

COUNTY



OF HILLSBOROUGH

MEMORANDUM

Date January 17, 1985

To Willard Hanks

From Steve Gyrog through Jerry Campbell *SG*

Subject: AMAX Plant City's Conveyor Belt Transfer Point Dust Collector

We have received the December 18, 1984 letter of incompleteness response from AMAX concerning the above source. The particular collection efficiency for the dust collector listed in the application remains to be specified.

If you have any questions, please call me or Jerry Campbell.

SG/ch

# COUNTY OF HILLSBOROUGH



## MEMORANDUM

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January 17, 1985

To Willard Hanks, CAPS

From Steve Gyorog through Jerry Campbell *SG*

Subject: AMAX Chemical Corporation, Plant City, Phosphoric Acid Defluorination Facility  
Scrubber, AC29-091316, Letter of Incompletion Items

We have received the revised permit application for the above mentioned project. There are a number of problems with the application. The following Item #'s and remarks refer to the December 18, 1984 letter from AMAX:

- Item #4: The BACT determination for Occidental Chemical Company was for a packed tower (scrubber). AMAX is proposing the use of a spray tower. The use of packing would lead to greater collection efficiency, and therefore, the BACT quoted is inapplicable.
- Item #7: Fluoride emissions of 0.86 lb/hr are based on a production rate of 21.5 tons/hour and 0.04 lb F1/ton P<sub>2</sub>O<sub>5</sub>. The BACT is inapplicable. The emissions will probably exceed 0.04 lb F1/ton P<sub>2</sub>O<sub>5</sub>.
- Item #8: At a scrubber flow rate to the nozzles of 40 gal/min, and yearly hours of operation of 2080 (two, four-hour batches per day), the scrubber effluent sent to the process water ponds will be 20,804 tons per year. The total steam input to the process of 388 tons per year will also add to this figure (some will condense). The 32 tons/year figure listed should be justified.
- Item #10: Fluoride emission collection efficiency is based on heated acid producing 1.825 gr F1<sup>-</sup>/ft<sup>3</sup>. What is the reference for this concentration?
- Item #11: The revised application lists stack and fan characteristics of 1.33 ft. dia., 3000 ACFM, velocity 35.81 fps. Item #11 lists 63.66 fps and a diameter of 1.0 ft. Which is correct?

Finally, although the phosphoric acid is not produced at this facility, it seems reasonable to use 40 CFR 60 Subpart T and ask the applicant to accept 0.02 lb F1<sup>-</sup>/ton P<sub>2</sub>O<sub>5</sub> as an allowable emission rate. If the phosphoric acid were defluorinated at the Manatee facility, certainly NSPS would apply. Perhaps a BACT determination for a counter current spray tower is required.

If you have any questions, please call me or Jerry Campbell.

SG/ch