State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee		
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
From: _____	Date: _____	
Reply Optional [ ]	Reply Required [ ]	Info. Only [ ]
Date Due: _____	Date Due: _____	

TO: Teresa Heron

FROM: Dan A. Williams

DATE: Feb. 16, 1982

SUBJECT: AMAX - Construction/Modification Permit Application

Per telephone request from Patty Adams, enclosed is the December 28, 1981 letter from Fred Mullins of AMAX.

It probably will help if I try to give you a little background on this project. The Phosphate Feed Preparation Plant is an existing operation. It was permitted on AO29-6318 which included six baghouses. In an attempt to reduce fugitive emissions and improve the control efficiency on the entire operation, they applied for a construction permit to eliminate three baghouses and replace it with one large baghouse. This office issued construction permit AC29-46069 to do this. Before actual construction began it was determined design errors had been made. They then decided to split up the pick up points on the new large baghouse with part of the points to go to a new 7,500 ACFM baghouse. The flowrate on the large baghouse remained at 24,300 ACFM. The District will be modifying AC29-46069 to reflect the change in pick up points. CAPS would be permitting the 7500 ACFM baghouse.

I have also attached some of the old correspondence including the original permit. On the diagram I have shown the split as now proposed.

If you have any questions please give me a call.

DAW/rkt

DER

FEB 18 1982

BAQM

AMAX Phosphate, Inc.
A SUBSIDIARY OF AMAX INC.
402 SOUTH KENTUCKY AVENUE • SUITE 600 • LAKELAND, FLORIDA 33801 • (813) 687-2561

December 28, 1981

D.E.R.
DEC 29 1981
SOUTHWEST DISTRICT
TAMPA

Mr Dan Williams, P.E.
Air Permitting
Florida Department of Environmental Regulation
7601 Highway 301, North
Tampa, Florida 33610

Dear Mr. Williams:

Pursuant to our meeting of December 21, I would like to confirm the project changes that relate to the AMAX Phosphate Feed Preparation Plant Baghouse Modification Permit (FDER Number AC 29-46069). There are three primary changes in the original plan. The first, as presented to you in the above-mentioned meeting, involves the replacement of the present Mikro-Pulsaire unit 37-8-100 (FDER Permit Number AO 29-6318) with a new 24,300 cfm baghouse and several new collection points. The difference between the new approach and the one presented in the modification permit involves the separation of a portion of the process area. This eliminates some of the dust collection points originally included in the 24,300 cfm baghouse system. The request for change was accompanied by revised permit application pages (for AC 29-46069).

The second change involves the installation of a new 7,500 cfm baghouse that will replace the present Mikro-Pulsaire unit 25-8-100 (FDER Permit Number A0 19-6318). The baghouse will control the portion of the Feed Preparation System that was removed from the 24,300 baghouse. The reason for the separation of the two systems was to improve the fugitive dust capture, to design for the loss of air flow from duct wall build-up, and to allow operations the flexibility of being able to operate either system independently of the other. This second installation will be submitted in the form of an additional modification permit and will be treated as a totally separate system from the 24,300 baghouse covered by modification permit AC 29-46069.

The third change involves keeping and renovating the Mikro-Pulsaire baghouse 16-8-100 (FDER Permit Number AO 29-6318). This baghouse serves the feed preparation ground phosphate rock storage bin and will be completely renovated to assure acceptable performance. This renovation work will be handled as maintenance of the existing unit. As per your request, a new and separate operating permit will be submitted for this baghouse within sixty (60) days of the completion of the renovation work.

As a result of the December 21 meeting, it is our understanding that AMAX Phosphate, Inc. may immediately begin construction on the 24,300 cfm Feed Preparation Baghouse System in accordance with the permit changes presented at that meeting.

If you have any questions concerning the preceding information, please let me know.

Sincerely,

Fred G. Mullins
Regulatory Compliance Manager

FGM:la

cc: Ms. Lynn Stephenson (HCEPC)
Mr. Jim Whittum
Mr. John Cladakis
Mr. J. J. Lewis
Mr. G. Townsend
Mr. R. Dunn

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT
7601 HIGHWAY 301 NORTH
TAMPA, FLORIDA 33610

Hillsborough County AP

Mr. J.J. Lewis, Plt. Mgr.
AMAX Phosphate, Inc.
P.O. Box 790
Plant City, Fla. 33566

Dear Mr. Lewis:

Enclosed is Permit Number AC29-46069, dated October 19, 1981 to construct the subject air pollution source issued pursuant to Section 403, Florida Statutes.

