversion
PSD-FL-142; DER File No. AC13-169901

Dear Mr. Reynolds:

Please find enclosed the original *Waiver Of 90 Day Limit* which was sent via facsimile to you this date regarding the pending permit application for the above source. Should you have any questions please call me at (305)823-8800.

Sincerely,

Scott Quaas
Environmental Specialist

cc: A. Townsend
D. Buff - KBN Engineering

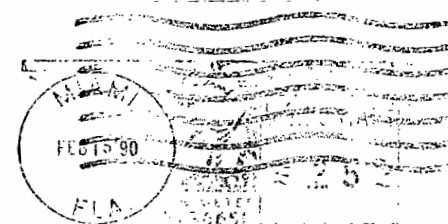
*B. Andrews
M. Linn
CNE/JRP/BT*



Tarmac

TARMAC FLORIDA, INC.

P.O. Box 2998
Hialeah, Florida 33012



**Mr. John Reynolds
Permitting Engineer
Fla. Dept. of Environmental Regulation
2600 Blair Stone Rd.
Tallahassee, Florida 32399-2400**





January 22, 1990
89025

Mr. C.H. Fancy, P.E.
Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Proposed Modification - Kiln No. 2 Coal Conversion
PSD-FL-142 - AC13-169901

Dear Mr. Fancy:

Please find enclosed the article entitled "Antidumping Petition On Behalf Of Az-Nm-Tx-Fl Producers of Gray Portland Cement". This article was inadvertently left out of KBN's response letter dated January 15, 1990, concerning the above referenced permit application.

Sincerely,

A handwritten signature in cursive script that reads "David A. Buff".

David A. Buff, M.E., P.E.
Principal Engineer

cc: Bruce Miller, EPA✓

DAB/mla

cc: *J. Reynolds*
B. Andrews
M. Finn
J. Goldmann, SE Dist.
P. Hong, OERM
C. Sharer, WPS
CHF/JRP/ET

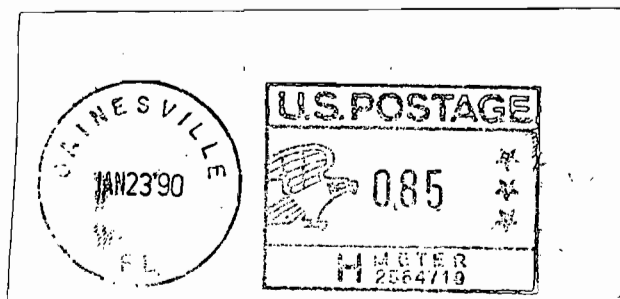
RECEIVED

JAN 24 1990

DER-BAQM

KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 Northwest 57th Street Gainesville, Florida 32605 904/331-9000 FAX: 904/332-4189



**KBN ENGINEERING
AND APPLIED SCIENCES, INC.**

1034 NW 57th Street
GAINESVILLE, FLORIDA 32605

Mr. C.H. Fancy, P.E.
Bureau of Air Regulation
FL. Dept. of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400



January 15, 1990
89025

Mr. C.H. Fancy, P.E.
Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED

JAN 18 1990

DER-BAQM

Re: Proposed Modification - Kiln No. 2 Coal Conversion
PSD-FL-142 - AC13-169901

Dear Mr. Fancy:

The purpose of this correspondence is to provide the department with additional information concerning the above-referenced permit application. Two major areas are addressed herein: the first being responses to EPA's comments contained in their letter to the department dated December 13, 1989; the second being Tarmac's position on the subject of applicability of federal New Source Performance Standards (NSPS) to the Kiln 2 modification.

EPA COMMENTS

1. APPLICABILITY DETERMINATION

EPA's main concern with the PSD applicability determination was that actual operating hours/production rates were not used in determining the starting point for PSD applicability. Although KBN does not believe a source should be penalized merely because it did not operate at its permitted capacity, as stated in the preamble to the 1980 PSD regulations, this is a subject that will be debated with EPA outside of this permit application. In order to facilitate review of this application and to resolve EPA's concerns, we have recalculated the actual emissions for Kiln 2 based on actual production rates.

