

TO: Clair Fancy

THRU: Al Linero *aal* 10/31

FROM: Syed Arif *Syed Arif*

DATE: October 31, 2000

SUBJECT: US Agri-Chemicals Corporation  
1050051-009-AC (PSD-FL-278)

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Attached is the Public Notice package for increasing the production rate at the above referenced facility.

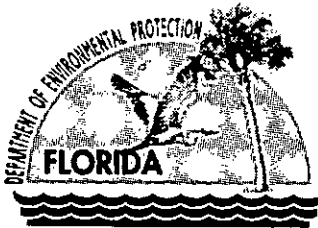
The production rate of the existing Sulfuric Acid Plants Nos. 1 and 2 will be increased to 3000 tons per day, each. The production rate of the existing Phosphoric Acid Trains A and B will be increased from 44 to 50 tons per hour  $P_2O_5$  input, each. A proportional increase will result in the processing rate of the Phosphoric Acid Tank Farm. Sulfur dioxide and sulfuric acid mist emissions from the sulfuric acid plants will be controlled by the double absorption process and mist eliminators, respectively. Fluoride emissions from the phosphoric acid trains will be controlled by the use of scrubbers using process pond water. An air quality impact analysis was required for sulfur dioxide and nitrogen oxides.

October 31 is Day 63 for the project.

I recommend your approval and signature.

AAL/sa

Attachments



Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary


## P.E. Certification Statement

**Permittee:**  
US Agri-Chemicals Corporation  
Ft. Meade Chemical Plant

**DEP File No.** 1050051-009-AC  
**Permit No.** PSD-FL-278

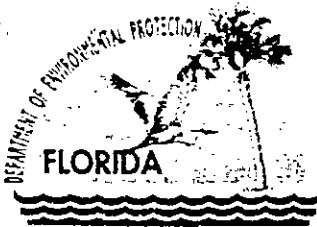
**Project type:** Permit for the construction /modification of the Ft. Meade Chemical Plant to increase production rate of the existing Sulfuric Acid Plants Nos. 1 and 2 to 3000 tons per day, each; increase the production rate of the existing Phosphoric Acid Trains A and B from 44 to 50 tons per hour  $P_2O_5$  input, each; and a proportional increase in the processing rate of the Phosphoric Acid Tank Farm. Sulfur dioxide and sulfuric acid mist emissions from the sulfuric acid plants will be controlled by the double absorption process and mist eliminators, respectively. Fluoride emissions from the phosphoric acid trains will be controlled by the use of scrubbers using process pond water. An air quality impact analysis was required for sulfur dioxide and nitrogen oxides.

*I HEREBY CERTIFY that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).*

  
Syed Arif, P.E. 10/31/00  
Date  
Registration Number: 51861

Department of Environmental Protection  
Bureau of Air Regulation  
New Source Review Section  
111 South Magnolia Drive, Suite 4  
Tallahassee, Florida 32301  
Phone (850) 488-0114  
Fax (850) 922-6979

"More Protection, Less Process"



Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

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## P.E. Certification Statement

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US Agri-Chemicals Corporation  
Ft. Meade Chemical Plant

**DEP File No.** 1050051-009-AC  
**Permit No.** PSD-FL-278

**Project type:** Permit for the construction /modification of the Ft. Meade Chemical Plant to increase production rate of the existing Sulfuric Acid Plants Nos. 1 and 2 to 3000 tons per day, each; increase the production rate of the existing Phosphoric Acid Trains A and B from 44 to 50 tons per hour  $P_2O_5$  input, each; and a proportional increase in the processing rate of the Phosphoric Acid Tank Farm. Sulfur dioxide and sulfuric acid mist emissions from the sulfuric acid plants will be controlled by the double absorption process and mist eliminators, respectively. Fluoride emissions from the phosphoric acid trains will be controlled by the use of scrubbers using process pond water. An air quality impact analysis was required for sulfur dioxide and nitrogen oxides.

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Syed Arif, P.E. 10/31/00  
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Department of Environmental Protection  
Bureau of Air Regulation  
New Source Review Section  
111 South Magnolia Drive, Suite 4  
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Phone (850) 488-0114  
Fax (850) 922-6979

"More Protection, Less Process"

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Received by (Please Print Clearly)	B. Date of Delivery 11-05-00
1. Article Addressed to: Mr. Phong T. Vo, Gen. Mgr. Engineering and Technical Services U. S. Agri-Chemical Corp 3225 State Rd. 630 West Ft. Meade, FL 33841		C. Signature X <i>U. S. Agri-Chem</i>	<input type="checkbox"/> Agent <input type="checkbox"/> Addressee
2. Article Number (Copy from service label) 7099 3400 0000 1453 0142		D. Is delivery address different from item 1? If YES, enter delivery address below: <input type="checkbox"/> Yes <input type="checkbox"/> No	
PS Form 3811, July 1999		3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
Domestic Return Receipt		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
		102595-99-M-1789	

**U.S. Postal Service**  
**CERTIFIED MAIL RECEIPT**  
(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:  
Mr. Phong T. Vo, Gen. Mgr.

Postage	\$	US Agri-Chem.
Certified Fee		Postmark
Return Receipt Fee (Endorsement Required)		Here
Restricted Delivery Fee (Endorsement Required)		
<b>Total Postage &amp; Fees</b>	\$	

Address (Please Print Clearly) (No Postage or Insurance)  
Mr. Phong T. Vo, Gen. Mgr.  
Street, Apt., Box or PO Box No.  
3225 State Rd 630 West  
City, State, ZIP  
Ft. Meade, FL 33841

PS Form 3800, July 1999 See Reverse for Instructions

7099 3400 0000 1453 0142



Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary

October 31, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Phong T. Vo, General Manager  
Engineering and Technical Services  
U. S. Agri-Chemicals Corporation  
3225 State Rd. 630 West  
Ft. Meade, Florida 33841

Re: DRAFT Permit No. 1050051-009-AC (PSD-FL-278)  
Ft. Meade Chemical Plant

Dear Mr. Vo:

Enclosed is one copy of the Draft Air Construction Permit for modification of the Ft. Meade Chemical Plant, located at 3225 State Rd. 630 West, Ft. Meade, Polk County. The Technical Evaluation and Preliminary Determination, Best Available Control Technology, the Department's Intent to Issue Air Construction Permit and the "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT" are also included.