Should you object to this permit, including any and all of the conditions contained therein, you may file an appropriate petition for administrative hearing. This petition must be filed within fourteen (14) days of the receipt of this letter. Further, the petition must conform to the requirements of Section 28-5.201, Florida Administrative Code, (see reverse side of this letter). The petition must be filed with the Office of General Counsel, Department of Environmental Regulation, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301.

If no petition is filed within the prescribed time, you will be deemed to have accepted this permit and waived your right to request an administrative hearing on this matter.

Acceptance of the permit constitutes notice and agreement that the Department will periodically review this permit for compliance, including site inspections where applicable, and may initiate enforcement action for violation of the conditions and requirements thereof.

Sincerely,

W.K. Hennessey
District Manager

cc: HCEPC
Richard W. Vanhorn, P.E.

Enclosure

DER Form 17-1.122(66) 1/2

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT
7601 HIGHWAY 301 NORTH
TAMPA, FLORIDA 33610

APPLICANT:

Mr. J. J. Lewis
AMAX Phosphate, Inc.
P.O. Box 790
Plant City, Fla. 33566

PERMIT/CERTIFICATION NO. AC29-46069

COUNTY: Hillsborough

PROJECT: Feed Prep Plant Baghouse

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code. The above named applicant, hereinafter called Permittee, is hereby authorized to perform the work or operate the facility shown on the approved drawing(s), plans, documents, and specifications attached hereto and made a part hereof and specifically described as follows:

For the construction of a Mikro-Pulsaire, Model 380S-10-TR, baghouse for the feed preparation area as a fugitive dust control for the pneumatically loaded silos. This construction replaces dust collectors no. 1, 2, and 3.

Located at Coronet Road, Plant City, Hillsborough County.

UTM: 17-393.8E and 3096.3 N

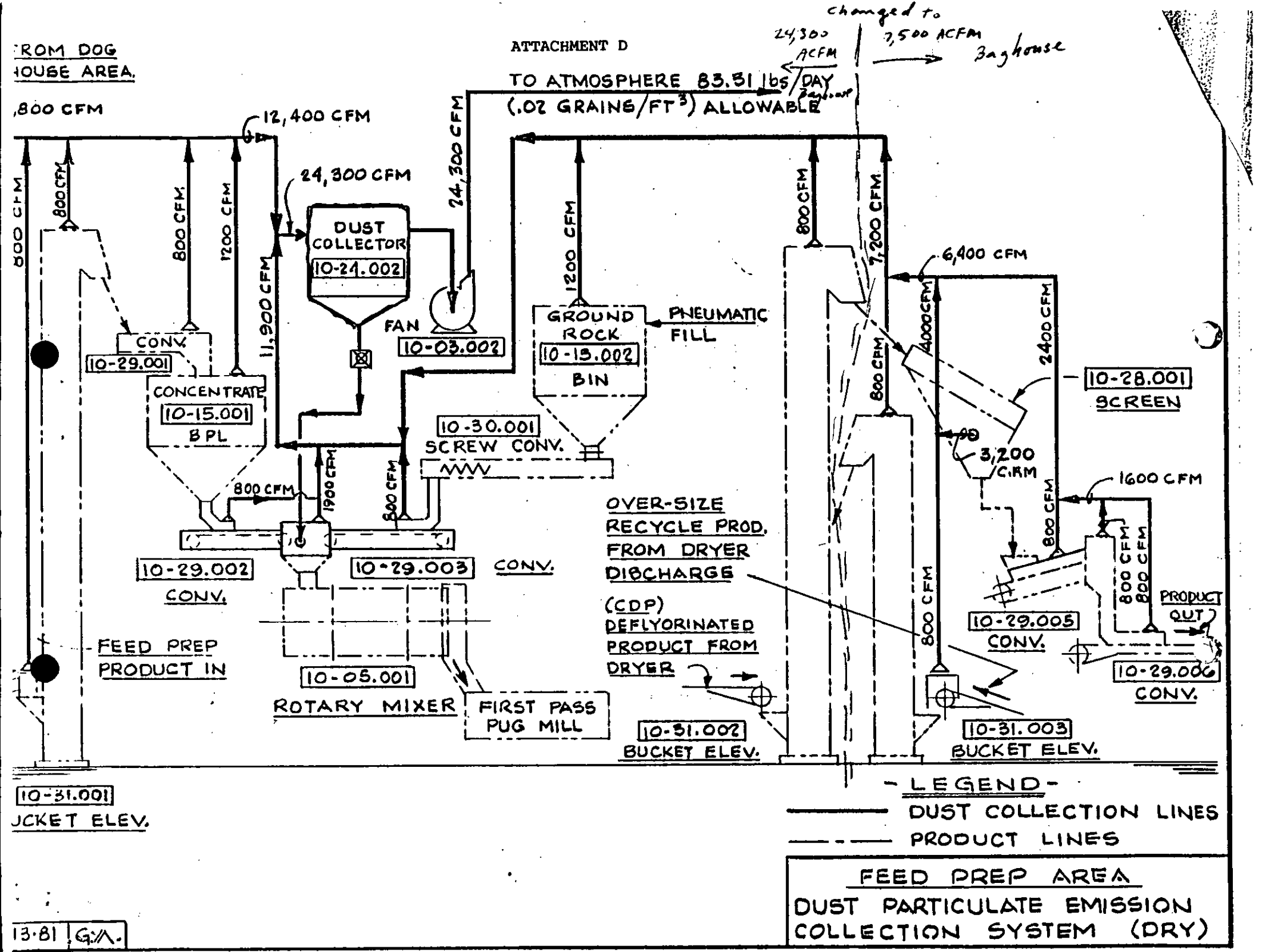
Replaces Part of AO29-6318 NEDS NO: 0075 Point ID: 06

