

I N T E R O F F I C E   M E M O R A N D U M

**Date:** 09-Oct-1995 03:39pm ES  
**From:** John Reynolds TAL  
REYNOLDS\_J  
**Dept:** Air Resources Managememe  
**Tel No:** (904)488-1344  
**SUNCOM:** 278-1344

**TO:** Alvaro Linero TAL

( LINERO\_A )

**Subject:** Tarmac Memo Dated Oct. 3, 1995

I don't recall that we agreed to a BACT "re-determination" as Jim Alves implied. We said we would like more information regarding why the NOx numbers were so high relative to Kiln No. 3, but we didn't say we would use that information to redetermine BACT.

I suggest we respond with the following:

"This is in response to your letter dated October 3. As indicated during the Tarmac meeting on August 30, the Department would like more information as to why the NOx emissions from Kiln No. 2 exceed the BACT limit and why they are so much higher than Kiln No. 3 which was the basis for the Kiln No. 2 BACT limit. However, please understand that no agreement has been made to revise the BACT determination or to avoid enforcement of the current emission limit.

Rather than spending a lot of time and money developing an extensive report on various wet kiln technologies geared toward a revised BACT, Tarmac should be zeroing in on specific peculiarities of Kiln No. 2 affecting NOx emissions, perhaps conducting additional testing with another burner and/or employing kiln/burner design consultants to see if the problem can be solved through non-major physical/operational modifications. The Department will agree to a 7-month time period to accomplish this, which means that Tarmac must present evidence of its modification investigation and the results to the Department by May 15, 1996. "

## HOPPING GREEN SAMS & SMITH

JAMES S. ALVES  
BRIAN H. BIBEAU  
KATHLEEN L. BLIZZARD  
ELIZABETH C. BOWMAN  
RICHARD S. BRIGHTMAN  
PETER C. CUNNINGHAM  
RALPH A. DEMEO  
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WILLIAM H. GREEN  
WADE L. HOPPING  
FRANK E. MATTHEWS  
RICHARD D. MELSON  
DAVID L. POWELL  
WILLIAM D. PRESTON  
CAROLYN S. RAEPPEL  
DOUGLAS S. ROBERTS  
GARY P. SAMS  
ROBERT P. SMITH  
CHERYL G. STUART

PROFESSIONAL ASSOCIATION  
ATTORNEYS & COUNSELORS  
123 SOUTH CALHOUN STREET  
POST OFFICE BOX 8526  
TALLAHASSEE, FLORIDA 32314  
(804) 222-7500  
FAX (804) 224-8551  
FAX (804) 425-3415

WRITER'S DIRECT DIAL NO.  
425-2360

KRISTIN M. CONROY  
CONNIE C. DURRENCE  
JONATHAN S. FOX  
JAMES C. GOODLETT  
GARY K. HUNTER, JR.  
JONATHAN T. JOHNSON  
ROBERT A. MANNING  
ANGELA R. MORRISON  
GARY V. PERKO  
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MICHAEL P. PETROVICH  
LISA K. RUSHTON  
R. SCOTT RUTH  
JULIE R. STEINMEYER  
-----  
OF COUNSEL  
CARLOS ALVAREZ  
W. ROBERT FOKES

October 3, 1995

RECEIVED  
OCT 3 1995

Bureau of  
Air Regulation

### VIA HAND DELIVERY

Mr. Al Linero  
New Source Review Section  
Florida Department of Environmental Protection  
111 S. Magnolia Avenue, Suite 4  
Tallahassee, FL 32302

RE: Tarmac Florida, Inc.  
Kiln No. 2

Dear Al:

As discussed by telephone last month, Tarmac Florida requests that in addition to extending the expiration date of its PSD permit, DEP also include, as a minor modification, a schedule for resolving the pending issues concerning the final BACT determination for NOx. More specifically, this schedule would consist of the following three steps in development and consideration of pertinent information:

- (1) January 15, 1996 -- KBN to complete and submit to DEP results of a literature search compiling available information related to NOx emissions and NOx control technologies potentially applicable to wet process kilns. The results will be provided in narrative, tabular, and graphic format, as indicated from the data. The following potential sources of information will be consulted: EPA (Research Triangle Park Regional Offices, and BACT Clearinghouse); State of California; Portland Cement Association; air pollution control equipment vendors; supplies of coal burners; and sources operating NOx control systems on wet process kilns.
- (2) April 15, 1996 -- KBN to prepare and to submit a report addressing technically feasible NOx control technologies applicable to wet process cement kilns along

Al Linero  
October 3, 1995  
Page 2

with economic evaluations of feasible alternatives. With respect to technical feasibility, an engineering analysis will be conducted of the cement kiln process, process variables, and factors affecting NOx emissions. Areas investigated will include the species of NOx generated, the formation steps in the kiln, and the potential magnitude and species of NOx formed. Both Tarmac's cement kiln and other operating wet process cement kilns may be visited during this task, to assess the feasibility of various technologies. A written discussion of the results will be provided, along with supportive tables, graphs, etc. With regard to the economic evaluation of the technically feasible alternative control technologies, capital and annual operating costs will be developed for each alternative, and the total and incremental cost effectiveness for each will be determined. Costs will be based upon vendor information and standard cost estimating procedures published by EPA.

- (3) May 15, 1996 -- Based on the results of the economic evaluation and other information gathered during the study, KBN's BACT recommendation will be submitted. This recommendation will follow the EPA's "top-down" approach for determining BACT. A report describing the information and analysis gathered in all tasks will be developed for presentation to the Department. A meeting with the Department will be convened to present the results of the study and to discuss the analysis.

This process would facilitate the orderly development of relevant information, and allow DEP and Tarmac to address and evaluate pertinent questions in a systematic manner. Certainly a major advantage to this requested permit modification is that it identifies an endpoint to negotiations on this issue.

Please let me know at your earliest convenience whether this suggestion is acceptable to DEP. Of course, David Buff of KBN and I would be pleased to answer any questions regarding this proposal.

Very truly yours,



James S. Alves

JSA:lb



Tarmac America, Inc.

455 Fairway Drive  
Deerfield Beach, FL 33441  
Telephone: 305.481.2800  
Facsimile: 305.480.9352

HAND DELIVERED

30 August 1995

Mr. A. A. Linero, P.E.  
Administrator - New Source Review  
Fla. Dept. Of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RE: Pennsuco Cement Plant  
Dade County - AP  
Kiln No. 2 Coal Conversion  
FDEP Permit No. AC13-169901 [PSD-FL-142]

Dear Mr. Linero:

I am in receipt of your letter dated August 24, 1995 regarding my recent extension request for the above referenced permit. I have enclosed a check in the amount of \$250.00 [check# 207080] for the required processing fee. Your comment regarding Tarmac's statement in a letter dated April 24, 1995 is noted. However, the submittal of an operation permit application would be premature in view of the requested reevaluation of the NO<sub>x</sub> emission limits. We will discuss those matters at our meeting scheduled for this date.

Sincerely,

Scott Quaas  
Environmental Manager  
Technical Services-Florida Region

I N T E R O F F I C E   M E M O R A N D U M

**Date:** 29-Aug-1995 12:26pm ES  
**From:** John Reynolds    TAL  
          REYNOLDS\_J  
**Dept:** Air Resources Manageme  
**Tel No:** (904)488-1344  
**SUNCOM:** 278-1344

**TO:** Patricia Comer    TAL

( COMER\_P )

**CC:** Alvaro Linero    TAL

( LINERO\_A )

**Subject:** Tarmac

Correction, I should have said "meet the BACT limit of 1.04 lb/MMBTU" which represents the top of their proposed range.

I N T E R O F F I C E   M E M O R A N D U M

Date: 29-Aug-1995 07:15am EST  
From: Patricia Comer TAL  
COMER\_P  
Dept: Office General Counsel  
Tel No: 904/488-9730  
SUNCOM: 278-9730

TO: John Reynolds TAL

( REYNOLDS\_J )

Subject: Tarmac

John

I saw Jim Alves today and we decided that the meeting tomorrow should be technical, no attorneys. He says that the reason that Tarmac had a range was because nobody knew what BACT should be, but that they couldn't meet the range. Maybe you can talk to these guys about what the problem is, etc. but keep the legal issues open for later. Jim also says that the bubble rule, that's in the making this year, might resolve this problem. I'm not sure about any of that right now, but if so, all the better.