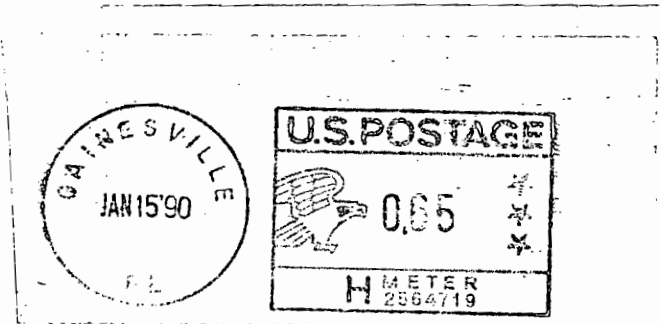
Presented in Tables 1 through 5 attached are calculated actual emissions from Kiln 2 for the years 1980 and 1981 (the two most recent full years of kiln operation). Actual emissions from Kiln 2 for particulate matter [PM(TSP) and PM10] are shown in Table 1. The emissions are based on actual PM(TSP) stack test results from which an emission factor (lb/ton clinker produced) was derived. This emission factor was then applied to the actual production for the kiln for 1980 and 1981. The baseline emissions were calculated as the 2-year average emission rate. PM10 emissions were calculated as 85 percent of PM(TSP) emissions, as described in Tarmac's previous submittals.

Actual NOx emissions from Kiln 2 are shown in Table 2. These are based on the NOx source tests conducted on Kiln 2 in 1980, from which a lb/ton clinker produced factor was calculated for both gas and oil firing. These emission factors were used in conjunction with actual clinker production for the kiln to calculate actual emissions. Only gas was burned in Kiln 2 during 1980 and 1981.

KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 Northwest 57th Street Gainesville, Florida 32605 904/331-9000 FAX: 904/332-4189

KBN



Mr. C.H. Fancy, P.E.
Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 Northwest 57th Street

Gainesville, Florida 32605

PM
12-23-89
Miami, FL

File C067



RECEIVED
DEC 26 1989
DER-BAQWI

December 21, 1989

Mr. C. H. Fancy, P.E.
Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Proposed Modification - Kiln 2 Coal Conversion
PSD-FL-142; AC13-169901

Dear Mr. Fancy:

Mr. Barry Andrews of your staff has verbally requested additional information regarding the BACT analysis for the above referenced permit application. Barry requested that two items be addressed for the SO₂ BACT analysis. These items were:

1. Lower sulfur coal will provide a benefit since it is higher in heating value, thereby requiring less coal usage. This would translate into less SO₂ emissions and cost savings from coal purchases.
2. The effect of using lower sulfur coal on sulfuric acid emissions.

In regards to the first item, Barry has assumed that the heating value of coal is inversely related to the sulfur content; i.e., as sulfur content decreases heating value increases. This would imply additional benefits of less coal usage, lower coal costs, and lower SO₂ emissions. Barry stated that these additional benefits of lower sulfur coal should be addressed in the BACT analysis.

To investigate Barry's concerns, Tarmac has analyzed their coal analysis data for the period January 1987 through December 1989. Tarmac took weekly coal samples during this period. As part of the coal analysis, sulfur content and heating value are measured.

KBN ENGINEERING AND APPLIED SCIENCES, INC.

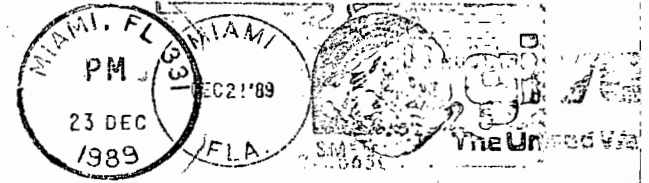
1034 Northwest 57th Street Gainesville, Florida 32605 904/331-9000 FAX: 904/332-4189



Tarmac

TARMAC FLORIDA, INC.

