

Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

October 25, 1990

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. J. E. Parsons
General Manager
CF Industries, Inc.
P. O. Drawer L
Plant City, FL 33566

Dear Mr. Parsons:

Re: Sulfuric Acid Plants "C" and "D"
Permit Modification AC29-186931

Sulfur Storage
Permit Modification AC29-187327

AC29-186931:

On September 26, 1990, the Department received CF Industries' application to modify Sulfuric Acid Plants "C" and "D" to increase production by repacking the absorption towers. The application is deemed incomplete. Additional information is required for further processing of this application.

Within 30 days of receipt of this letter, please respond to the following items of incompleteness:

1. Is the 99.7% efficiency (listed on page 5 of the application) of the dual absorption towers based on current test data or is that the proposed efficiency of the towers after they are repacked?
2. How are the absorption towers to be repacked? Is the packing material to be a new type?
3. The application states that NO_x emissions will be minimized by operating the burners of the sulfuric acid plants within the limits established by the designer. What, specifically, are these limits?
4. Please show the correlation between the gas flow rate of 146,162 dscfm (listed on page 6 of the application) and the gas flow rate of 67,500 dscf/ton of acid (listed on page 7b).

5. The application states that the nitrogen oxide concentration in the tail gas stream of a typical sulfuric acid plant is in the range of 20 parts per million. What is the source of this information?

6. The uncontrolled emissions calculations for acid mist (shown on page 7c) need to be recalculated.

The project description on page 2 has been corrected for you to 4.0 lbs SO₂/ton 100% H₂SO₄ and 0.15 lb mist/ton 100% H₂SO₄.

Also, it is the EPA's determination that actual emissions must be based upon the previous two years of operating data unless some other period is deemed to be more representative of normal operating conditions. In this case, the emissions increase would be greater than the amounts listed in Attachment 1B, but the amounts of increase shown in Attachment 1B were already significant anyway.

AC29-187327:

On October 1, 1990, the Department received CF Industries' request to modify the sulfur storage and handling facility to increase the daily average allowable throughput from 2255 tons to 2484 tons of sulfur as a result of the proposed increase in sulfuric acid production. This application is deemed incomplete. Additional information is required for further processing of this application.

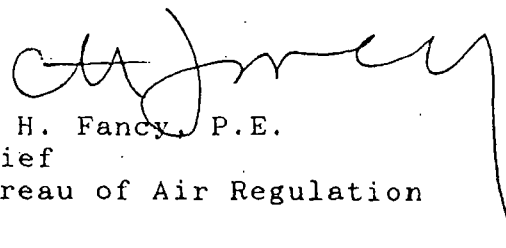
Within 30 days of receipt of this letter, please respond to the following items of incompleteness:

1. Please submit the calculation sheet showing the derivation/assumptions of the revised emission estimates for PM/PM₁₀, SO₂, TRS/H₂S and VOC emissions.
2. Why does this application state that the sulfuric acid production for the facility is increasing from 6900 TPD to 7600 TPD, when the application for permit modifications of sulfuric acid plants "C" and "D" requests a facility increase from 6900 TPD to 7300 TPD?

CF Industries, Inc.
AC29-186931 & AC29-187327
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If you have any questions concerning this request for additional information, please contact Cindy Phillips at (904)488-1344.

Sincerely,



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

CHF/CP

c: C. Fred Deuel, C. Fred Deuel & Assoc.
John B. Koogler, Koogler & Assoc.
Jerry Campbell, EPCHC
Harry Kerns, SW District

G. Harper, EPA
C. L. L. L. L. PPS