Expires: July 15, 1982

DER FORM 17-1.122(63) 1/4 (1/80)

'See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

ATTACHMENT D



FEED PREP AREA

DUST PARTICULATE EMISSION COLLECTION SYSTEM (DRY)

13-81 G.A.

AMAX Phosphate, Inc.
A SUBSIDIARY OF AMAX INC.
402 SOUTH KENTUCKY AVENUE • SUITE 600 • LAKELAND, FLORIDA 33801 • (813) 687-2561

X 32

December 21, 1981

Mr. Dan Williams
Florida Department of Environmental Regulation
7601 Highway 301 North
Tampa, Florida 33601

Dear Mr. Williams:

Due to the acceptance of an improved engineering proposal from Case Engineering, Inc., revisions in the original application of modification (construction) Permit No. AC 29-46069 were made necessary. We are submitting the revised application in its entirety with the following revisions:

1. Section I
   "B." Case Engineering, Inc.

2. Section II
   "A." A number of dust collection points to capture fugitive dust at conveyors, screens and transfer points will be installed with the necessary duct work and a Mikro Pulsaire (or equivalent) dry collector with an air flow of 24,300 cfm and a cloth area of 4,476 $ft.^2$ (or more).

   "B." Start construction - January 1982
   Complete construction - April 1982

3. Attachment C-1
   The bag house to be installed is a Mikro 3805-10-TR (or equivalent) with a minimum cloth area of 4,476 $ft.^2$ (or more) and an air flow of 24,300 cfm. The resulting air to cloth ratio is 5.43 $cfm/ft.^2$ of cloth. The material collected by this bag house will be returned to process.

   Bag houses are considered to be the Best Available Control Technology (BACT) by the U.S. Environmental Protection Agency when used to control nuisance particulate. Bag houses are considered to be +99% efficient, and this installation will meet or exceed this level.

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

A number of dust collection points to capture fugitive dust at conveyors, screens and transfer points will be installed with the necessary ductwork and a Mikro-Pulsaire (or equivalent) dry collector with an air flow of 24,300 CFM and a cloth area of 4,476 ft.^{2} (or more).

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction January, 1982 Completion of Construction April, 1982 Const. complete June 1

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Mikro-Pulsaire dust collector and duct work: $255,000

Total cost including Engineering and labor: $667,000

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

The present Feed Preparation dust control units are being operated under the collective FDER Permit # AO 29-6318 which was issued on May 9, 1979 and expires May 5, 1983.

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? ____ Yes X No

F. Normal equipment operating time: hrs/day 20*; days/wk 7*; wks/yr 52*; if power plant, hrs/yr N/A; if seasonal, describe: *Operating time may be variable due to production problems and market demand.