The "PUBLIC NOTICE" must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please contact Syed Arif, P.E., at 850/921-9528 or Mr. Linero at 850/921-9523..

Sincerely,

C. H. Fancy, P.E., Chief,  
Bureau of Air Regulation

CHF/sa

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

In the Matter of an  
Application for Permit by:

Mr. Phong T. Vo, General Manager E & TS  
US Agri-Chemicals Corporation  
3225 State Road 630 West  
Ft. Meade, Florida 33841

DEP File No. 1050051-009-AC  
Draft Permit No. PSD-FL-278  
Ft. Meade Chemical Plant  
Polk County

### INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit (copy of DRAFT Permit attached) for the proposed project, detailed in the application specified above and the attached Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, US Agri-Chemicals Corporation, submitted a complete application on August 29, 2000 to the Department for an air construction permit to increase the sulfuric acid and phosphoric acid production capability within the complex and to increase the processing rate of the phosphoric acid tank farm at its Ft. Meade Chemical Plant. The plant is located at 3225 State Rd. 630 West, Ft. Meade, Polk County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a review for the Prevention of Significant Deterioration (PSD), a determination of Best Available Control Technology (BACT) and an air construction permit are required for the proposed work.

The Department intends to issue this Air Construction Permit based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT." The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the Final Air Construction Permit in accordance with the conditions of the attached Draft Air Construction permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for a public meeting concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the Draft Air Construction Permit, the permitting authority shall issue a Revised Draft Air Construction Permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would

justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.



C. H. Fancy, P.E., Chief  
Bureau of Air Regulation

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE AIR CONSTRUCTION PERMIT (including the PUBLIC NOTICE, Technical Evaluation and Preliminary Determination, Draft BACT Determination, and the DRAFT permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 11/1/00 to the person(s) listed:

Phong T. Vo, USAC\*  
Gregg Worley, EPA  
John Bunyak, NPS  
Bill Thomas, DEP  
John Koogler, K & A

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Charlotte J. Hanger 11/1/00  
(Clerk) (Date)



**PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT**

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DEP File No. 1050051-009-AC (PSD-FL-278)  
Ft. Meade Chemical Plant  
US Agri-Chemicals Corporation  
Polk County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to US Agri-Chemicals Corporation to increase the sulfuric acid and phosphoric acid production capability within the complex and to increase the processing rate of the Phosphoric Acid Tank Farm at its Ft. Meade Chemical Plant. The plant is located at 3225 State Rd. 630 West, Ft. Meade, Polk County.

A Best Available Control Technology (BACT) determination was required for sulfur dioxide (SO<sub>2</sub>), sulfuric acid mist (SAM), nitrogen oxides (NO<sub>x</sub>) and fluorides (F) pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The applicant's name and address are US Agri-Chemicals Corporation, 3225 State Rd. 630 West, Ft. Meade, Florida 33841.

The physical production capability of the existing Sulfuric Acid Plants Nos. 1 and 2 will be increased to 3000 tons per day to match the previously-permitted production rates. The production rate of the existing Phosphoric Acid Trains A and B will be increased from 44 to 50 tons per hour P<sub>2</sub>O<sub>5</sub> input, each. A proportional increase will result in the processing rate of the Phosphoric Acid Tank Farm. Sulfur dioxide and sulfuric acid mist emissions from the sulfuric acid plants will be controlled by the double absorption process and mist eliminators, respectively.

The BACT emission limits for SO<sub>2</sub> and SAM are proposed to be 3.5 and 0.12 pounds per ton of sulfuric acid respectively SO<sub>2</sub>. These are the lowest values to-date in the fertilizer industry. Fluoride emissions from the phosphoric acid trains will be controlled by the use of scrubbers using process pond water. The BACT fluoride emission limit is proposed to be 0.012 pounds per ton of P<sub>2</sub>O<sub>5</sub> input. This is equal to the lowest value to-date.

An air quality impact analysis for sulfur dioxide and nitrogen oxides was conducted. Emissions from the facility will not significantly contribute to or cause a violation of any state or federal ambient air quality standards. The maximum predicted NO<sub>2</sub> impacts were insignificant so no PSD Class II increment consumption analysis was required for NO<sub>2</sub>. The maximum predicted SO<sub>2</sub> PSD Class II increments in the vicinity of the project consumed by all sources in the area, including this project, will be as follows:

	<u>Increment Consumed</u> ( $\mu\text{g}/\text{m}^3$ )	<u>Allowable Increment</u> ( $\mu\text{g}/\text{m}^3$ )	<u>Increment Consumed</u> (Percent)
SO <sub>2</sub>			
3-hour	259	512	51
24-hour	63	91	69
Annual	0	20	0

The Department will issue the Final Air Construction Permit in accordance with the conditions of the Draft Air Construction Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The permitting authority has determined that an Air Construction Permit is required.

The Department will accept written comments and requests for a public meeting concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection  
Bureau of Air Regulation  
111 S. Magnolia Drive, Suite 4  
Tallahassee, Florida 32301  
Telephone: 850/488-0114  
Fax: 850/922-6979

Department of Environmental Protection  
Southwest District Office  
3804 Coconut Palm Drive  
Tampa, Florida 33619  
Telephone: 813/744-6100  
Fax: 813/744-6458

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

TECHNICAL EVALUATION  
AND  
PRELIMINARY DETERMINATION

US AGRI-CHEMICALS CORPORATION

FT. MEADE CHEMICAL PLANT  
Ft. Meade, Polk County

DEP File No. 1050051-009-AC  
PSD-FL-278

Department of Environmental Protection  
Division of Air Resources Management  
Bureau of Air Regulation

October 31, 2000

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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## 1. APPLICATION INFORMATION

### 1.1 Applicant Name and Address

US Agri-Chemicals Corporation  
3225 State Rd. 630 West  
Ft. Meade, Florida 33841

Authorized Representative: Mr. Phong T. Vo; General Manager of Eng. And Tech. Services

