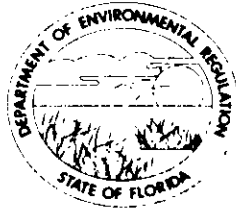


STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

November 17, 1982

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. J. J. Lewis, Plant Manager
AMAX Phosphate, Inc.
Post Office Box 790
Plant City, Florida 33566

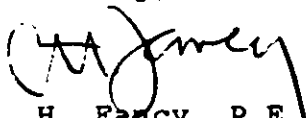
Dear Mr. Lewis:

Attached is one copy of the application, Technical Evaluation and Preliminary Determination, and proposed permits for modification of three defluorinating kilns located at the Company's Plant City chemical complex in Hillsborough County.

Pursuant to Section 403.815, Florida Statutes, and Florida Administrative Code Rule 17-1.62, you are required to publish (at your own expense) the attached notice. This notice should be published, one time only, in the legal ad section of a newspaper of general circulation in the Plant City area. The department, in accordance with Rule 17-1.62, is required to have proof that notice was given. Therefore, please have the newspaper prepare an affidavit of publication to submit to the department.

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to Bill Thomas of the Bureau of Air Quality Management.

Sincerely,


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

CHF/pa

cc: Anthony R. Lenkei, AMAX Phosphate, Inc.
John B. Koogler, Sholtes and Koogler Environmental
Consultants
Dan Williams, DER Southwest District
Iwan Choronenko, Hillsborough County Environmental
Protection Commission

Technical Evaluation
and
Preliminary Determination

AMAX Phosphate, Inc.
Hillsborough County, Florida

Defluorinating Units

Source	Proposed Permit Number
Fluid Bed Reactor No. 1	AC 29-57072
Fluid Bed Reactor No. 2	AC 29-57074
Paragon Kiln No. 2	AC 29-57073

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting
October 28, 1982

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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Notice of Proposed Agency Action

The Department of Environmental Regulation gives notice of its intent to issue permits to AMAX Phosphates, Inc. that will allow increased production and emissions from three defluorinating kilns located at the Company's Plant City chemical complex in Hillsborough County, Florida. No physical change in the process or control equipment is required for these modifications. The modifications will increase the emissions of air pollutants, in tons per year, by the following amounts.

Particulate Matter	Sulfur Dioxide	Fluoride
63	0	0

A Best Available Control Technology (BACT) determination was not required for the proposed modifications.

Emissions from the modified facility will not impact the Hillsborough County particulate matter nonattainment area by a significant amount nor exceed the allowable increment consumption or cause an ambient air quality violation in other areas.

A person who is substantially affected by the department's proposed permitting decision may request a hearing in accordance with Section 120.57, Florida Statutes, and Chapter 17-1 and 28-5, Florida Administrative Code. The request for hearing must be filed (received) in the Office of General Counsel of the department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request a hearing under Section 120.57, Florida Statutes.

The Technical Evaluation and Preliminary Determination for the proposed projects is available for public inspection during normal business hours at the following locations:

Department of Environmental Regulation
BAQM
2600 Blair Stone Road
Tallahassee, Florida 32301

Department of Environmental Regulations
Southwest District
7601 Highway 301 N
Tampa, Florida 33610

Hillsborough County
Environmental Protection Commission
1900 9th Avenue
Tampa, Florida

Any person may send written comments on the proposed action to Mr. Clair Fancy at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

I. Project Description

A. Applicant

AMAX Phosphate, Inc.
P. O. Box 790
Plant City, Florida 33566

B. Project and Location

Three of the existing defluorination kilns operated by AMAX Phosphate, Inc. (AMAX), Fluid Bed Reactors No. 1 and 2 and Paragon kiln No. 2, are covered by the same operating permit (AO 29-6778). The emissions from these kilns discharge through a common stack. These existing kilns are located at AMAX's chemical complex on Coronet Road, Plant City, Hillsborough County, Florida. AMAX is requesting the department to issue a separate permit for each of these kilns, allow the production to increase in each of the two fluid bed reactors from 4 to 9 TPH and base the allowable particulate matter (PM) emissions from each kiln on 17-2. 610(1), Process Weight Table, FAC. This administrative change will allow total emissions of PM from the three kilns to increase from 20 to 41 pounds per hour. Sulfur dioxide emissions from the three kilns will not increase by a significant amount. The two kilns that are increasing production (and fuel consumption) use only natural gas fuel, except during startup, when No. 2 fuel oil is used. Both these fuels contain little sulfur which is the source of sulfur dioxide emissions.