G. If this is a new source or major modification, answer the following questions. (Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? No
   a. If yes, has "offset" been applied? N/A
   b. If yes, has "Lowest Achievable Emission Rate" been applied? N/A
   c. If yes, list non-attainment pollutants.
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. No
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements apply to this source? If yes, see Sections VI and VII. No
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? No
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

AMAX Phosphate, Inc.
A SUBSIDIARY OF AMAX INC.
402 SOUTH KENTUCKY AVENUE · SUITE 600 · LAKELAND, FLORIDA 33801 · (813) 687-2561

February 17, 1982

Mr. Dan Williams
Department of Environmental Regulation
7601 Highway 301 North
Tampa, Florida 33610

Dear Dan:

In response to your question regarding RACT applicability raised at our meeting of February 4, 1982, we are submitting a report by Sholtes and Koogler wherein an air quality model was conducted to determine the impact of our current (including the proposed changes discussed at our meeting) particulate matter emitting sources on the Hillsborough County non-attainment area. Their report, attached as Exhibit A, indicates an insignificant impact of 0.6 ug/cu. m, annual average and 4.2 ug/cu. m, 24-hour average. These figures are well below those specified for a significant impact thereby exempting this facility under Rule 17-2.650(2)(b)2., F.A.C. from the imposition of RACT.

As you are aware, however, Amax is undertaking a massive voluntary "clean-up" program at its Plant City - Coronet Facility. Specifically, the program calls for the installation of baghouses and wet scrubbers to reduce and/or alleviate fugitive dust emissions. Each of these changes are being made solely for the purposes of enhancing air quality and efficiency.

The purpose for this letter, therefore, is to define our position relative to specific emission standards which may be imposed as a result of this "clean-up" effort. Obviously, Amax is not interested in becoming liable for compliance with an economically prohibitive requirement.

According to Rule 17-4.23(1)(c) "New control devices installed on existing process equipment for the purpose of decreasing air pollutant mass emission rates shall comply with the existing source limitations pursuant to Chapter 17-2, F.A.C."

Under 17-2, General and Specific Air Quality Standards are enumerated in Parts II and III. Part IV contains Specific Emission Limiting and Performance Standards. The installation of the new control devices will not negatively impact any of these standards.

Other limitations contained in 17-2 include:

1) 17-2.500 PSD
2) 17-2.510 New Source Review
3) 17.2-630 BACT
4) 17-2.640 LAER
5) 17-2.650 RACT

As mentioned previously, RACT is inapplicable to our facility. Further, because the changes envisioned do not fall within the definition of "modification" in that the net result will be a decrease in emissions for the facility, and the changes do not rise to the level of a "New Source," the New Source Review and LAER criteria appears inapplicable. Similarly, because the facility is not located in an area of attainment or unclassifiable area, PSD criteria should not be applied.

A BACT determination, however, may be required at the time of each application for construction. If the Department determines that there is the necessity for a BACT determination, Amax would request that they be so notified as expeditiously as possible in order to avoid any delay in the "clean-up" effort.

If I can provide any additional information to assist in this determination, please do not hesitate to call.

Sincerely yours,

Fred G. Mullins
Manager
Regulatory Compliance

/kaw

cc: Rhea F. Law
Hillsborough County EPC

FOWLER, WHITE, GILLEN, BOGGS, VILLAREAL AND BANKER, P. A.

ATTORNEYS AT LAW

FREEDOM SAVINGS BUILDING
TAMPA, FLORIDA 33602
(813) 228-7411

601 FLORIDA NATIONAL BANK BUILDING
ST. PETERSBURG, FLORIDA 33701
(813) 896-0601

600 CLEVELAND STREET-SUITE 760
CLEARWATER, FLORIDA 33515
(813) 446-8525

490 FLORIDA FEDERAL BUILDING
LAKELAND, FLORIDA 33802
(813) 688-8517

CABLE ADDRESS
"FOWHITE"
TELEX 052776

PLEASE REPLY TO:
P. O. BOX 1438
TAMPA, FLORIDA 33601

February 10, 1982

Mr. Dan Williams
Department of Environmental Regulation
7601 Highway 301 North
Tampa, Florida 33610

Re: Revision of Permit #AO29-6778
for operation of Defluorinating Units,
Reactors #1 & #2 and Paragon Kiln #2.

Dear Dan:

This letter is being sent as a followup to our meeting of February 4, 1982, wherein we discussed the subject permit. Primarily, this revision is requested as a result of Amax's commitment to critically review and revise all permits previously procured and held by Borden, Inc. The purpose of these revisions is to secure a permit which more accurately reflects the actual operating conditions of the facilities. As I mentioned, this program is ongoing and hopefully will be completed as expeditiously and painlessly as possible to the benefit of both the regulatory agencies and Amax.