### 1.2 Reviewing and Process Schedule

10-18-1999: Date of Receipt of Application  
11-03-1999: DEP's 1<sup>st</sup> Completeness Request  
02-02-2000: Applicant's response to DEP's 1<sup>st</sup> Completeness Request  
03-03-2000: DEP's 2<sup>nd</sup> Completeness Request  
06-23-2000: Applicant's response to DEP's 2<sup>nd</sup> Completeness Request  
07-20-2000: DEP's 3<sup>rd</sup> Completeness Request  
07-21-2000: DEP's 4<sup>th</sup> Completeness Request  
08-29-2000: Applicant's response to DEP's 3<sup>rd</sup> and 4<sup>th</sup> Completeness Requests. Application Complete  
11-xx-2000: Issue Intent

## 2. FACILITY INFORMATION

### 2.1 Facility Location

The agricultural chemicals manufacturing facility is located at 3225 State Rd. 630 West, Ft. Meade, Polk County. This site is over 100 kilometers from the Chassahowitzka National Wildlife Refuge, a Class I Area. The UTM coordinates of this facility are Zone 17; 416.2 km E; 3068.7 km N.

### 2.2 Standard Industrial Classification Codes (SIC)

Major Group No.	28	Chemicals and Allied Products
Industry Group No.	2874	Phosphate Fertilizers

### 2.3 Facility Category

This agricultural chemicals facility makes sulfuric acid, phosphoric acid, monoammonium phosphate (MAP) and diammonium phosphate (DAP).

The sulfuric acid is produced on-site by burning elemental sulfur, converting the resulting sulfur dioxide to sulfur trioxide, and absorbing it into a recirculating sulfuric acid solution. Phosphoric acid is made by acidulation of phosphate rock with sulfuric acid. Waste gypsum is produced and stacked. The phosphoric acid is reacted with ammonia to make MAP and DAP. The facility is classified as a major or Title V source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), or volatile organic compounds (VOC) exceed 100 TPY.

This industry is included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a major facility with respect to Rule 62-212.400, Prevention of Significant Deterioration

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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(PSD). Per Table 62-212.400-2, modifications at the facility resulting in emissions increases greater than PSD significant levels, require review per the PSD rules and a determination of Best Available Control Technology (BACT) per Rule 62-212, F.A.C.

## 3. PROCESS DESCRIPTION

### 3.1 Sulfuric Acid Production

The plants are sulfur-burning double absorption sulfuric acid plants. This is the most common process for producing sulfuric acid in the U.S. phosphate fertilizer industry and it continues to be improved and employed at both existing and new installations in the U.S. and throughout the world.

The process is comprised of three distinct steps. These are sulfur combustion and gas preparation; catalytic conversion of sulfur dioxide to sulfur trioxide; and absorption of sulfur trioxide into sulfuric acid.

A great deal of heat is evolved throughout the process. Its management is an important consideration in optimizing the conversion and absorption steps as well as providing useful energy to the plant. Reaction kinetics and thermodynamics are also important factors. Following is a description of the process:

Atmospheric air is drawn through a filter by the main compressor and then contacted with a recirculating stream of sulfuric acid in the drying tower. The dried air is blown by a steam-driven compressor into a refractory-lined burner where molten sulfur is combusted to produce sulfur dioxide ( $\text{SO}_2$ ). The hot combustion gases are cooled in a waste heat boiler to recover excess heat as steam.

The gas stream is then introduced into a converter packed with catalyst. In a series of steps, the  $\text{SO}_2$  and excess oxygen from the combustion air are progressively converted to  $\text{SO}_3$ . The gases containing  $\text{SO}_3$ , some unconverted  $\text{SO}_2$ , oxygen, and atmospheric nitrogen are conveyed to an "interpass tower" where the  $\text{SO}_3$  is absorbed into a stream of concentrated sulfuric acid and reacted with excess water to further strengthen the acid. By removing most  $\text{SO}_3$  in the interpass absorber, the equilibrium favors further conversion of the remaining  $\text{SO}_2$  to  $\text{SO}_3$ . This is accomplished in the final pass of the converter. The resulting gas stream is conveyed to the high-efficiency "final tower" where most of the remaining  $\text{SO}_3$  reacts with water in a 98-99 percent sulfuric acid stream.

Throughout the conversion, the temperatures are moderated by an intricate arrangement of heat exchangers so that the excess heat is removed. Mist eliminators are used to insure that sulfuric acid sprays and fine mists are contained, thereby protecting plant equipment and minimizing emissions to the atmosphere.

### 3.2 Phosphoric Acid Production

Phosphoric acid is made by reacting wet phosphate rock with sulfuric acid in reaction tanks, filtering the acid, concentrating the acid, and pumping the acid to various processes and/or storage, as necessary. Waste gypsum from the process is pumped and stacked. Air emissions of fluorides are controlled by scrubbers using pond water.

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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Acid clarification removes certain impurities from the phosphoric acid. Purified acid is pumped into storage tanks. Air emissions of fluorides are controlled by scrubbers using pond water.

### 4. PROJECT DESCRIPTION

This permit addresses the following emissions units:

EMISSION UNIT NO.	SYSTEM	EMISSION UNIT DESCRIPTION
016	Product	Sulfuric Acid Plant No. 1
017	Product	Sulfuric Acid Plant No. 2
005	Process	Phosphoric Acid A Train
020	Process	Phosphoric Acid B Train
021	Process	Phosphoric Acid Tank Farm

The proposed project includes an increase in the production rate of the existing Sulfuric Acid Plants Nos. 1 and 2 to 3000 tons per day, each; to match the previously-permitted production rates, an increase in the production rate of the existing Phosphoric Acid Trains A and B from 44 to 50 tons per hour P<sub>2</sub>O<sub>5</sub> input, each; and a proportional increase in the processing rate of the Phosphoric Acid Tank Farm. There will be no changes to the existing molten sulfur system permit, which allows the storage and handling of 1974 tpd of molten sulfur.

Some equipment changes and upgrades will be necessary to increase the production rates of the emission units. The proposed project will result in actual increases in sulfur dioxide (SO<sub>2</sub>), sulfuric acid mist (SAM), nitrogen oxides (NO<sub>x</sub>) and fluorides (F). Emissions increases of all four pollutants listed above are above their respective significant emission levels per Table 62-212.400-2, F.A.C., and require PSD new source review.