Fluoride emissions from the stack will not change by a significant amount because the existing scrubber can handle the increase fluoride from the kilns.

No physical changes to the process or control equipment is included in this request.

C. Process and Controls

The three kilns defluorinate a prepared phosphate feed (mixture of dried phosphate rock, phosphoric acid and caustic soda). Emissions from the Paragon kiln No. 2 pass through a fluoride recovery unit and a tail gas scrubber before being discharged through a common stack used by all three kilns. The emissions from fluid bed reactors No. 1 and 2 pass through separate fluoride recovery units, tail gas scrubbers and electrostatic precipitators (ESP) before being discharged through the common stack. No physical modifications to this process or control equipment is being proposed by AMAX.

II. RULE APPLICABILITY

A. State Regulations

The proposed project, administrative changes to an existing state permit that will allow increased production and emission for three existing kilns, is subject to preconstruction review under provisions of Chapter 403,FS, and Chapter 17-2, FAC.

The plant is in a nonattainment area for ozone (17-2.410(1)), unclassified area for SO₂ (17-2.430(2)), attainment for the other criteria pollutants (17-2.420) and in the area of influence (17-2.100(14)) of the Hillsborough County particulate matter (PM) nonattainment area.

The potential emissions, in TPY, from the control equipment after the proposed change are as follows:

<u>Source</u>	<u>PM</u>	<u>SO₂</u>	<u>F</u>
Paragon kiln No. 2	51.4	536	2.37
Fluid Bed Reactor No. 1	49.5	3.5	3.67
Fluid Bed Reactor No. 2	<u>49.5</u>	<u>3.5</u>	<u>3.67</u>
Total	150.4	543.6	9.71

The plant is a major source for PM and SO₂ as defined in Chapter 17-2.100(96) because the potential emissions of each of these criteria pollutants exceed 100 TPY.

The reduction in PM emissions from unconfined sources achieved by the Company can not 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.).

The changes requested by AMAX do not meet the definition of "modification", 17-2.100(102)(b), because no physical changes to process or control equipment will be made and the production rates of the kilns are not limited by permit.

The facility is subject to 17-2.650, RACT, for ozone. Since VOC is not among the pollutants emitted by the affected sources, 17-2.650(1), VOC RACT, is not applicable to the Company's proposed action. The sources are exempt from 17-2.650(2), PM RACT, because the PM impact is below the limits stated in 17-2.650(2)(b) of 1 ug/m³ annual and 5 ug/m³ daily.

Therefore, the applications will be reviewed under the rules in Section 17-2.600, Specific Source Emission Limiting Standards. Allowable PM emissions will be based on 17-2.610(1), process weight table. Allowable fluoride (F) emission will be current actual emissions so as to avoid a significant net emission increase that could trigger PSD review for this pollutant. Sulfur content of the fuel oil will be listed in the permit to aid in evaluating future increases of SO₂ from this facility.

B. Federal Regulations

The proposed modification is not subject to federal prevention of significant deterioration (PSD) regulations, Section 52.21 of Title 40 of the Code of Federal Regulations (40 CFR 52.21) as amended in the Federal Register of August 7, 1980 (45 CFR 52.21) because the source can accommodate the proposed production with no physical changes required to either the sources or the facility and the production rate is not currently limited by permit.

III. SUMMARY OF EMISSIONS AND AIR QUALITY IMPACT

A. Emission Limitations

The following table summarizes the change in emissions from the three kilns subject to the modification.

	Current			Proposed		
	PM	SO ₂	F	PM	SO ₂	F
Fluid Bed Reactor No. 1	--	3.5 TPY	-	49.5 TPY 14.02 lbs/hr	3.5 TPY	3.7 TPY 1.04 lbs/hr
Fluid Bed Reactor No. 2	--	3.5 TPY	-	49.5 TPY 14.02 lbs/hr	3.5 TPY	3.7 TPY 1.04 lbs/hr
Paragon Kiln No. 2	--	536 TPY	-	51.4 TPY 13.03 lbs/hr	536 TPY	2.35 TPY 0.595 lbs/hr
TOTAL	87.36 TPY 20 lbs/hr	543 TPY	9.8 TPY	150.4 TPY 41.07 lbs/hr	543 TPY	9.75 TPY 2.68 lbs/hr

Each kiln will have a separate allowable emission. AMAX will be required to perform periodic (annual for the state, semiannually for the County) measurements of the emissions from each kiln by EPA method 5(PM) and 13(F) to determine the compliance status of that source. Federal, state and county regulatory agencies also have the authority to conduct emission

test at any reasonable time to determine the compliance status of the kilns.