As for the subject permit, Amax is requesting a revision which would recognize the independent nature of the equipment. Reactors #1 and #2 and the Kiln are in actuality three separate and distinct facilities. Each has its own scrubber and each is capable of independent operation. The only point of commonality is the single stack. It is on this basis that Amax is requesting that the conglomerate permit for these facilities be broken down to provide a separate permit for each facility.

There are several reasons for this request. The first, the recognition of each facilities' independent character, is fundamental permitting policy. In fact, the original inclusion

of these three facilities under a common permit was probably an oversight. Secondly, this revision would serve to resolve collateral difficulties with the current permit.

Originally, the permit was issued for the operation of Reactor #1 at an input rate of four tons/hour, Reactor #2 at an input rate of four tons/hour, and the Kiln at an input rate of 8 tons/hour. These permitted input figures , however, are not reflective of the actual input rates utilized for the facilities. In fact, Reactor #1 is currently operating at an input rate of 8 tons/hour and Reactor #2 is operating at 8 tons/hour. The Paragon Kiln is currently not operating, having been shut down since February, 1981.

This is not to say, however, that these departures from the permitted input rates constitute violation of the permit. This is true because the facilities were grouped together under the terms of the current permit, thereby allowing, under Condition #9, a total input of 16 tons/hour. Therefore, because the Kiln is shut down, the total current input of 16 tons/hour into the reactors is within the permitted allowable.

Needless to say, this temporary condition is totally fortuitous, and therefore requires that steps be taken now to accomodate the future startup of the Kiln. It is on this basis that Amax requests a further revision of the individual permit input rates to maximum operating capacity;i.e.,

Reactor #1 9 tons/hour

Reactor #2 9 tons/hour

and Paragon Kiln 8 tons/hour.

There are other effects resulting from a revision of this nature. The most obvious being the recalculation of emission rates. As we discussed, the input rates are currently summed for all three facilities and then subjected to the Process Weight Table. The result of this method is a lower emission rate than would be possible under separate consideration for each facility. In this particular instance, this method of calculation results in a cummulative emission rate of 20.03 pounds/hour.

If the facilities were permitted separately, the maximum allowable emission rate for the common stack would be the sum of the individual maximum allowable emission rates for

each source. In this case, the total allowable rate would be 41.05 pounds/hour.

While this rate is, in fact, higher than that previously permitted, it is comparable with that originally imposed by EPA in the Consent Order of May 9, 1977. That Order fixed an emission rate of no greater than 37 pounds/hour for the joint facilities at a total input rate of 16 tons/hour.

Further, in recognition of the increased emission rate, Amax is prepared to offer internal offsets as follows:

Permit No.	Facility	Permitted Emission Rate	Proposed Emission Rate	Total Reduction
A029-6315	Phosphate Feed Preparation Plant	34.57 lbs/hour	20 lbs/hour	14.57
A029-6316	#6 and #7 Defluorinating Kilns	25.00 lbs/hour	15 lbs/hour	10.00
			TOTAL	24.57

These changes would result in a net reduction of 3.55 lbs/hour. (41.05 - 20.03= 21.02 increase for Reactors #1 and #2 and Paragon Kiln; 24.57(offset) - 21.02(increase) = 3.55 net reduction in emissions.)