### 5. RULE APPLICABILITY

The project is subject to the federal new source performance standards (NSPS) for wet-process phosphoric acid plants (40 CFR 60, Subpart T) and for sulfuric acid plants (40 CFR 60, Subpart H), incorporated by reference in Rule 62-204.800, F.A.C. The phosphoric acid plant is also subject to the 40 CFR 63 Subpart AA (NESHAPs). The Phosphoric Acid Tank Farm is not regulated under 40 CFR 60 Subpart T or 40 CFR 63 Subpart AA.

The proposed project is also subject to permitting, preconstruction review, emissions limits and compliance requirements under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.).

This facility is located in Polk County, an area designated as attainment for all criteria pollutants in accordance with Rule 62-204.360, F.A.C. The proposed project is subject to review under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), because the potential emission increases for sulfur dioxide, sulfuric acid mist, nitrogen oxides and fluorides exceed the significant emission rates given in Chapter 62-212, Table 62-212.400-2, F.A.C. PSD review requires an assessment of air quality impacts and a determination of Best Available Control Technology (BACT).

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The emission units affected by this permit modification shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein) and, specifically, the following Chapters and Rules:

Chapter 62-4	Permits.
Rule 62-204.220	Ambient Air Quality Protection
Rule 62-204.240	Ambient Air Quality Standards
Rule 62-204.260	Prevention of Significant Deterioration Increments
Rule 62-204.360	Designation of Prevention of Significant Deterioration Areas
Rule 62-204.800	Federal Regulations Adopted by Reference
Rule 62-210.300	Permits Required
Rule 62-210.350	Public Notice and Comments
Rule 62-210.370	Reports
Rule 62-210.550	Stack Height Policy
Rule 62-210.650	Circumvention
Rule 62-210.700	Excess Emissions
Rule 62-210.900	Forms and Instructions
Rule 62-212.300	General Preconstruction Review Requirements
Rule 62-212.400	Prevention of Significant Deterioration
Rule 62-213	Operation Permits for Major Sources of Air Pollution
Rule 62-296.320	General Pollutant Emission Limiting Standards
Rule 62-297.310	General Test Requirements
Rule 62-297.401	Compliance Test Methods
Rule 62-297.520	EPA Continuous Monitor Performance Specifications

### **6. SOURCE IMPACT ANALYSIS**

#### **6.1 Air Quality Analysis**

##### **6.1.1 Introduction**

According to the application, the proposed project will increase emissions of four pollutants in excess of PSD significant amounts: SO<sub>2</sub>, NO<sub>x</sub>, F and SAM. SO<sub>2</sub> and NO<sub>x</sub> are criteria pollutants and have national and state ambient air quality standards (AAQS) and PSD increments defined for them. SAM and F are non-criteria pollutants and have no AAQS or PSD increments defined for them; therefore, an air quality impact analysis was required only for SO<sub>2</sub> and NO<sub>x</sub>. For SAM and F, the BACT requirements will establish the emission limits for this project. The PSD regulations require the following air quality analyses for this project:

- A significant impact analysis for SO<sub>2</sub> and NO<sub>x</sub>;
- An analysis of existing air quality for SO<sub>2</sub> and NO<sub>x</sub>;
- A PSD increment analysis for SO<sub>2</sub> and NO<sub>x</sub>;
- An Ambient Air Quality Standards (AAQS) analysis for SO<sub>2</sub> and NO<sub>x</sub>;
- An analysis of impacts on soils, vegetation, and visibility and of growth-related air quality modeling impacts.

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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The analysis of existing air quality generally relies on preconstruction monitoring data collected with EPA-approved methods. The PSD increment and AAQS analyses depend on air quality dispersion modeling carried out in accordance with EPA guidelines.

Good Engineering Practice (GEP) stack height means the greater of: (1) 65 m (213 ft) or (2) the maximum nearby building height plus 1.5 times the building height or width, whichever is less. The stacks associated with the proposed project are all less than 65 m and will not exceed the GEP stack height regulations. However, these stacks will still be less than the corresponding GEP stack heights; therefore, the potential for building downwash to occur was considered in the modeling analysis for these stacks.

Based on the required analyses, the Department has reasonable assurance that the proposed project, as described in this report and subject to the conditions of approval proposed herein, will not cause or significantly contribute to a violation of any AAQS or PSD increment. However, the following EPA-directed stack height language is included: "In approving this permit, the Department has determined that the application complies with the applicable provisions of the stack height regulations as revised by EPA on July 8, 1985 (50 FR 27892). Portions of the regulations have been remanded by a panel of the U.S. Court of Appeals for the D.C. Circuit in *NRDC v. Thomas*, 838 F. 2d 1224 (D.C. Cir. 1988). Consequently, this permit may be subject to modification if and when EPA revises the regulation in response to the court decision. This may result in revised emission limitations or may affect other actions taken by the source owners or operators." A discussion of the required analyses follows.

### 6.1.2 Analysis of Existing Air Quality and Determination of Background Concentrations

Preconstruction ambient air quality monitoring is required for all pollutants subject to PSD review unless otherwise exempted or satisfied. The monitoring requirement may be satisfied by using existing representative monitoring data, if available. An exemption to the monitoring requirement may be obtained if the maximum air quality impact resulting from the projected emissions increase, as determined by air quality modeling, is less than a pollutant-specific de minimus concentration. In addition, if EPA has not established an acceptable monitoring method for the specific pollutant, monitoring may not be required.

If preconstruction ambient monitoring is exempted, determination of background concentrations for PSD significant pollutants with established AAQS may still be necessary for use in any required AAQS analysis. These concentrations may be established from the required preconstruction ambient air quality monitoring analysis or from existing representative monitoring data. These background ambient air quality concentrations are added to pollutant impacts predicted by modeling and represent the air quality impacts of sources not included in the modeling.

The table below shows that predicted NO<sub>2</sub> impacts from the project are predicted to be less than the de minimus level; therefore, preconstruction ambient air quality monitoring is not required for this pollutant. However, in the table, predicted SO<sub>2</sub> impacts from the project are greater than the de minimus level; therefore, the applicant is not exempt from preconstruction monitoring for this pollutant.



# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## Maximum Project Air Quality Impacts for Comparison to the De Minimus Ambient Levels

Pollutant	Averaging Time	Max Predicted Impact (ug/m <sup>3</sup> )	De Minimus Level(ug/m <sup>3</sup> )	Impact Greater Than De Minimus?
NO <sub>2</sub>	Annual	0.02	14	NO
SO <sub>2</sub>	24-hour	69	13	YES

The applicant may instead satisfy the preconstruction monitoring requirement by using previously existing representative data. Previously existing representative monitoring data exists from an SO<sub>2</sub> monitor in Plant City to the north of the project. These data are appropriate for fulfilling the monitoring requirement for SO<sub>2</sub> and to establish background concentrations for use in the SO<sub>2</sub> AAQS analysis. The background concentrations for SO<sub>2</sub> are shown in the table below.

BACKGROUND CONCENTRATIONS FOR USE IN AAQS ANALYSES		
Pollutant	Averaging Time	Background Concentration (µg/m <sup>3</sup> )
SO <sub>2</sub>	Annual	11
	24-hour	31
	3-hour	114

### 6.1.3 Models and Meteorological Data Used in the Air Quality Impact Analysis

The applicant and the Department used the EPA-approved Industrial Source Complex Short-Term (ISCST3) dispersion model to evaluate the pollutant emissions from the proposed project on the PSD Class II area in the vicinity of the facility. The model determines ground-level concentrations of inert gases or small particles emitted into the atmosphere by point, area, and volume sources. The model incorporates elements for plume rise, transport by the mean wind, Gaussian dispersion, and pollutant removal mechanisms such as deposition. The ISCST3 model allows for the separation of sources, building wake downwash, and various other input and output features. A series of specific model features, recommended by the EPA, are referred to as the regulatory options. The applicant used the EPA recommended regulatory options. Direction-specific downwash parameters were used for all sources for which downwash was considered. The stacks associated with this project all satisfy the good engineering practice (GEP) stack height criteria.

Meteorological data used in the ISCST3 model consisted of a consecutive 5-year period of hourly surface weather observations and twice-daily upper air soundings from the National Weather Service (NWS) stations at Tampa International Airport, Florida (surface data) and Ruskin, Florida (upper air data). The 5-year period of meteorological data was from 1987 through 1991. These NWS stations were selected for use in the study because they are the closest primary weather stations to the study area and are most representative of the project site. The surface observations included wind direction, wind speed, temperature, cloud cover, and cloud ceiling.

Since five years of data were used in ISCST3, the highest-second-high (HSH) short-term predicted concentrations were compared with the appropriate AAQS or PSD increments. For the

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

annual averages, the highest predicted yearly average was compared with the standards. For determining the project's significant impact area in the vicinity of the facility and if there are significant impacts from the project on any PSD Class I area, both the highest short-term predicted concentrations and the highest predicted yearly averages were compared to their respective significant impact levels.

At distances beyond 50 km from a source, the California Puff (CALPUFF) model is recommended for use by the EPA and the Fish and Wildlife Service. The CALPUFF model is a long-range transport, Lagrangian puff model applicable for estimating the air quality impacts in areas that are more than 50 km from a source. For the project the CALPUFF model, with 1990 meteorological data as input, was used to perform the significant impact, Class I PSD increment and regional haze analyses at the Chassahowitzka National Wilderness Area (CNWA).

### 6.1.4 Significant Impact Analysis

Initially, the applicant conducts modeling using only the proposed project's emissions changes. If this modeling shows significant impacts, further modeling is required to determine the project's impacts on the AAQS or PSD increments. Over twenty receptor rings with 10 degree intervals (10-360 degrees) were placed at distances ranging from 0.5 to 24 km from the facility, which is located in a PSD Class II area. In addition receptors were located along the facility's property boundary. Thirteen discrete receptors were set in the CNWA located approximately 125 km to the northwest of the project at its closest point. For each pollutant subject to PSD and also subject to PSD increment and/or AAQS analyses, this modeling compares maximum predicted impacts due to the project with PSD significant impact levels to determine whether significant impacts due to the project are predicted in the vicinity of the facility or in the CNWA. The tables below show the results of this modeling. There were significant impacts predicted in the CNWA Class I area for the SO<sub>2</sub> 3-hour and 24-hour averaging times. In the vicinity of the facility significant impacts were predicted for all SO<sub>2</sub> averaging times. Therefore, more detailed SO<sub>2</sub> AAQS and PSD increment analyses were required in both the Class II area in the vicinity of the project and the CNWA Class I area.

**Maximum Project Air Quality Impacts for Comparison  
to the PSD Class II Significant Impact Levels in the Vicinity of the Facility**

Pollutant	Averaging Time	Maximum Predicted Impact (ug/m <sup>3</sup> )	Significant Impact Level (ug/m <sup>3</sup> )	Significant Impact?	Radius of Significant Impact (km)
SO <sub>2</sub>	Annual	2	1	YES	8
	24-hour	23	5	YES	23
	3-hour	89	25	YES	11
NO <sub>2</sub>	Annual	0.02	1	NO	0

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## Maximum Project Air Quality Impacts in the CNWA for Comparison to the PSD Class I Significant Impact Levels

Pollutant	Averaging Time	Maximum Predicted Impact (ug/m <sup>3</sup> )	Significant Impact Level (ug/m <sup>3</sup> )	Significant Impact?
SO <sub>2</sub>	Annual	0.02	0.1	NO
	24-hour	0.3	0.2	YES
	3-hour	1.5	1.0	YES
NO <sub>2</sub>	Annual	0.0003	0.1	NO

### 6.1.5 Receptor Networks for the PSD Increment And AAQS Analyses

For the PSD Class II increment and AAQS analyses, receptor grids normally are based on the size of the significant impact area for each pollutant. As shown in the previous section, the size of the significant impact area for the required SO<sub>2</sub> analyses is 24 km. Thirteen department-approved discrete receptors were set in the CNWA for the PSD Class I increment analysis.

