

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: Bill Thomas, DER, Tallahassee  
THRU: Dan Williams *DW*  
FROM: Bill Thomas *WT*  
DATE: January 13, 1983  
SUBJECT: AMAX Phosphate, Air Pollution Source Construction  
Permits AC29-57072, 73, 74 Technical Evaluation  
and Preliminary Determination.

DER

JAN 17 1983

BAQM

This communique is to comment on AMAX letter of 1/4/83 on the above subject. The following comments relate to the numbered paragraphs in AMAX's letter

1. Agree with proposed change
2. In a meeting with AMAX concerning this subject, they agreed to annual individual stack test at times convenient to AMAX plus an annual stack test for the three sources combined in one stack. This should be ad-heard to unless circumstances, unknown to the Tampa office, warranted the change
3. Agree with proposed change
4. This change requires surrogate approval
5. Agree with proposed change
6. Basis process weight table, no change needed
7. This condition apparently was included as another ceiling on the permitted process rate. Special condition No. 2 limits the material input rate to 9 tons/hour
8. AMAX makes a good point, but CAPS is in a better position to react to this request.

BT/rm

Air

# AMAX Phosphate, Inc.

A SUBSIDIARY OF AMAX INC.

402 SOUTH KENTUCKY AVENUE • SUITE 600 • LAKELAND, FLORIDA 33801 • (813) 687-2581

Thomas,  
Please  
send comment  
to Clair Fancy.  
Don  
1/6/83

January 4, 1983

Mr. Clair Fancy  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301

SUBJECT: Hillsborough County - AP  
AMAX Phosphate, Inc.  
Air Pollution Source Construction Permits  
AC29-57072, AC29-57073 and AC29-57074

Dear Mr. Fancy:

Recently we received the document entitled, "Technial Evaluation and Preliminary Determination, AMAX Phosphate, Inc., Hillsborough County, Florida, Defluorinating Units", dated October 28, 1982, addressing the amendment of the following sources: Fluid Bed Reactor #1, Permit #AC29-57072; Fluid Bed Reactor #2, Permit #AC29-57074; and Paragon Kiln #2, Permit #AC29-57073. Our review has revealed some areas on which we would like to comment. These are as follows:

1. Throughout the document the three sources are referred to as "kilns". Because two of the sources are fluid bed reactors, such designation is inaccurate; therefore, a more appropriate designation would be "defluorinating units".
2. On page three, paragraph four, a reference is made to semi-annual sampling requirements by Hillsborough County. As a result of a recent agreement with the Hillsborough County Environmental Protection Commission, this sampling requirement has been amended to conform with DER's annual requirement. (See attached letter from John Egan to Bill Thomas.)
3. Page one of the Paragon Kiln No. 2 permit indicates that the unit is being fired with No. 5 fuel oil. This description is incorrect, as the unit is normally fired with natural gas and the No. 5 fuel oil is used only as a stand-by fuel.

No!

**DER.**

Test @ 12 mo. intervals  
with all three units on-line.  
Test each unit separately  
at a convenient time within  
the 12 mo. period.

JAN 6 1983

SOUTHWEST  
TAMPA

Letter to Mr. Clair Fancy  
January 4, 1983  
Page Two

*Requires  
surrogate  
approval*

4. Specific condition #7 of the Paragon Kiln No. 2 permit requires that the sampling facilities between the scrubber and the fan be upgraded to meet the specifications found in 17-2.700(4) F.A.C. Unfortunately, this upgrading is physically impossible and the wording of the specific condition should be amended to read as follows: "Existing stack sampling facilities between the scrubber and the fan will be upgraded as close as reasonably possible to the specifications listed in Chapter 17-2.700(4) F.A.C."

5. Specific condition #2 contains a typographical error in the first sentence, wherein Paragon is spelled incorrectly.

6. Concerning specific condition #4 of both Fluid Bed Reactor permits, there is some question as to rationale for the particulate matter emission rate of 1.56 pounds per ton. Apparently the Process Weight Table was not applied in this case, as it was for the Paragon Kiln. Therefore, we would appreciate some clarification of the basis for this limitation.

*Limits  
production  
?*

7. Specific condition #6 of both Fluid Bed Reactor permits calls for a restriction of heat input to the reactors of 72 MMBTU per hour. Because the reactors are restricted from using fuel oil except during startup and the natural gas used for normal operations has a negligible effect on point source emissions, this limitation appears unnecessary. Therefore, we would suggest that sentence number three of these paragraphs be changed to read as follows: "Use of No. 5 fuel oil or No. 2 fuel oil for normal operations shall be considered as a modification."