All three kilns discharge through a common stack. Physical limitations of the process prohibit the fluid bed reactors from being shut down within a reasonable time. The Paragon kiln can be shut down on a short notice.

To accomplish the required periodic compliance testing, it will be necessary for AMAX to install a separate stack on each kiln or schedule their operation in such a manner that two of the kilns can be shut down while a compliance test is being performed on the remaining kiln. To allow the regulatory agencies to conduct compliance test will require separate stacks on each kiln or:

1. Install acceptable sample ports in the duct between the paragon kiln and the common stack and:
2. Shut down the Paragon kiln within 24 hours of a request from a regulatory agency to allow testing of the fluid bed kilns.
3. Accept a PM emission limit on the combined emissions of the two fluid bed reactor, in lbs PM/ton feed, based on maximum allowable emissions at maximum feed rate. Unless both units are at maximum production, this will be a more restrictive standard than would be allowed if each unit could be tested separately. AMAX is not authorized to use this limit for determining the compliance status because a "bubble standard" is not approved for the kilns.

As the cost of construction of separate stacks for each kiln is prohibitive, the construction permit will be issued with the alternate compliance testing program discussed above.

To assure the sulfur dioxide emissions are not increased, the department will prohibit the use of fuel oil in the fluid bed reactors except during startup. Limits will also be placed on the amount of fuel oil that can be used during startups. As the production and fuel oil consumption of the Paragon kiln are not changed by this modification, the existing limits will be placed in the permit for that source.

The permits will list the allowable fluoride emissions requested by AMAX. These limits will result in a slight decrease in fluoride emissions, on an annual basis.

B. Ambient Air Quality Impact

The results of air quality modeling shows the maximum annual impact of PM from the facility on the Hillsborough County particulate matter nonattainment area is 0.6 micrograms per cubic meter (ug/m^3), annually, and 4.2 ug/m^3 , daily. The impacts considered significant are 1.0 and 5.0 ug/m^3 , respectively, so the source will not have a significant impact on the PM nonattainment area.

Thus, there is reasonable assurance that the modification will not lead to any violation of the ambient air quality standards.

IV. CONCLUSION

Based on a review of the data submitted by AMAX Phosphate Inc., the department has concluded that the Company's requested modification can be approved without causing any violations of the air pollution control regulations.

Therefore, the department proposes to issue AMAX Phosphate Inc., separate permits for Paragon kiln No. 2 and fluid bed reactors No. 1 and 2, allow the production to increase in the two fluid bed reactors and increase the allowable particulate matter emissions from all three units. The General and Specific Conditions listed in the proposed permits (attached) will assure compliance with all applicable air pollution regulations.

No. 0157767
 RECEIPT FOR CERTIFIED MAIL
 NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO		Mr. J. J. Lewis	
STREET AND NO.		P. O. Box 790	
P. O. STATE AND ZIP CODE		Plant City, FL 33566	
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	¢	
	SPECIAL DELIVERY	¢	
	RESTRICTED DELIVERY	¢	
	OPTIONAL SERVICES 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	¢
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢	
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE		11/19/82	

PS Form 3800, Apr. 1976

PS Form 3811, Jan. 1978

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. J. J. Lewis
 Post Office Box 790
 Plant City, FL 33566

3. ARTICLE DESCRIPTION:
 REGISTERED NO. CERTIFIED NO. INSURED NO.
 0157767

(Always obtain signature of addressee or agent)

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

DATE OF DELIVERY 11-22-82

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

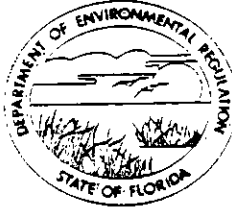
TELEK'S INITIALS

NOV 22 1982
 PLANT CITY, FL 33566

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIRSTONE ROAD
TALLAHASSEE, FLORIDA 32301