#### PSD Class II Increment Analysis

The PSD increment represents the amount that new sources in an area may increase ambient ground level concentrations of a pollutant from a baseline concentration which was established in 1977 (the baseline year was 1975 for existing major sources of SO<sub>2</sub>) for SO<sub>2</sub> and 1988 for NO<sub>2</sub>. As the maximum predicted NO<sub>2</sub> impacts from the proposed project are less than significant, no additional modeling was required. The maximum predicted SO<sub>2</sub> PSD Class II area impacts from this project and all other increment-consuming sources in the area is shown in the table below. The table shows that all of the maximum predicted impacts are less than the allowable Class II increments.

#### PSD Class II Increment Analysis

Pollutant	Averaging Time	Maximum Predicted Impact (ug/m <sup>3</sup> )	Impact Greater Than Allowable Increment?	Allowable Increment (ug/m <sup>3</sup> )
SO <sub>2</sub>	24-hour	63	NO	91
	Annual	0	NO	20
	3-hour	259	NO	512

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## PSD Class I Increment Analysis

As the maximum predicted NO<sub>2</sub> impacts from the proposed project are less than significant, no additional modeling for NO<sub>2</sub> was required. The SO<sub>2</sub> PSD Class I increment modeling was simplified by limiting the analysis to days when the predicted impacts from the project were less than significant. The results of this modeling showed that the PSD increment contributions from all increment-consuming sources near the CNWA are negative when the predicted impacts from the proposed project are significant. Therefore, these CALPUFF modeling results predict that the Class I area PSD increments would not be exceeded by the proposed project, and that the proposed project would not significantly contribute to any predicted violations of the Class I increments.

## AAQS Analysis

For pollutants subject to an AAQS review, the total impact on ambient air quality is obtained by adding a "background" concentration to the maximum modeled concentration. This "background" concentration takes into account all sources of a particular pollutant that are not explicitly modeled. As the maximum predicted NO<sub>2</sub> impacts from the proposed project are less than significant, no additional modeling was required. The results of the AAQS analysis for SO<sub>2</sub> are summarized in the table below. As shown in this table, emissions from the proposed facility are not expected to cause or significantly contribute to a violation of any AAQS.

**Ambient Air Quality Impacts**

Pollutant	Averaging Time	Major Sources Impact (ug/m <sup>3</sup> )	Background Conc. (ug/m <sup>3</sup> )	Total Impact (ug/m <sup>3</sup> )	Florida AAQS (ug/m <sup>3</sup> )	Total Impact Greater Than AAQS?
SO <sub>2</sub>	24-hour	203	32	235	260	NO
	Annual	39	8	47	60	NO
	3-hour	476	114	590	1300	NO

## 6.2 Additional Impacts Analysis

### 6.2.1 Impact Analysis Impacts On Soils, Vegetation, And Wildlife

The maximum ground-level concentrations predicted to occur from SO<sub>2</sub> and NO<sub>x</sub> emissions as a result of the proposed project, including background concentrations and all other nearby sources, will be below the associated AAQS. The AAQS are designed to protect both the public health and welfare. As such, this project is not expected to have a harmful impact on soils and vegetation in the PSD Class II area. An air quality related values (AQRV) analysis was done by the applicant for the Class I area. No significant impacts on this area are expected.

## **TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION**

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### 6.2.2 Impact On Visibility

A regional haze analysis was used to assess the potential for a significant increase in regional haze in the Class I CNWA due to this source's projected increase in emissions. A regional haze analysis to determine visibility impacts in the Class I area was required by the Fish and Wildlife Service. The results indicate that the impact of this project on visibility in the Class I area is insignificant.

### 6.2.3 Growth-Related Air Quality Impacts

The proposed modification will not significantly change employment, population, housing or commercial/industrial development in the area to the extent that a significant air quality impact will result.

## 7. **CONCLUSION**

Based on the foregoing technical evaluation of the application and additional information submitted by the applicant, the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations, provided the Department's BACT determination is implemented.

Syed Arif, P.E.  
Cleve Holladay, Meteorologist

**PERMITTEE:**

US Agri-Chemicals Corporation  
3225 State Rd. 630 West  
Ft. Meade, Florida 33841

<b>File No.</b>	1050051-009-AC
<b>Permit No.</b>	PSD-FL-278
<b>SIC No.</b>	2874
<b>Project:</b>	Ft. Meade Chemical Plant
<b>Expires:</b>	October 1, 2002

*Authorized Representative:*

Phong T. Vo  
General Manager of Eng. And Tech. Services

**PROJECT AND LOCATION:**

Permit for the construction /modification of the Ft. Meade Chemical Plant to increase production rate of the existing Sulfuric Acid Plants Nos. 1 and 2 to 3000 tons per day, each; to match the previously-permitted production rates, increase the production rate of the existing Phosphoric Acid Trains A and B from 44 to 50 tons per hour P<sub>2</sub>O<sub>5</sub> input, each; and a proportional increase in the processing rate of the Phosphoric Acid Tank Farm. UTM coordinates are Zone 17; 416.2 km E; 3068.7 km N.

**STATEMENT OF BASIS:**

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

**ATTACHED APPENDICES ARE MADE A PART OF THIS PERMIT:**

Appendix BD      BACT Determination  
Appendix GC      Construction Permit General Conditions

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Howard L. Rhodes, Director  
Division of Air Resources  
Management

**SECTION I. FACILITY INFORMATION**

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**FACILITY DESCRIPTION**

The Ft. Meade Chemical Plant is an agricultural chemicals manufacturing facility. Phosphate rock is reacted with sulfuric acid (purchased or produced on-site) to make phosphoric acid. The phosphoric acid is further processed into monoammonium phosphate (MAP) and diammonium phosphate (DAP).

This permit is issued to allow an increase in the production rate of the existing Sulfuric Acid Plants Nos. 1 and 2 to 3000 tons per day, each; to match the previously-permitted production rates, an increase in the production rate of the existing Phosphoric Acid Trains A and B from 44 to 50 tons per hour  $P_2O_5$  input, each; and a proportional increase in the processing rate of the Phosphoric Acid Tank Farm.

**REGULATORY CLASSIFICATION**

The facility is classified as a major source of air pollution or Title V source because it has the potential to emit at least 100 tons per year of sulfur dioxide and nitrogen oxides.

