

# 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 16, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Scott Quaas, Environmental Specialist  
Tarmac Florida, Inc.  
11000 Northwest 121 Way  
Miami, Florida 33178

Dear Mr. Quaas:

Re: File No. AC 13-194142, Kiln No. 3 Modification

The Department has established a posture and precedent in its permitting of sources to potentially burn tire derived fuel. We require a test burn first for verification of pollutant emissions and then evaluate the results for permitting action. Please advise if this is acceptable; otherwise, the Bureau may not have reasonable assurances under the current application package and may consider recommending denial.

The Department has made a preliminary review of the application for permit to modify kiln No. 3 at your Portland cement plant located at 11000 Northwest 121 Way, Medley, Dade County, Florida 33012. Before this application can be processed, we need the following information:

1. Please provide copies of the current permits to operate kiln No. 3 and its cooler.
2. Describe how excess dust from the ESP will be removed from the system and disposed of. What precautions will be used to minimize unconfined emissions while handling this dust?
3. Will the emissions of any air pollutant from the cooler change as a result of the proposed modification? If so, by how much?
4. Please provide a sketch and description of the material handling equipment, including the seals on the kiln, that will be used to feed the tires to the kiln.
5. What complete and incomplete products of combustion will be emitted from the burning of tires?
6. What currently unregulated pollution will be emitted from tire and soil burning? Provide initial estimates of the maximum emissions of metals, PCDD, PCDFS, polynuclear aromatic

hydrocarbons, benzene, semi-volatile organic compounds, VOC, PCB, dioxins, furans, and TSCA substances from the burning of tires and soil in kiln No. 3. Include a table showing the change from the current actual to new allowable emissions being requested.

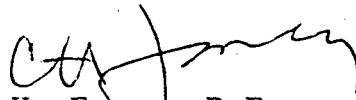
7. What is the maximum concentrations of these pollutants in the ambient air for 8-hr, 24-hr, and annual average time periods?
8. Will the emissions of any air pollutant from the modified kiln cause an exceedance of the no-threat level for a toxic material?
9. Why was kiln No. 3 connected to the ESP for kiln No. 4?
10. What is the difference between the two ESP units (kiln 3 ESP and kiln 4 ESP)?
11. Which ESP was used to obtain the data presented in the application?
12. What will be the source of the contaminated soil to be treated in kiln No. 3?
13. Will the contaminated soil contain "off-spec" petroleum products or hazardous waste (40 CFR 261.3)?
14. What contaminants will be in the soil and what will be the maximum concentration of the contaminant? List all constituents and their CASR number.
15. Will the plant meet all the requirements of F.A.C. Chapter 17-775?
16. How will the contaminated soil be brought into the plant, stored, transported to the process equipment, and what precautions will be used to minimize unconfined emissions of PM and VOC?
17. What is the minimum destruction efficiency by the kiln of the VOC in the soil?
18. What temperature, residence time, and percent oxygen will the VOC vapors from the soil be exposed to?
19. Please provide plots showing the temperatures and residence times of both solids and gases as they flow through the kiln. Note on the plot where the tires and soil will enter the kiln.

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20. Investigate the feasibility of adding the contaminated soil with the tires in the center of the kiln.
21. Please make a BACT recommendation for controlling NOx when the kiln is burning fuel oil, tires, and natural gas.
22. What is the maximum nitrogen content of the coal, fuel oil, and tires that will be burned in this kiln?
23. Please provide a plan and schedule to establish good combustion practice to minimize NOx, CO, and VOC emissions from kiln No. 3.
24. What is the cumulative NOx increment consumption on the Everglades Class I area resulting from this project?

We will resume processing the application after the requested information is received. If you have any questions on this matter, please write to me or call Bruce Mitchell (TDF) or Willard Hanks (soil decontamination) at 904-488-1344.

Sincerely,



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

CHF/WH/plm

c: S. Brooks, SE Dist.  
D. Buff, P.E.  
D. Ehlenbeck, BWC