8. Finally, we wish to respond to paragraph five on page two, which reads as follows:

"The reduction in PM emissions from unconfined sources achieved by the company (AMAX) cannot be used to determine contemporaneous emission changes, 17-2.500(2)(e)3, because the unconfined PM emissions were reduced to comply with 17-2.610(3) and the unconfined PM emissions do not have the same qualitative significance for public health and welfare as the smaller particulate matter particles emitted from the kilns (17-2.500(e)4.c.)."

Letter to Mr. Clair Fancy  
January 4, 1983  
Page Three

*Why?  
PWT increases  
may trigger  
PSD.*

On the basis of the following information, it is suggested that this paragraph be deleted from the preliminary determination because the referenced paragraph does not apply to the permits as written or to the preliminary determination since emissions offsets are not required as a condition of issuing the permits.

The particulate matter emissions addressed in the above referenced paragraph were from the truck loadout facility at the AMAX Plant City, Florida plant, presently permitted under FDER Permit #A029-52854. The facility was voluntarily modified under FDER Construction Permit #AC29-43906 to reduce the unconfined emissions from the loadout operation even though the facility was operating under a valid FDER operating permit (#A029-6317) and was in full compliance with all conditions of the permit.

*Reasonable  
assurance  
was not  
defined at  
that time.*

{ At the time of the issuance of the original permit (FDER #A029-6778), DER made a determination of "reasonable precautions" as required under F.A.C. 17-4.03 and 17-4.07 and included them as conditions of the permit. Specifically, the unit employed the use of hoods, fans, filters (in the form of a bag collector) and nonventilated steel covers over the conveyors to contain and capture unconfined emissions.

Since the source was properly permitted, the permit was current and valid, operations were in compliance with all specific conditions of the permit, and no Notice of Violation or Letter of Warning indicating the source was in noncompliance had been issued; it must be assumed that AMAX was in compliance with the permit conditions, and thereby taking the necessary "reasonable precautions" to prevent the emissions of unconfined particulate matter. As used herein, "unconfined particulate matter" is defined in accordance with the definition in the FDER memo of April 21, 1982, from Bill Thomas and Martha Hall through Steve Smallwood to Dan Williams regarding AMAX Phosphate, Inc.

Because there is no justification for alleging that AMAX was not taking "reasonable precautions" to prevent the emission of unconfined particulate matter from the truck loadout facility, it cannot be maintained, as stated in the referenced paragraph, that "the unconfined PM emissions were reduced to comply with 17-2.610(3). . .".

Letter to Mr. Clair Fancy  
January 4, 1983  
Page Four

The referenced paragraph also states: "the unconfined PM emissions do not have the same qualitative significance for public health and welfare as the smaller particulate matter particles emitted from the kilns . . .". This statement is made without benefit of actual measurements of the size range of particles from either the truck loadout facility or the kilns.

In considering the nature of the particles from the two sources strictly from a qualitative standpoint, it is reasonable to expect that some of the particles emitted from the truck loadout operation will be larger in diameter than the particles emitted from the kiln stack. On the same basis, it is also reasonable to expect that some of the particles emitted from the truck loadout operation will be in the same size range as particles emitted from the kiln stack. The fact that the emissions from the truck loadout operation are near ground level and will, therefore, have a greater impact on human health and welfare than particles emitted from the 152-foot height kiln stack was also not considered.

To fully evaluate the conditions set forth in Chapter 17-2.500(2)(e)4.c(iii), Florida Administrative Code, which states "It (quantifiable fugitive emissions) has approximately the same qualitative significance for public health and welfare as attributed to the increase in emission of the modification", a particulate size analysis must be conducted on the particles emitted from both sources and air quality modeling must be conducted, taking into consideration source height, source strength and other source parameters to evaluate the impact on ambient air quality.

9. Page two, paragraph 3, under Rule Applicability, should be amended to correct Fluoride Potential Emissions as follows:

<u>Source</u>	<u>F</u>
Paragon Kiln #2	2.35
Fluid Bed Reactor #1	3.70
Fluid Bed Reactor #2	3.70
Total	9.75

Letter to Mr. Clair Fancy  
January 4, 1983  
Page Five

I appreciate the opportunity to make these comments and look forward to discussing them with you at your convenience.