I think we suffer from not having Barry's input here. I wish I knew what the ranges were based on, if they were intended for BACT. Maybe you can find that out from the Tarmac people?

Thanks

Pat

I N T E R O F F I C E   M E M O R A N D U M

**Date:** 09-Aug-1995 01:49pm ES  
**From:** John Reynolds TAL  
REYNOLDS\_J  
**Dept:** Air Resources Manageme  
**Tel No:** (904)488-1344  
**SUNCOM:** 278-1344

**TO:** Patricia Comer TAL ( COMER\_P )

**Subject:** TARMAC CASE NO. 90-0954

The New Source Review Section would like the OGC's input regarding Tarmac's current request to amend a 1991 PSD construction permit quadrupling allowable NO<sub>x</sub> emissions. Tarmac wants to meet with us right away on this, so we need a response ASAP. Specifically, we need to know why the Department agreed, in the Stipulation for Dismissal of the case, to a rather bizarre arrangement whereby the Department would reevaluate the BACT limits if emission results from a one-year test program fell within a stated range of values. Is the Department legally bound to reevaluate the permit limits if the test results are above the stated range of values as are the NO<sub>x</sub> results?

The stipulated permit condition is:

"Tarmac shall conduct a series of compliance tests for SO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub> mist, and NO<sub>x</sub> emissions every two months for up to one year to allow representative sampling during different times of the year. The tests shall be performed in accordance with the compliance test methods specified in this permit. In the event that this series of tests results in SO<sub>2</sub> emissions in the range of 195 to 275 lbs/hr (up to 11 lbs/ton clinker, 1,084.1 TPY), NO<sub>x</sub> emissions in the range of 113.8 to 169.3 lbs/hr (up to 6.77 lbs/ton clinker, 667.2 TPY), or H<sub>2</sub>SO<sub>4</sub> mist emissions in the range of 5.86 to 8.25 lbs/hr (up to 0.33 lbs/ton clinker, 32.52 TPY), the Department, if requested by the permittee, shall reevaluate BACT and consider upward adjustments of the emission limitations for the indicated constituents based on available data. During this testing and evaluation period, the permittee shall make reasonable efforts to limit air emissions, and the Department shall not initiate enforcement proceedings. Any upward adjustment of emission limitations pursuant to this paragraph shall be the subject of public notice in a local newspaper pursuant to Department rules. The Department's determination based on the data produced under this paragraph shall be a point of entry for purposes of Section 120.57, Florida Statutes."



Tarmac America, Inc.  
 455 Fairway Drive  
 Deerfield Beach, FL 33441  
 Telephone: 305.481.2800  
 Facsimile: 305.480.9352

**CERTIFIED MAIL - RRR**  
**Z 056 630 740**

17 July 1995

Ms. Stephanie Brooks, P.E.  
 Air Resources Management  
 Fla. Dept. Of Environmental Regulation  
 P.O. Box 15425  
 W. Palm Beach, Florida 33416

**RECEIVED**

JUL 27 1995

Bureau of  
 Air Regulation

**RE: Pennsuco Cement Plant  
 Dade County - AP  
 Kiln No. 2 Coal Conversion  
 FDEP Permit No. AC13-169901**

Dear Ms. Brooks:

Please find enclosed stack a emission test report in accordance with the test protocol specified in the above referenced permit. The protocol required a series of compliance tests every two months for one year and the enclosed test conducted on May 31, 1995 is the last in that series. The table below summarizes the series test results.