P.O. Box 2998
Hialeah, Florida 33012



Mr. C. H. Fancy, P.E.
Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

DEC 13 1989

4APT-APB-cdw

Mr. Clair Fancy, P.E., Chief
Bureau of Air Regulation
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Tarmac Florida, Inc. (PSD-FL-142)

Dear Mr. Fancy:

We have received the November 13, 1989, letter and enclosures thereto from Mr. David A. Buff of KBN Engineering and Applied Sciences, Inc., transmitted to us by your Agency. As you are aware, this submittal by KBM was intended to address EPA's concerns with the application for Tarmac's proposed kiln 2 coal conversion project.

Applicability Determination

In reviewing this submittal, it is obvious to us that certain very basic concepts of the Prevention of Significant Deterioration (PSD) rules continue to be misapplied by KBN. In our October 18, 1989 letter to Ms. Patricia Adams of your agency, we raised several concerns with the applicant's determination of historical baseline emissions for several pollutants. In the applicant's November 13, 1989, response to these comments, KBN has dismissed our concerns as being inconsistent with the PSD rules.

KBN has agreed that baseline emissions for determining the amount of potential emissions increases as a result of the kiln modification should be based on actual historical emissions. However, their calculations for determining these actual emissions are based on fictitious allowable operating hours and production rates. This in no way represents actual emissions. KBN has used these allowable operating hours and production rates in the calculations based on their statement that "an increase in the operating hours or in the production rate of a source does not constitute a physical change in the source or change in the method of operation." The issue here is not whether the kiln, prior to coal conversion, can operate at its allowable production and operational limits without triggering PSD, but the physical modifications to the kiln to accommodate the conversion to coal. This coal conversion is the change which has triggered possible applicability to PSD. Because a physical change

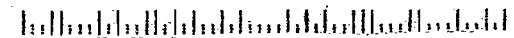
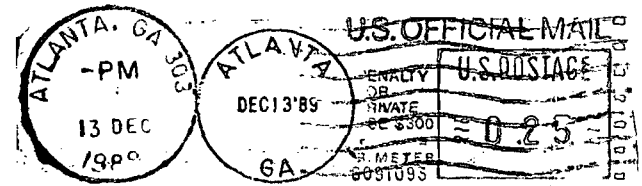
RECEIVED
DEC 18 1989
DER-BAQM

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

AIR-4

Mr. Clair Fancy, P.E., Chief
Bureau of Air Regulation
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

RECEIVED
OCT 23 1989
DER-BAQM

4APT-APB-cdw

OCT 18 1989

Ms. Patricia G. Adams, Planner
Bureau of Air Regulation
Florida Department of Environmental
Regulation

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

RE: Tarmac Florida, Inc. (PSD-FL-142)

Dear Ms. Adams:

We have received your September 15, 1989, letter transmitting the Prevention of Significant Deterioration (PSD) application submitted by Tarmac Florida, Inc., for the conversion of kiln No. 2 to coal at the facility's existing Portland cement plant. As discussed on October 3, 1989, between Mr. John Reynolds of the Florida Department of Environmental Regulation (DER) and Mark Armentrout of my staff, we are offering the following comments.

Applicability Determination

The source has incorrectly performed PSD applicability determinations for particulate matter (PM/PM₁₀), oxides of nitrogen (NO_x), sulfur dioxide (SO₂) and volatile organic compounds (VOC). The underlying flaw in all of these determinations is in the calculation of baseline (historic actual) emissions. In the case of PM emissions, the source concluded that baseline emissions are 31.3 lb/hr. They justify this value by stating that the highest actual source test emissions, as determined by a March 1982 test, resulted in a PM emission rate of 26.3 lb/hr which is close to the current allowable of 31.3 lb/hr. As you are aware, baseline emissions must be calculated based on the two-year average of actual emissions under representative operating conditions. We request that the facility amend their application by including the results of all PM source tests during the representative two-year period, recalculating baseline emissions, and performing a PSD review, if applicable. Furthermore, and as discussed below, the applicant must submit production records for the baseline period which indicate the usage of oil and gas in the kiln and annual hours of operation. It also appears that the applicant has not included the fugitive emissions increases (new coal mill) and increases from the No. 3 kiln coal handling equipment in the PM applicability determination, i.e., in the new allowable PM emission rates.