**PERMIT SCHEDULE:**

- 10-18-1999: Date of Receipt of Application
- 08-29-2000: Application deemed complete
- 11-xx-2000: Intent issued

**RELEVANT DOCUMENTS:**

The documents listed form the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- Application received 10-18-1999
- Department letters dated 11-03-1999, 03-03-2000, 07-20-2000 and 07-21-2000
- Applicant letters dated 02-02-2000, 06-23-2000 and 08-29-2000
- Technical Evaluation and Preliminary Determination dated 10-31-2000
- Best Available Control Technology determination (issued concurrently with permit)

**SECTION II. EMISSION UNIT(S) ADMINISTRATIVE REQUIREMENTS**

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1. Regulating Agencies: All documents related to applications for permits to operate, reports, tests, minor modifications and notifications shall be submitted to the Department of Environmental Protection, Southwest District Office located at 3804 Coconut Palm Drive, Tampa, Florida 33619, and phone number (813) 744-6100. All applications for permits to construct or modify an emission unit(s) subject to the Prevention of Significant Deterioration (PSD) should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP) located at 2600 Blairstone Road, Tallahassee, Florida 32399-2400 and phone number (850)488-0114.
2. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
3. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
4. Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]
5. Expiration: This air construction permit shall expire on October 1, 2002. [Rule 62-210.300(1), F.A.C.]. The permittee may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit. However, the permittee shall promptly notify the permitting authority office of any delays in completion of the project which would affect the startup day by more than 90 days. [Rule 62-4.090, F.A.C.]
6. Applicable Regulations: The facility is subject to the following regulations: Florida Administrative Code Chapters 62-4; 62-103; 62-204; 62-210; 62-212, 62-213, 62-296, and 62-297. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]



**AIR CONSTRUCTION PERMIT 1050051-009-AC AND PSD-FL-278**  
**SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS**

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**COMMON CONDITIONS: 40 CFR 60 - NEW SOURCE PERFORMANCE STANDARDS**

This permit addresses the following emission units.

<b>EMISSION UNIT NO.</b>	<b>EMISSION UNIT DESCRIPTION</b>
016	Sulfuric Acid Plant No. 1
017	Sulfuric Acid Plant No. 2
005	Phosphoric Acid A Train
020	Phosphoric Acid B Train
021	Phosphoric Acid Tank Farm

These emission units shall comply with all applicable requirements of 40 CFR 60, General provisions, Subpart A, adopted by reference in Rule 62-204.800(7), F.A.C.

- 40 CFR 60.7, Notification and record keeping
- 40 CFR 60.8, Performance tests
- 40 CFR 60.11, Compliance with standards and maintenance requirements
- 40 CFR 60.12, Circumvention
- 40 CFR 60.13, Monitoring requirements
- 40 CFR 60.19, General notification and reporting requirements

The Phosphoric Acid Trains A and B are subject to the applicable requirements of the New Source Performance Standards (NSPS) under 40 CFR 60 Subpart T, Standards of Performance for Wet-Process Phosphoric Acid Plants and National Emission Standards for Hazardous Pollutants (NESHAPs) under 40 CFR 63 Subpart AA, for Phosphoric Acid Plants.

The Phosphoric Acid Tank Farm is not subject to NSPS (40 CFR 60 Subpart T) or NESHAPs (40 CFR 63 Subpart AA).

The Sulfuric Acid Plant Nos. 1 and 2 are subject to the applicable requirements of the New Source Performance Standards (NSPS) under 40 CFR 60 Subpart H, Standards of Performance for Sulfuric Acid Plants.

**SPECIFIC CONDITIONS :**

The Specific Conditions listed in this subsection apply to the following emission units:

<b>EMISSION UNIT NO.</b>	<b>EMISSION UNIT DESCRIPTION</b>
016	Sulfuric Acid Plant No. 1
017	Sulfuric Acid Plant No. 2
005	Phosphoric Acid A Train
020	Phosphoric Acid B Train
021	Phosphoric Acid Tank Farm

AIR CONSTRUCTION PERMIT 1050051-009-AC AND PSD-FL-278  
SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

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1. Unless otherwise indicated, the construction and operation of the subject agricultural chemicals production facilities shall be in accordance with the capacities and specifications stated in the application. **[Rule 62-210.300, F.A.C.]**
  
2. The subject emissions units shall comply with all applicable provisions of the 40 CFR 60 New Source Performance Standards for Wet-Process Phosphoric Acid Plants, Subpart T and for Sulfuric Acid Plants, Subpart H; and, 40 CFR 63 Subpart AA, for phosphoric acid plants, as applicable. **[Rule 62-204.800 F.A.C.]**
  
3. The maximum operation rates shall not exceed:
  - a. Sulfuric Acid Plant Nos. 1 and 2, each - 3000 tpd 100% H<sub>2</sub>SO<sub>4</sub>;
  - b. Phosphoric Acid Trains A and B, each - 50 tph P<sub>2</sub>O<sub>5</sub> input, 30-day rolling average, and 55 tph maximum. Maximum annual rate shall not exceed 438,000 tons P<sub>2</sub>O<sub>5</sub> input.
  - c. Phosphoric Acid Tank Farm - 100 tph P<sub>2</sub>O<sub>5</sub> input, 30-day rolling average, and 110 tph maximum. Maximum annual rate shall not exceed 876,000 tons P<sub>2</sub>O<sub>5</sub> input.**[Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]**
  
4. The subject emission units are allowed to operate continuously (8760 hours/year).  
**[Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]**
  
5. Emissions of sulfur dioxide from the Sulfuric Acid Plant Nos. 1 and 2 each, shall not exceed 3.5 lb/ton 100% H<sub>2</sub>SO<sub>4</sub>, averaged over three hours, and 1916 tpy. **[Rule 62-212.400, F.A.C.]**
  
6. Emissions of sulfuric acid mist from the Sulfuric Acid Plant Nos. 1 and 2 each, shall not exceed 0.12 lb/ton 100% H<sub>2</sub>SO<sub>4</sub> and 65.7 tpy. **[Rule 62-212.400, F.A.C.]**
  