Very truly yours,

A handwritten signature in black ink, appearing to read "Fred G. Mullins", with a horizontal line extending from the end of the signature.

Fred G. Mullins  
Regulatory Compliance Manager

FGM/rit

Attachment

cc: (All With Attachment)  
Mr. John Egan (HCEPC)  
Mr. Jack Lewis  
Mr. George Townsend  
Mr. Dan Williams (FDER)

# AMAX Phosphate, Inc.

A SUBSIDIARY OF AMAX INC.

402 SOUTH KENTUCKY AVENUE • SUITE 600 • LAKELAND, FLORIDA 33801 • (813) 687-2561

January 11, 1983

Mr. Willard Hanks  
Central Air Permitting Section  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301

DER

JAN 14 1983

BAQM

Dear Mr. Hanks:

Please find attached FDER Form 17-1.122(71) for the waiver of the 90-day time limit under Section 120.60(2) of the Florida Statutes. This waiver applies to the AMAX Plant City Permit Numbers AC29-57072, AC29-57073 and AC29-57074.

If you have any questions concerning this waiver, please let me know.

Sincerely,



Fred G. Mullins  
Regulatory Compliance Manager

FGM/rit

Attachment

cc: (All With Attachment)  
John Egan (HCEPC)  
Dan Williams (FDER-Southwest District)  
Jack Lewis  
Nolan Lowrey  
George Townsend

WAIVER OF 90 DAY TIME LIMIT  
UNDER SECTION 120.60(2), FLORIDA STATUTES

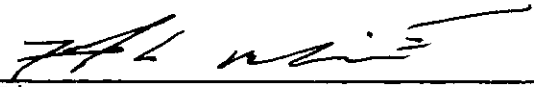
License (Permit, Certification) Application No. AC29-57072  
AC29-57073  
Applicant's Name: AMAX Phosphate, Inc. AC29-57074

The undersigned has read Section 120.60(2), Florida Statutes, and fully understands the Applicant's rights under that section.

With regard to the above referenced license (permit, certification) application, the Applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Section 120.60(2), Florida Statutes, waives the right under Section 120.60(2), Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Section 120.60(2), Florida Statutes. Said waiver is made freely and voluntarily by the Applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 16th day of February 1983.

The undersigned is authorized to make this waiver on behalf of the applicant.

  
Signature

Fred G. Mullins, III  
Name of Signee

January 10, 1983  
Date

Sworn to and subscribed  
before me this 10th day  
of January 1983.

  
Notary Public

NOTARY PUBLIC STATE OF FLORIDA  
BONDED THRU GENERAL INS. UND.  
MY COMMISSION EXPIRES SEPT. 30, 1985



Section 120.60, Florida Statutes

(2) When an application for a license is made as required by law, the agency shall conduct the proceedings required with reasonable dispatch and with due regard to the rights and privileges of all affected parties or aggrieved persons. Within 30 days after receipt of an application for a license, the agency shall examine the application, notify the applicant of any apparent errors or omissions, and request any additional information the agency is permitted by law to require. Failure to correct an error or omission or to supply additional information shall not be grounds for denial of the license unless the agency timely notified the applicant within this 30 day period. The agency shall notify the applicant if the activity for which he seeks a license is exempt from the licensing requirement and return any tendered application fee within 30 days after receipt of the original application or within 10 days after receipt of the timely requested additional information or correction of errors or omissions. Every application for license shall be approved or denied within 90 days after receipt of the original application or receipt of the timely requested additional information or correction of errors or omissions. Any application for a license not approved or denied within the 90-day period or within 15 days after conclusion of a public hearing held on the application, whichever is latest, shall be deemed approved and, subject to the satisfactory completion of an examination, if required as a prerequisite to licensure, <sup>2</sup>(the license) shall be issued. The Public Service Commission, when issuing a license, and any other agency, if specifically exempted by law, shall be exempt from the time limitations within this subsection. Each agency, upon issuing or denying a license, shall state with particularity the grounds or basis for the issuance or denial of same, except where issuance is a ministerial act. On denial of a license application on which there has been no hearing, the denying agency shall inform the applicant of any right to a hearing pursuant to s. 120.57.

# AMAX Phosphate, Inc.

A SUBSIDIARY OF AMAX INC.