Test Date	Clinker Production	Sulfur Dioxide	Sulfuric Acid Mist	Nitrogen Oxides	Carbon Monoxide	VOC's	Particulate Matter	PM10
4/26-27/94	24.08	0.36	0.07	417.32	9.73	1.00	13.26	11.27
6/28-29/94	23.80	48.85	*	279.08	-	-	-	-
8/31/94	19.30	7.89	3.60	204.53	-	-	-	-
10/27-28/94	24.7	5.94	*	287.92	-	-	-	-
1/3/95	23.0	0.77	0.91	335.71	-	-	-	-
5/31/95	24.0	4.43	2.27	328.4	-	-	-	-
AVERAGE	23.15	11.37	1.71	308.83	9.73	1.00	13.26	11.27

[all test results in lbs/hr]

\* interference problems - see report

Copies of this letter and the enclosed test reports have been forwarded to the DERM. In accordance with the permit protocol, a request will be prepared and submitted for modification of the emission



Ms. Stephanie Brooks  
Fla. Dept. of Environmental Protection

RE: Pennsuco Cement Plant  
Kiln No. 2 Coal Conversion

17 July 1995

Page -2-

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limits for NO<sub>x</sub> and SO<sub>2</sub> relative to the test results. Should you have any questions at this time regarding the enclosed reports please call me at (800) 330-3380 x4165.

Sincerely,



Scott Quaas  
Environmental Manager  
Technical Services-Florida Region

cc: A. Townsend  
R. Pluta  
E. Anderson - DERM  
C. Fancy - FDEP, Tallahassee



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

June 15, 1995

PSD-FL-142

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David A Buff, P.E.  
Principal Engineer  
KBN Engineering and Applied Sciences, Inc.  
6241 N.W. 23rd Street - Suite 500  
Gainesville, FL 32653-1500

Re: Petcoke Project  
Tarmac Florida, Inc.  
A013-238048

Dear Mr. Buff:

Your letter of May 19, 1995 was forwarded to this office by the Southeast District. They cannot amend the Operating Permit as requested until any underlying construction permits are modified to provide for utilization of petroleum coke.


The scenario described in your letter indicates no increase in sulfur dioxide (SO<sub>2</sub>) emissions if the proposed petcoke/coal blend has a sulfur content equal to the maximum allowed sulfur content of the presently-used coal. It is still necessary to compare the future potential emissions of regulated pollutants affected by the change with present actual emissions. The latter are based on what emissions have been in recent years instead of what they could have been.

Because of its high vanadium content, petcoke usage results in higher sulfuric acid mist emissions even if sulfur content remains constant. This is because of catalytic oxidation of SO<sub>2</sub> to sulfur trioxide in the presence of vanadium. Since acid mist is a pollutant subject to Prevention of Significant Deterioration (PSD) analysis, it is necessary to know the effects of the operational change on actual emissions for this pollutant. It should also be substantiated that the additional vanadium and nickel found in petcoke will indeed be retained in the clinker or control equipment.

We recommend you take a second look at the proposed project. At a minimum it will require modification of existing construction permit(s) and engineering calculations showing the changes in all pollutants affected by the change. It may be necessary to conduct a trial burn, if information is not already available for emissions predictions.

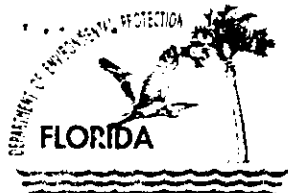
If you have any questions regarding this matter, please call me or John Reynolds at (904)488-1344.

Sincerely,

  
A.A. Linero, P.E.  
Administrator, New  
Source Review

AAL/aal/l

cc: Stephanie Brooks, SED



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

May 8, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Townsend:

Re: Extension of Permit No. PSD-FL-142/Kiln No. 2

The Department received Tarmac's April 7 letter requesting an extension of the expiration date of the above permit. The expiration date is changed as shown below:

From: December 31, 1993

To: **August 31, 1995**

This letter shall become Attachment No. 15 to this permit.

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, Florida Statutes (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 applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

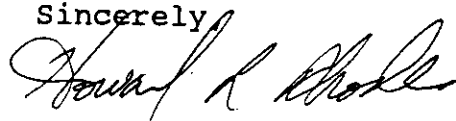
(a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

Mr. Albert W. Townsend  
May 8, 1995  
Page Two

- (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 the 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 amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the amendment 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 receipt of this amendment 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, Florida Administrative Code.