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

AIR-4

Ms. Patricia G. Adams, Planner
Bureau of Air Regulation
Florida Dept. of Envirn. Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

ATLANTA, GA 30365
PM
18 OCT
1989
PENALTY FOR PRIVATE USE \$300
600659 L

RECEIVED
OCT 23 1989
DER-BAQM

OCT 19 1989

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge)
 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Mr. Scott Quaas Environmental Specialist Tarmac Florida, Inc. P. O. Box 2998 Hialeah, FL 33012	4. Article Number P 938 762 702
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature of Addressee X <i>Scott Quaas</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature of Agent X	
7. Date of Delivery	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

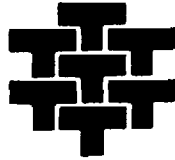
P 938 762 702

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

Sent to Mr. Scott Quaas, Tarmac Florida	
Street and No. P.O. Box 2998	
P.O., State and ZIP Code Hialeah, FL 33012	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date Mailed: 10-4-89 Permit: AC 13-169901 PSD-FL-142	

PS Form 3800, June 1985



Tarmac

TARMAC FLORIDA, INC.

P.O. Box 2998
Hialeah, Florida 33012

August 31, 1989

Mr. Clair Fancy, P.E.
Division of Air Resources Management
Fla. Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED
DER - MAIL ROOM
1989 SEP - 5 AM 9:37

RE: **Application For Major Modification
Pennsuco Cement & Supply
Permit No. AO13-157297**

Dear Mr. Fancy:

Tarmac is pleased to submit an *Application To Operate/Construct Air Pollution Sources* for the modification of Kiln 2 to burn coal as primary fuel. Included as part of the submittal is a PSD application, BACT evaluation, and air quality analysis. Additionally, a check in the amount of \$5000.00 is enclosed for the permit processing fee.

Tarmac looks forward to working with you and your staff on this project. Please do not hesitate to contact me or Scott Quaas of this office regarding any questions or further information you may need. The telephone number is (305)823-8800.

Sincerely,

Albert Townsend
Manager
Real Estate & Environmental

cc: K. Riveira
D. Bailey
S. Quaas
D. Buff - KBN Engineering
S. Brooks - FDER, SE Dist.
J. Reynolds
B. Andrews
J. Rogers
W. Robinson, EPA
C. Phauer, NPS
P. Wong, DERM