402 SOUTH KENTUCKY AVENUE • SUITE 600 • LAKELAND, FLORIDA 33801 • (813) 687-2561

1-10-83  
Public notice 11/29/82  
30TH day ~ 12/29/82  
Letter dated 1-4-83, thus  
after 20 days of notice &  
DER is not required to  
Consider.  
work

~~Bill~~  
Willard

RECEIVED  
January 4, 1983

JAN 7 1983

D. E. R.  
DER Regional Management

DER

JAN 07 1983

BAQM

Mr. Clair Fancy  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301

SUBJECT; Hillsborough County - AP  
AMAX Phosphate, Inc.  
Air Pollution Source Construction Permits  
AC29-57072, AC29-57073 and AC29-57074

Dear Mr. Fancy:

Recently we received the document entitled, "Technical Evaluation and Preliminary Determination, AMAX Phosphate, Inc., Hillsborough County, Florida, Defluorinating Units", dated October 28, 1982, addressing the amendment of the following sources: Fluid Bed Reactor #1, Permit #AC29-57072; Fluid Bed Reactor #2, Permit #AC29-57074; and Paragon Kiln #2, Permit #AC29-57073. Our review has revealed some areas on which we would like to comment. These are as follows:

1. Throughout the document the three sources are referred to as "kilns". Because two of the sources are fluid bed reactors, such designation is inaccurate; therefore, a more appropriate designation would be "defluorinating units".
2. On page three, paragraph four, a reference is made to semi-annual sampling requirements by Hillsborough County. As a result of a recent agreement with the Hillsborough County Environmental Protection Commission, this sampling requirement has been amended to conform with DER's annual requirement. (See attached letter from John Egan to Bill Thomas.)
3. Page one of the Paragon Kiln No. 2 permit indicates that the unit is being fired with No. 5 fuel oil. This description is incorrect, as the unit is normally fired with natural gas and the No. 5 fuel oil is used only as a stand-by fuel.

Letter to Mr. Clair Fancy  
January 4, 1983  
Page Two

4. Specific condition #7 of the Paragon Kiln No. 2 permit requires that the sampling facilities between the scrubber and the fan be upgraded to meet the specifications found in 17-2.700(4) F.A.C. Unfortunately, this upgrading is physically impossible and the wording of the specific condition should be amended to read as follows: "Existing stack sampling facilities between the scrubber and the fan will be upgraded as close as reasonably possible to the specifications listed in Chapter 17-2.700(4) F.A.C.
5. Specific condition #2 contains a typographical error in the first sentence, wherein Paragon is spelled incorrectly.
6. Concerning specific condition #4 of both Fluid Bed Reactor permits, there is some question as to rationale for the particulate matter emission rate of 1.56 pounds per ton. Apparently the Process Weight Table was not applied in this case, as it was for the Paragon Kiln. Therefore, we would appreciate some clarification of the basis for this limitation.
7. Specific condition #6 of both Fluid Bed Reactor permits calls for a restriction of heat input to the reactors of 72 MMBTU per hour. Because the reactors are restricted from using fuel oil except during startup and the natural gas used for normal operations has a negligible effect on point source emissions, this limitation appears unnecessary. Therefore, we would suggest that sentence number three of these paragraphs be changed to read as follows: "Use of No. 5 fuel oil or No. 2 fuel oil for normal operations shall be considered as a modification."
8. Finally, we wish to respond to paragraph five on page two, which reads as follows:

"The reduction in PM emissions from unconfined sources achieved by the company (AMAX) cannot be used to determine contemporaneous emission changes, 17-2.500(2)(e)3, because the unconfined PM emissions were reduced to comply with 17-2.610(3) and the unconfined PM emissions do not have the same qualitative significance for public health and welfare as the smaller particulate matter particles emitted from the kilns (17-2.500(e)4.c.)."

Letter to Mr. Clair Fancy  
January 4, 1983  
Page Three

On the basis of the following information, it is suggested that this paragraph be deleted from the preliminary determination because the referenced paragraph does not apply to the permits as written or to the preliminary determination since emissions offsets are not required as a condition of issuing the permits.

The particulate matter emissions addressed in the above referenced paragraph were from the truck loadout facility at the AMAX Plant City, Florida plant, presently permitted under FDER Permit #A029-52854. The facility was voluntarily modified under FDER Construction Permit #AC29-43906 to reduce the unconfined emissions from the loadout operation even though the facility was operating under a valid FDER operating permit (#A029-6317) and was in full compliance with all conditions of the permit.