Sincerely



Howard L. Rhodes, Director  
Division of Air Resources  
Management

HLR/jr/t

cc: I. Goldman, SED  
D. Buff, P.E.  
J. Harper, EPA  
E. Anderson, DERM

**Memorandum**

**Florida Department of  
Environmental Protection**

TO: Howard L. Rhodes  
FROM: Clair Fancy *CHJ*  
DATE: May 5, 1995  
SUBJ: Tarmac Florida, Inc.  
PSD-FL-142 - Kiln No.2

RECEIVED

MAY 5 1995

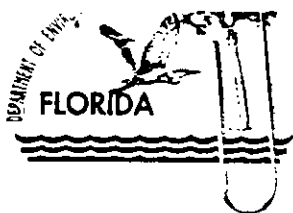
Bureau of  
Air Regulation

Attached for your approval and signature is a letter extending the expiration date of the subject construction permit to provide additional time needed for testing.

I recommend that this extension be approved.

HLR/jr/t

Attachments



# Department of Environmental Protection

JRS copy

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

May 3, 1995

Mr. Scott Quaas  
Environmental Manager  
Technical Services  
Tarmac Florida, Inc.  
455 Fairway Drive  
Deerfield Beach, Florida 33441

Re: Pennsuco Cement Plant Kiln No. 2 Coal Conversion  
FDEP Permit No. AC13-169901, PSD-FL-142

Dear Mr. Quaas:

The Department has reviewed your letter of April 24 and will act on your original request of October 1, 1993, to extend the referenced construction permit.

Unfortunately, your letter to the Southeast District dated March 28, 1994, did not reference your extension amendment request, nor indicate any other action for the Tallahassee office. The letter with the Certificate of Completion indicated that construction was finished and we inferred that there was no need to act on the extension request.

Because the Certificate of Completion satisfies our requirement that Tarmac "show that construction has commenced," we will act on the extension. However, you must submit a timely and complete Title V permit application to the Southeast District at least sixty days prior to expiration of the extended construction permit.

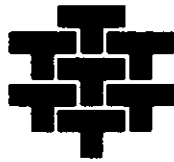
If you have any questions regarding this matter, please call A. A. Linero at 904/488-1344.

Sincerely,

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

CHF/ch

cc: A. A. Linero  
Stephanie Brooks  
Patrick Wong



# Tarmac

**TARMAC FLORIDA, INC.**

455 Fairway Drive  
Deerfield Beach, Florida 33441

CERTIFIED MAIL - RRR  
Z 115 124 470

Telephone:  
Deerfield Beach (305) 481-2800

24 April 1995

RECEIVED

APR 26 1995

Mr. C.H. Fancy, P.E.  
Chief - Bureau of Air Regulation  
Fla. Dept. Of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Bureau of  
Air Regulation

RE: Pennsuco Cement Plant  
Dade County - AP  
Kiln No. 2 Coal Conversion  
FDEP Permit No. AC13-169901 [PSD-FL-142]

Dear Mr. Fancy:

A review of the above facility permit file revealed that Tarmac's request for permit extension was not acted upon by the Department. Your letter of October 19, 1993 (copy enclosed) stated "... the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department. ". By the same letter requested Tarmac to provide evidence to show that construction had commenced prior to April 1, 1994. Tarmac submitted to the Department on March 28, 1994 (copy enclosed) a *Certificate of Completion of Construction* along with notice that testing as specified in the referenced permit was to commence. That information should have satisfied the Department's request.

Tarmac would ask that the Department review the enclosed documents and grant a permit extension until August 31, 1995. By the testing specified by the permit conditions will be completed within the next 30 days and an operation permit application should be ready for submittal within 60 days thereafter. Should you have any questions or need further information please call me at (800)330-3380 x4165.

Sincerely,

Scott Quaas  
Environmental Manager  
Technical Services

cc: R. Pluta  
A. Townsend  
B. Smith  
D. Bailey  
S. Brooks - FDEP, WPB  
DERM