Best Available Copy

FEDERAL EXPRESS		AIRBILL		PACKAGE TRACKING NUMBER 4053695371	
USE THIS AIRBILL FOR DOMESTIC SHIPMENTS WITHIN THE CONTINENTAL U.S.A., ALASKA AND HAWAII. USE THE INTERNATIONAL AIR WAYBILL FOR SHIPMENTS TO PUERTO RICO. QUESTIONS? CALL 800-238-5355 TOLL FREE.		4053695371			
Date: 9/1/89		RECIPIENT'S COPY			
From (Your Name) Please Print David A. Buff		Your Phone Number (Very Important) (904) 375-8000		To (Recipient's Name) Please Print Mr. Clair Tancy	
Company FLA. DEPT. OF ENVIRONMENTAL REGULATION		Department/Floor No.		Recipient's Phone Number (Very Important) (904) 488-1111	
Street Address 2600 BLAIR STONE ROAD		City Tallahassee		State FL	
City Tallahassee		State FL		ZIP Required 32399-2401	
YOUR BILLING REFERENCE INFORMATION (FIRST 24 CHARACTERS WILL APPEAR ON INVOICE.) 9024			IF HOLD FOR PICK-UP, Print FEDEX Address Here Street Address City State ZIP Required		
PAYMENT <input checked="" type="checkbox"/> Bill Sender <input type="checkbox"/> Bill Recipient's FedEx Acct. No. <input type="checkbox"/> Bill 3rd Party FedEx Acct. No. <input type="checkbox"/> Bill Credit Card <input type="checkbox"/> Cash			City State ZIP Required		
SERVICES		DELIVERY AND SPECIAL HANDLING		Emp. No. _____ Date _____	
1 <input type="checkbox"/> PRIORITY 1 Overnight Delivery 6 <input type="checkbox"/> OVERNIGHT LETTER*		1 <input type="checkbox"/> HOLD FOR PICK-UP (Fill in Box H)		<input type="checkbox"/> Cash Received	
2 <input checked="" type="checkbox"/> COURIER-PAK OVERNIGHT ENVELOPE* 7 <input type="checkbox"/>		2 <input checked="" type="checkbox"/> DELIVER WEEKDAY		<input type="checkbox"/> Return Shipment	
3 <input type="checkbox"/> OVERNIGHT BOX 8 <input type="checkbox"/>		3 <input type="checkbox"/> DELIVER SATURDAY (Extra charge) <input type="checkbox"/>		<input type="checkbox"/> Third Party <input type="checkbox"/> Chg. To Del. <input type="checkbox"/> Chg. To Hold	
4 <input type="checkbox"/> OVERNIGHT TUBE 9 <input type="checkbox"/>		4 <input type="checkbox"/> DANGEROUS GOODS (Extra charge)		Street Address	
5 <input type="checkbox"/> STANDARD AIR Delivery not later than second business day 10 <input type="checkbox"/>		5 <input type="checkbox"/> CONSTANT SURVEILLANCE SERVICE (CSS) (Extra charge) (Release Signature Not Applicable)		City State Zip	
		6 <input type="checkbox"/> DRY ICE _____ Lbs.		Received By: X	
		7 <input type="checkbox"/> OTHER SPECIAL SERVICE _____		Date/Time Received FedEx Employee Number	
		8 <input type="checkbox"/>		PART #111800 REVISION DATE 10/88 PRINTED IN U.S.A. FXEM 009 PROD. 6/89 © 1988 F.E.C.	
		9 <input type="checkbox"/> SATURDAY PICK-UP (Extra charge)		Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.	
		10 <input type="checkbox"/>		Release Signature: _____	
		11 <input type="checkbox"/>			
		12 <input type="checkbox"/> HOLIDAY DELIVERY (if offered) (Extra charge)			
		Total Total Total			
		Received At 1 <input type="checkbox"/> Regular Stop 2 <input type="checkbox"/> On-Call Stop 3 <input type="checkbox"/> Drop Box 4 <input type="checkbox"/> B.S.C. 5 <input type="checkbox"/> Station			
		FEDEX Corp. Employee No. _____			
		Date/Time for FEDEX Use _____			

Check Sheet

Company Name: Tarmac Florida, Inc.
Permit Number: AC 13-169901
PSD Number: PSD FL-142
Permit Engineer: _____

Application:

- Initial Application
- Incompleteness Letters
- Responses
- Waiver of Department Action
- Department Response
- Other

Cross References:

- AD 13-157297
-
-

Intent:

- Intent to Issue
- Notice of Intent to Issue
- Technical Evaluation
- BACT or LAER Determination
- Unsigned Permit

Correspondence with:

- EPA
- Park Services
- Other
- Proof of Publication
 - Petitions - (Related to extensions, hearings, etc.)
 - Waiver of Department Action
 - Other

Final

Determination:

- Final Determination
- Signed Permit
- BACT or LAER Determination
- Other

Post Permit Correspondence:

- Extensions/Amendments/Modifications
- Other