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

APPLICANT:

AMAX Phosphate, Inc.
P. O. Box 790
Plant City, Florida 33566

PERMIT/CERTIFICATION
NO. AC 29-57073

COUNTY: Hillsborough
County
PROJECT: Paragon Kiln
No. 2

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:

Modification to the existing No. 5 fuel oil fired Paragon kiln No. 2 that processes eight tons per hour prepared feed and is equipped with dust chambers, spray towers and a Tellerett packed cross flow wet scrubber to control fluoride and particulate matter emissions. The kiln discharges through a common stack with fluid bed reactors No. 1 and 2. The source is located at AMAX Phosphate, Inc. chemical complex on Coronet Road, Plant City, Hillsborough County, Florida. The UTM coordinates of the site are 17-393.8 E and 3096.3 N. Modification shall be in accordance with the application titled Paragon Kiln No. 2 (Defluorinating Unit) and signed by Mr. J. J. Lewis on 6/10/82.

PERMIT NO.: AC 29-57073
APPLICANT: AMAX Phosphate, Inc.

9. The Company will conduct periodic compliance tests (annually for the department and semiannually for the county) at 90 to 100 percent permitted capacity for particulate matter and fluoride and submit an annual report of the actual operation of the facility which will include, as a minimum: quantity (maximum and average) phosphate feed processed, amount and percent sulfur (maximum and average) No. 5 fuel oil used, total hours of operation of the kiln and stack test results.
10. The applicant will demonstrate compliance with the conditions of this construction permit and submit a complete application for an operating permit to Hillsborough County Environmental Protection Commission prior to 90 days before the expiration date of this permit. The applicant may continue to operate in compliance with all terms of this construction permit until its expiration or until issuance of an operating permit.

Expiration Date: April 30, 1983

Issued this _____ day of _____, 19_____.

_____ Pages Attached.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

Signature

PAGE 4 OF 4

PERMIT NO.: AC 29-57073
APPLICANT: AMAX Phosphate, Inc.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions, and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.
3. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.
4. As provided in subsection 403.087(6), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.
6. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.111, F.S.
7. In the case of an operation permit, permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or department rules.
8. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant, or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.
9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.
10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.
11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.
12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
13. This permit also constitutes:
 - Determination of Best Available Control Technology (BACT)
 - Determination of Prevention of Significant Deterioration (PSD)
 - Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

PERMIT NO.: AC 29-57073
APPLICANT: AMAX Phosphate, Inc.

SPECIFIC CONDITIONS:

1. This permit replaces AO 29-6778 as it applies to Paragon kiln No. 2.
2. Maximum prepared feed input to Paragon kiln No. 2 will not exceed eight (8) tons per hour. Calibrated scales or an alternate method approved by the department will be available to determine the process weight input to the kiln.
3. Maximum operation time of the kiln will not exceed 7,900 hours per year.
4. Particulate matter emissions, as determined by EPA reference Method 5, will not exceed 13.03 lbs/hr or the quantity allowed by 17-2.610(1), FAC, whichever is lowest. When processing less than 8 TPH prepared feed, allowable particulate matter emission is determined by the following formula:

$$E=3.59 P^{0.62}$$

where E is allowable emissions in lbs/hr and P is process feed input to the kiln in TPH.

5. Fluoride emission will not exceed 0.60 lbs/hr as determined by reference method 13A or 13B, 40 CFR 60, or other methods approved by the department.
6. Sulfur content of the No. 5 fuel oil used in this kiln will not exceed 2.08 per cent nor shall heat input to the kiln exceed 62 MMBTU/hr. The No. 5 fuel oil system will not be connected to the No. 2 fuel oil system at this facility.
7. Existing stack sampling facilities between the scrubber and the fan will be upgraded to meet the specifications listed in Chapter 2.700(4), FAC.
8. The following data from the Tellerett packed cross flow wet scrubber serving Paragon kiln No. 2 will be obtained each day the kiln operates and records of the data kept for 2 years for regulatory agency inspection.
 - a. Pressure drop of the gas in inches of water;
 - b. Flow rate of scrubber water in GPM (a weir or similar device may be used to obtain this flow);
 - c. pH of the scrubber water;
 - d. Pressure of the scrubber water.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

APPLICANT: AMAX Phosphate, Inc.

