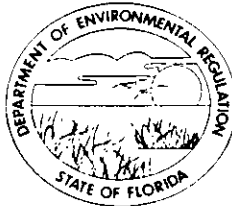


STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

September 7, 1984

Mr. George Townsend  
Environmental Supervisor  
AMAX Chemical Corporation  
Post Office Box 790  
Plant City, Florida 33566

Dear Mr. Townsend:

Hillsborough County Environmental Protection Commission (HCEPC) and the department have made an initial review of AMAX Chemical Corporation's applications for permits to construct a phosphoric acid defluorinating plant and install a dust collector on a conveyor belt transfer point. Before the applications can be considered complete, we will need the following information.

Phosphoric Acid Defluorination Plant (file No. AC 29-091316)

1. On the drawings D-1 and D-2 or a separate drawing, show the proposed process equipment and air pollution control equipment (ducts and scrubber) that this application is to cover. Also show the operating permit numbers of the adjacent processes.
2. Please provide a process description of the proposed project, with reference to the process flow sheet, and include the chemical reactions that occur in the process.
3. How are raw materials transported to the plant, unloaded, stored, conveyed to process, and air pollutant emissions controlled during each of these operations?
4. Please provide a Best Available Control Technology (BACT) determination for fluorides (Rule 17-2.630, FAC) as required by Rule 17-2.600(3)(a)9., FAC. Consider a spray-cross flow packed bed scrubber in the determination.
5. For the scrubber you recommend as BACT, what is the design scrubber water pressure (in. water), scrubber water flow (GPM), and gas pressure drop (in. water)?

Mr. Townsend  
September 7, 1984  
Page two

6. Please revise Section III: A and B to include other materials (water?) to account for the product weight of 51,872 lb/hr which is greater than the 51,649 lb/hr of raw material. What is the P<sub>2</sub>O<sub>5</sub> content of the phosphoric acid used in the process?
7. In Section III: C, what is the basis of the allowable fluoride emissions of 0.18 lb/hr?
8. What is the estimated increase in fluoride emissions from the process water pond as a result of this project?
9. What is the basis of the 25 lb particulate matter/hr and 49.23 lb fluorides/hr inlet loading to the scrubber? What is the basis for the 0.85 percent fluoride content of the phosphoric acid into the plant?
10. Please provide a copy of the calculations that concluded the proposed scrubber will be 98 percent efficient on particulate matter and fluoride emissions. Include the particulate matter particle size distribution of the inlet loading to the scrubber.
11. How will the stack velocity (10 FPS) be measured during the compliance test? Is the correct stack diameter 25 inches?

Conveyor Belt Transfer Point Dust Collector  
(file No. AC 29-091317)

1. On the drawings D-1 and D-2 or a separate drawing, show what conveyor belt the proposed dust collector will control and the operation permit numbers for it (if any) and adjacent process and material handling equipment.
2. Please provide a description of the conveyor belt to be controlled, stating what process equipment discharges on to it and where it discharges to.
3. How will fugitive emissions from the belt and its discharge point be controlled?
4. Are there any other uncontrolled emission points in the CDP material handling system? If so, what plans does the company have to control them?

Mr. Townsend  
September 7, 1984  
Page three

5. Did HCEPC agree in writing to accept 0.02 grains/DSCF as the emission standard?
6. What guarantee or specifications did the dust collector manufacturer provide for the emission from his equipment? What is the particle size distribution of the particulate matter to the dust collector?
7. What is the percent moisture in the gas handled by the proposed dust collector?

Sincerely,



C. H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality  
Management

CHF/WH/agh

cc: Bill Thomas  
Steve Gyorog

No. 0156561

RECEIPT FOR CERTIFIED MAIL  
 NO INSURANCE COVERAGE PROVIDED—  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

SENT TO			
Mr. George Townsend			
STREET AND NO.			
P.O., STATE AND ZIP CODE			
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	¢	
	SPECIAL DELIVERY	¢	
	RESTRICTED DELIVERY	¢	
	RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	¢
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
OPTIONAL SERVICES	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢	
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE			
		9/7/84	

PS Form 3800, Apr. 1976

PS Form 3811, Jan. 1979

● SENDER: Complete items 1, 2, and 3. Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)  
 Show to whom and date delivered. . . . .  
 Show to whom, date and address of delivery. . . . .  
 RESTRICTED DELIVERY  
 Show to whom and date delivered. . . . .  
 RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery \$ . . . . .  
 (CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 Mr. George Townsend  
 P. O. Box 790  
 Plant City, FL 33566

3. ARTICLE DESCRIPTION:  

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	0156561	

 (Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE  Addressee  Authorized agent

4. *Thomas P. [Signature]*  
 DATE OF DELIVERY 9/10/84

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: *[Signature]*

POSTMARK: SEP 10 1984 PLANT CITY, FL

CLERK'S INITIALS: *[Signature]*

★EFO : 1979-300-459