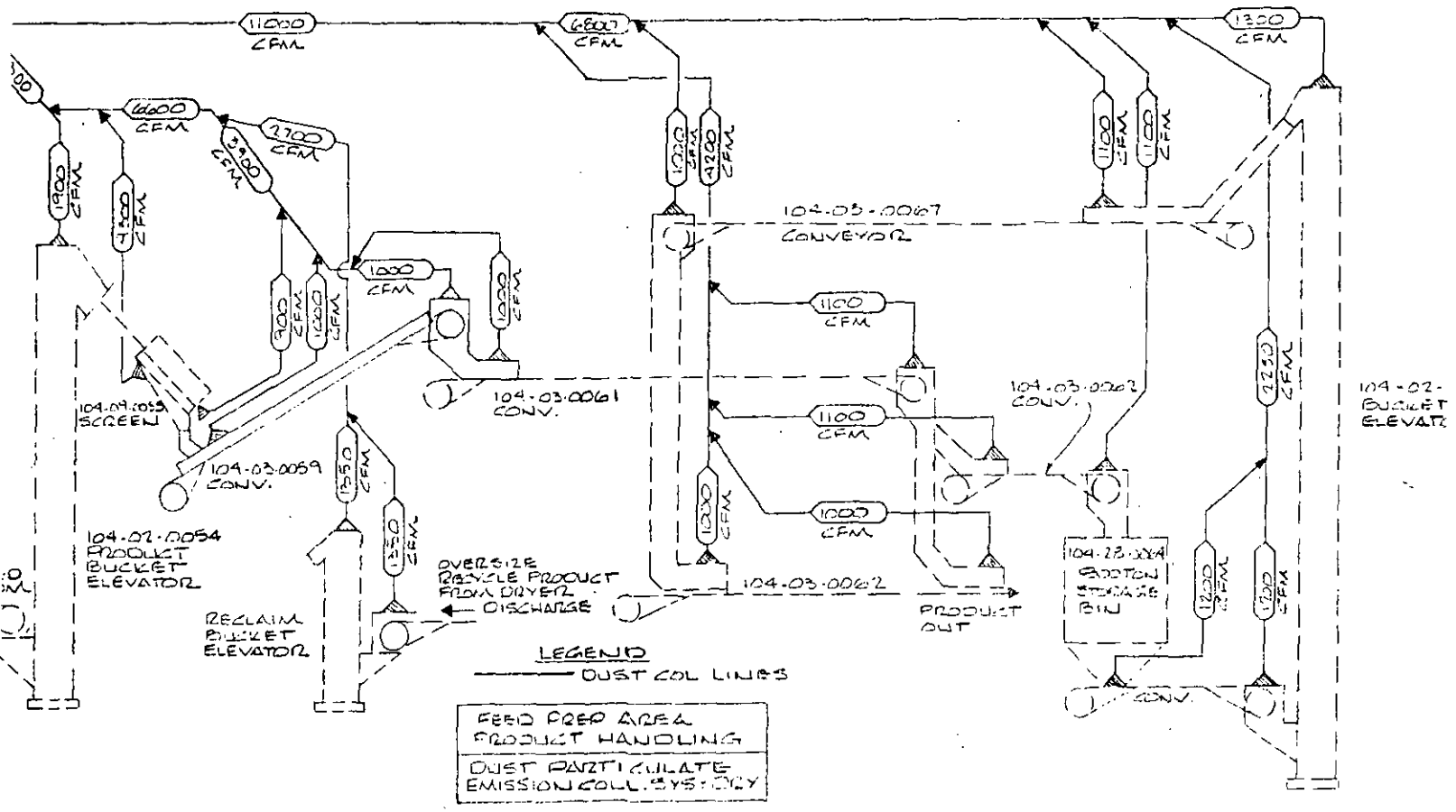
Thank you for your consideration of these requests. If I can provide any additional information, please let me know.