PERMIT/CERTIFICATION
NO: AC 29-57074

COUNTY: Hillsborough

PROJECT: Fluid Bed Reactor
No. 2

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:

Increase prepared phosphate feed input to 9 TPH in the existing natural gas fired fluid bed reactor No. 2. This reactor is controlled by a dust cyclone, spray tower, Tellerett packed cross flow scrubbers and Ceilcote double stage ionizing wet scrubber (IWS) and discharges through a common 152 foot high stack with two other kilns (Paragon kiln No. 2 and fluid bed reactor No. 1). The source is located at AMAX phosphate, Inc. chemical complex on Coronet Road, Plant City, Hillsborough County, Florida. The UTM coordinates of the site are 17-393.8 E and 3096.3 N. Modifications shall be in accordance with the application titled Fluid Bed Reactor No. 2 (Defluorinating Unit) and signed by Mr. J. J. Lewis on 6/10/82.

PERMIT NO.: AC 29-57074
APPLICANT: AMAX Phosphate, Inc.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions," and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.
3. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue; and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.
4. As provided in subsection 403.087(6), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.
6. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.111, F.S.
7. In the case of an operation permit, permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or department rules.
8. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant, or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.
9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.
10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.
11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.
12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
13. This permit also constitutes:
 - Determination of Best Available Control Technology (BACT)
 - Determination of Prevention of Significant Deterioration (PSD)
 - Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

PERMIT NO.: AC 29-57074
APPLICANT: AMAX Phosphate, Inc.

SPECIFIC CONDITIONS:

1. This permit replaces AO 29-6778 as it applies to Fluid Bed Reactor No. 2.
2. Maximum prepared feed input to Fluid Bed Reactor No. 2 will not exceed nine (9) tons per hour. Calibrated scales or an alternate method approved by the department will be available to determine the process weight input to the kiln.
3. Maximum operation time of the kiln will not exceed 7,056 hours per year.
4. Particulate matter emission, as determined by EPA reference Method 5, will not exceed 14.02 lbs/hr or 1.56 lbs/ton phosphate feed input, whichever is more restrictive.
5. Fluoride emission will not exceed 1.04 lbs/hr as determined by reference method 13A or 13B, 40 CFR 60, or other methods approved by the department.
6. Heat input to the kiln is limited to 72 MMBTU/hr. Only natural gas fuel may be used during production. Up to 50,000 gallons per year of virgin No. 2 fuel oil with a maximum of 1.0 percent sulfur may be used for startup only of this reactor. Use of No. 5 fuel oil anytime and No. 2 fuel oil as a supplementary fuel in this kiln is prohibited by this permit. The No. 2 fuel oil system will not be connected to the No. 5 fuel oil system.
7. Sample ports in the 152 foot high common stack will be used for periodic compliance test required by this permit. All other sources of air pollution that use this common stack will cease operation when the periodic compliance test on Fluid Bed Reactor No. 2 is being performed.
8. The following data on the control devices serving fluid bed reactor No. 2 will be obtained each day the reactor operates and records of the data kept for 2 years for regulatory agency inspection.
 - a. Pressure drop of the gas through the scrubber;
 - b. Flow rate of scrubber water;
 - c. pH of the scrubber water;
 - d. Pressure of the scrubber water.
 - e. Voltage of the electrostatic precipitator (ESP);
 - f. Amps to the ESP;
 - g. Sparking rate of the ESP.

PERMIT NO.: AC 29-57074
APPLICANT: AMAX Phosphate, Inc.

9. The Company shall conduct periodic compliance test (annually for the department and semiannually for the county) for particulate matter and fluoride while the kiln is operating at 90 to 100 percent of permitted capacity and submit an annual operation report for the kiln which will include, as a minimum: quantity (maximum and average) phosphate feed processed, amount and percent sulfur in the No. 2 fuel oil used for startup, total hours of operation of the kiln and stack test results.
10. The applicant will demonstrate compliance with the conditions of this construction permit and submit a complete application for an operating permit to Hillsborough County Environmental Protection Commission prior to 90 days before the expiration date of this permit. The applicant may continue to operate in compliance with all terms of this construction permit until its expiration or until issuance of an operating permit.