At the time of the issuance of the original permit (FDER #A029-6778), DER made a determination of "reasonable precautions" as required under F.A.C. 17-4.03 and 17-4.07 and included them as conditions of the permit. Specifically, the unit employed the use of hoods, fans, filters (in the form of a bag collector) and nonventilated steel covers over the conveyors to contain and capture unconfined emissions.

Since the source was properly permitted, the permit was current and valid, operations were in compliance with all specific conditions of the permit, and no Notice of Violation or Letter of Warning indicating the source was in noncompliance had been issued; it must be assumed that AMAX was in compliance with the permit conditions, and thereby taking the necessary "reasonable precautions" to prevent the emissions of unconfined particulate matter. As used herein, "unconfined particulate matter" is defined in accordance with the definition in the FDER memo of April 21, 1982, from Bill Thomas and Martha Hall through Steve Smallwood to Dan Williams regarding AMAX Phosphate, Inc.

Because there is no justification for alleging that AMAX was not taking "reasonable precautions" to prevent the emission of unconfined particulate matter from the truck loadout facility, it cannot be maintained, as stated in the referenced paragraph, that "the unconfined PM emissions were reduced to comply with 17-2.610(3). . .".

Letter to Mr. Clair Fancy  
January 4, 1983  
Page Four

The referenced paragraph also states: "the unconfined PM emissions do not have the same qualitative significance for public health and welfare as the smaller particulate matter particles emitted from the kilns . . .". This statement is made without benefit of actual measurements of the size range of particles from either the truck loadout facility or the kilns.

In considering the nature of the particles from the two sources strictly from a qualitative standpoint, it is reasonable to expect that some of the particles emitted from the truck loadout operation will be larger in diameter than the particles emitted from the kiln stack. On the same basis, it is also reasonable to expect that some of the particles emitted from the truck loadout operation will be in the same size range as particles emitted from the kiln stack. The fact that the emissions from the truck loadout operation are near ground level and will, therefore, have a greater impact on human health and welfare than particles emitted from the 152-foot height kiln stack was also not considered.

To fully evaluate the conditions set forth in Chapter 17-2.500(2)(e)4.c(iii), Florida Administrative Code, which states "It (quantifiable fugitive emissions) has approximately the same qualitative significance for public health and welfare as attributed to the increase in emission of the modification", a particulate size analysis must be conducted on the particles emitted from both sources and air quality modeling must be conducted, taking into consideration source height, source strength and other source parameters to evaluate the impact on ambient air quality.

9. Page two, paragraph 3, under Rule Applicability, should be amended to correct Fluoride Potential Emissions as follows:

<u>Source</u>	<u>F</u>
Paragon Kiln #2	2.35
Fluid Bed Reactor #1	3.70
Fluid Bed Reactor #2	3.70
Total	9.75

Letter to Mr. Clair Fancy  
January 4, 1983  
Page Five

I appreciate the opportunity to make these comments and look forward to discussing them with you at your convenience.

Very truly yours,

A handwritten signature in black ink, appearing to read "F. Mullins", with a long horizontal line extending to the right from the end of the signature.

Fred G. Mullins  
Regulatory Compliance Manager

FGM/rit

Attachment

cc: (All With Attachment)  
Mr. John Egan (HCEPC)  
Mr. Jack Lewis  
Mr. George Townsend  
Mr. Dan Williams (FDER)

# COUNTY



# OF HILLSBOROUGH

F. E. ... D  
AMAX Phosphate

[JAN 3 1983

MEMORANDUM

Date December 15, 1982

To Bill Thomas, P.E., FDER

From John Egan, HCEPC ←←←

Subject: ATTACHED LETTER FROM AMAX

Bill, AMAX is requesting a revision of its current testing requirement on its 2 fluid bed reactors and one rotary kiln. These 3 units feed a single scrubber/ESP and stack. Currently, we require them to test every 6 months and you require yearly tests. In order to test, they must shut down two of the 3 systems. It is very hard for them to shut down their fluid reactor as, once down, they must cool for a week and then must be jackhammered out.

We would agree to let AMAX test once a year on a schedule that is dependent on what is down.

In other words, if one of the fluid bed reactors "fall", AMAX would shut down the rotary kiln and test the fluid bed reactor by itself. At some point in a year's time, both fluid beds should be down together; at this point, the rotary kiln is tested.

JE/rr  
w/Attachment