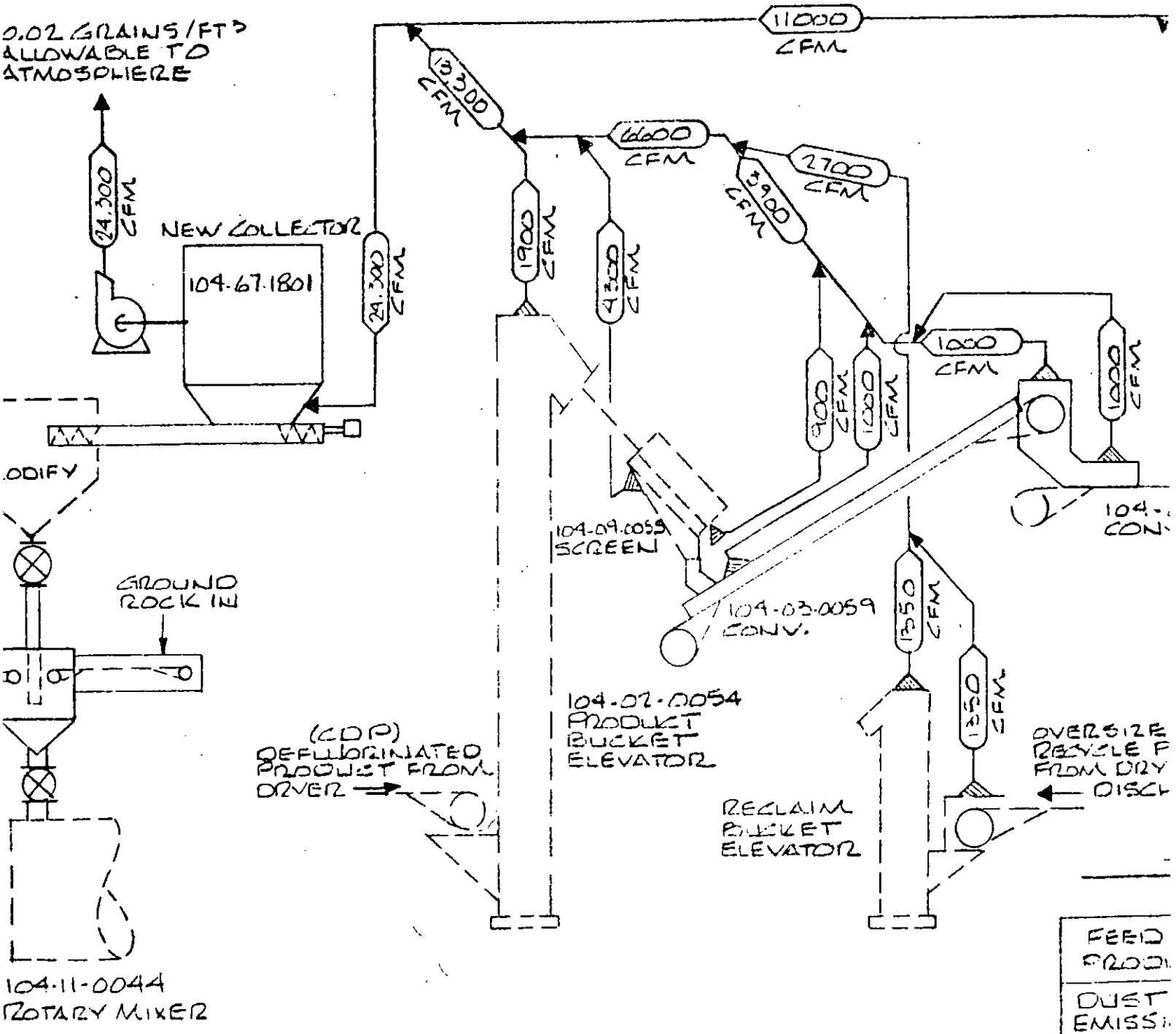
Sincerely yours,

RHEA F. LAW

RFL/wr

cc: Mr. Fred Mullins


11000 CFM
6800 CFM
1350 CFM
16600 CFM
2700 CFM
3400 CFM
1900 CFM
4200 CFM
1100 CFM
1000 CFM
900 CFM
1200 CFM
1000 CFM
104-03-0067 CONVEYOR
1100 CFM
104-03-0061 CONV.
104-03-0062 CONV.
1100 CFM
1000 CFM
1350 CFM
1350 CFM
1350 CFM
104-09-0059 SCREEN
104-03-0059 CONV.
104-02-0054 PRODUCT BUCKET ELEVATOR
RECLAIM BUCKET ELEVATOR
OVERSIZE RECYCLE PRODUCT FROM DRYER DISCHARGE
104-03-0062
PRODUCT OUT
104-28-XXA SOYTON STORAGE BIN
1200 CFM
1000 CFM
CONV.
104-02- BUCKET ELEVATR
LEGEND
DUST COL LINES
FEED PREP AREA PRODUCT HANDLING
DUST PARTICULATE EMISSION COLL. SYSTEM


0.02 GRAINS/FT³
ALLOWABLE TO
ATMOSPHERE
24,300 CFM
NEW COLLECTOR
104-67-1801
24,300 CFM
11000 CFM
13,300 CFM
16000 CFM
1900 CFM
4300 CFM
3900 CFM
2700 CFM
900 CFM
1000 CFM
1000 CFM
1000 CFM
104-09-0059
SCREEN
104-03-0059
CONV.
1350 CFM
1350 CFM
104-07-0054
PRODUCT
BUCKET
ELEVATOR
(CDP)
DEFLUORINATED
PRODUCT FROM
DRYER
RECLAIM
BUCKET
ELEVATOR
OVERSIZE
RECYCLE F
FROM DRY
DISCH
GROUND
ROCK IN
104-11-0044
ROTARY MIXER
FEED
PROD
DUST
EMISSI