Expiration Date: April 30, 1983

Issued this _____ day of _____, 19_____

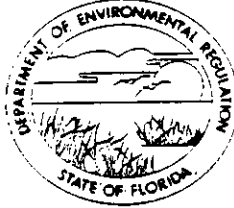
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

_____ Pages Attached.

Signature

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

APPLICANT:

AMAX Phosphate, Inc.

PERMIT/CERTIFICATION
NO. AC 2957072

COUNTY: Hillsborough
County

PROJECT: Fluid Bed Reactor
No. 1

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:

Increase feed input to 9 TPH in the existing natural gas fired fluid bed reactor No. 1. This reactor is controlled by a dust cyclone, spray tower, Tellerett packed cross flow scrubbers and Ceilcote double stage ionizing wet scrubber (IWS) and discharges through a common 152 foot high stack with two other kilns (Paragon kiln No. 2 and fluid bed reactor No. 2). The source is located at AMAX phosphate, Inc. Chemical Complex on Coronet Road, Plant City, Hillsborough County, Florida. The UTM coordinates of the site are 17-393.8 E and 3096.3 N. Modifications shall be in accordance with the application titled Fluid Bed Reactor No. 1 (Defluorinating Unit) and signed by Mr. J. J. Lewis on 6/10/82.

PERMIT NO.: AC 2957072
APPLICANT: AMAX Phosphate, Inc.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions, and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings; exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.
3. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance; including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.
4. As provided in subsection 403.087(6), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.
6. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.111, F.S.
7. In the case of an operation permit, permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or department rules.
8. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant, or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.
9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.
10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.
11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.
12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
13. This permit also constitutes:
 - Determination of Best Available Control Technology (BACT)
 - Determination of Prevention of Significant Deterioration (PSD)
 - Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

PERMIT NO.: AC 2957072
APPLICANT: AMAX Phosphate, Inc.

SPECIFIC CONDITIONS:

1. This permit replaces AO 29-6778 as it applies to Fluid Bed Reactor No. 1.
2. Maximum prepared feed input to Fluid Bed Reactor No. 1 will not exceed nine (9) tons per hour. Calibrated scales or an alternate method approved by the department will be available to determine the process weight input to the kiln.
3. Maximum operation time of the kiln will not exceed 7,056 hours per year.
4. Particulate matter emission, as determined by EPA reference Method 5, will not exceed 14.02 lbs/hr or 1.56 lbs/ton phosphate feed input, whichever is more restrictive.
5. Fluoride emission will not exceed 1.04 lbs/hr as determined by reference method 13A or 13B, 40 CFR 60, or other methods approved by the department.
6. Heat input to the kiln is limited to 72 MMBTU/hr. Only natural gas fuel may be used during production. Up to 50,000 gallons per year of virgin No. 2 fuel oil with a maximum of 1.0 percent sulfur may be used for startup only of this reactor. Use of No. 5 fuel oil anytime and No. 2 oil as a supplementary fuel in this kiln is prohibited by this permit. The No. 2 fuel oil system will not be connected to the No. 5 fuel oil system.
7. Sample ports in the 152 foot high common stack will be used for periodic compliance test required by this permit. All other sources of air pollution that use this common stack will cease operation when the periodic compliance test on Fluid Bed Reactor No. 1 is being performed.
8. The following data on the control devices serving fluid bed reactor No. 1 will be obtained each day the reactor operates and records of the data kept for 2 years for regulatory agency inspection.
 - a. Pressure drop of the gas through the scrubber;
 - b. Flow rate of scrubber water;
 - c. pH of the scrubber water;
 - d. Pressure of the scrubber water.
 - e. Voltage of the electrostatic precipitator (ESP);
 - f. Amps to the ESP;
 - g. Sparking rate of the ESP.

PERMIT NO.: AC 2957072
APPLICANT: AMAX Phosphate Inc.

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10. The applicant will demonstrate compliance with the conditions of this construction permit and submit a complete application for an operating permit to Hillsborough County Environmental Protection Commission prior to 90 days before the expiration date of this permit. The applicant may continue to operate in compliance with all terms of this construction permit until its expiration or until issuance of an operating permit.

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Issued this _____ day of _____, 19_____.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

_____ Pages Attached.

Signature

PAGE 4 OF 4

Applications and other referenced
correspondence are in the Application
Section of this file.