7. Emissions of nitrogen oxides from the Sulfuric Acid Plant Nos. 1 and 2 each, shall not exceed 0.12 lb/ton 100% H<sub>2</sub>SO<sub>4</sub> and 65.7 tpy. **[Rule 62-212.400, F.A.C.]**
  
8. Emissions of total fluorides from the Phosphoric Acid Trains A and B each, shall not exceed 0.012 lb/ton P<sub>2</sub>O<sub>5</sub> input and 2.63 tpy. **[Rule 62-212400, F.A.C.]**
  
9. Emissions of total fluorides from the Phosphoric Acid Tank Farm, shall not exceed 1.0 lb/hr and 4.38 tpy. **[Rule 62-210.200, F.A.C.]**
  
10. Visible emissions shall not exceed 10 percent opacity from the sulfuric acid plants.  
**[Rule 62-212.400, F.A.C.]**
  
11. The permittee shall install, calibrate, operate and maintain monitoring devices that continuously measure and record the total pressure drop across each phosphoric acid plant scrubbing system. Accuracy of the monitoring devices shall be  $\pm 5\%$  over the operating range.  
**[Rules 62-297.310, 62-204.800, F.A.C.; 40 CFR 60.203]**
  
12. In order to minimize excess emissions during startup/shutdown/malfunction these emissions units shall adhere to best operational practices. The provisions of the Memorandum of Understanding issued by the Department, are hereby added to this permit as Appendix A and shall be added to the Title V permit. **[Rule 62-210.700, F.A.C., 40 CFR 60.7]**

AIR CONSTRUCTION PERMIT 1050051-009-AC AND PSD-FL-278  
SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

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13. A continuous emissions monitoring system (CEMS) for the measurement of sulfur dioxide emissions shall be installed, calibrated, operated and maintained in accordance with 40 CFR 60.84 (1999 version).
14. Before this construction permit expires, the subject emission units shall be tested for compliance with the above emission limits. For the duration of all tests the emission unit shall be operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the emission unit may be tested at less than permitted capacity (i.e., 90% of the maximum operating rate allowed by the permit); in this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 30 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit. **[Rule 62-297.310, F.A.C.]**
15. The Department's Southwest District office in Tampa shall be notified in writing at least 15 days prior to the compliance tests. Written reports of the test results shall be submitted to that office within 45 days of test completion. **[Rule 62-297.310, F.A.C.]**
16. The procedures for the initial compliance test shall be in accordance with EPA Reference Methods 1, 2, 3, 4, 6C, 7E, 8, 9 and 13A or 13B, as appropriate, as published in 40 CFR 60, Appendix A. 60, Appendix A. **[Rules 62-204.800 and 62-297.310(7)(c), F.A.C.]**
17. All measurements, records, and other data required to be maintained by this facility shall be retained for at least five (5) years following the data on which such measurements, records, or data are recorded. These data shall be made available to the Department upon request. **[Rule 62-4.070(3), F.A.C.]**
18. The permittee shall install, calibrate, maintain, and operate monitoring devices which can be used to determine the mass flow of phosphorus-bearing feed material to the phosphoric acid processes. The monitoring devices shall have an accuracy of  $\pm 5$  percent over the operating range. The permittee shall maintain a daily record of equivalent  $P_2O_5$  feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using the flow monitoring device meeting the requirements of 40 CFR 60.203(a), and then by proceeding according to 40 CFR 60.204(b)(3) **[Rule 62-204.800, F.A.C.]**
19. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. **[Rule 62-296.320, F.A.C.]**
20. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. **[Rule 62-210.650, F.A.C.]**
21. The subject emissions units shall be subject to the following:
  - Excess emissions resulting from startup, shutdown or malfunction of any source shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in

AIR CONSTRUCTION PERMIT 1050051-009-AC AND PSD-FL-278  
SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

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any 24 hour period unless specifically authorized by the Department for longer duration.  
[Rule 62-210.700, F.A.C.]

- Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700, F.A.C.]
  - Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.  
[Rule 62-210.700, F.A.C.]
  - In case of excess emissions resulting from malfunctions, each source shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700, F.A.C.]
  - The down time on the Phosphoric Acid Tank Farm scrubber, when the Tank Farm is operating, may exceed 2 hours in a 24-hour period for maintenance purposes only.
22. The permittee shall submit an Annual Operating Report using DEP Form 62-210.900(4) to the Department's Southwest District office by March 1 of the following year for the previous year's operation. [Rule 62-210.370, F.A.C.]

**APPENDIX BD**  
**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)**

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**Ft. Meade Chemical Plant**  
**US Agri-Chemicals Corporation**  
**PSD-FL-278 / 1050051-009-AC**  
**Ft. Meade, Polk County**

The project proposed by US Agri-Chemicals Corporation will increase the production rate of the existing Sulfuric Acid Plants Nos. 1 and 2 to 3000 tons per day, each; to match the previously-permitted production rates, increase the production rate of the existing Phosphoric Acid Trains A and B from 44 to 50 tons per hour  $P_2O_5$  input, each; and will increase the processing rate of the Phosphoric Acid Tank Farm.

The proposed modification will result in a significant increase in emissions of sulfur dioxide ( $SO_2$ ), sulfuric acid mist (SAM), nitrogen oxides ( $NO_x$ ) and fluorides (F). The project is, therefore, subject to Prevention of Significant Deterioration (PSD) review in accordance with Rule 62-212.400, Florida Administrative Code (F.A.C.). A Best Available Control Technology (BACT) determination is part of the review required by Rules 62-212.400 and 62-296, F.A.C.

**DATE OF RECEIPT OF COMPLETE BACT APPLICATION:**

August 29, 2000

**BACT DETERMINATION PROCEDURE:**

In accordance with Chapter 62-212, F.A.C., this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department of Environmental Protection (Department), on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines what is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that, in making the BACT determination, the Department shall give consideration to:

- Any Environmental Protection Agency determination of BACT pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 - Standards of Performance for New Stationary Sources or 40 CFR Part 61 and 63 - National Emission Standards for Hazardous Air Pollutants.
- All scientific, engineering, and technical material and other information available to the Department.
- The emission limiting standards or BACT determination of any other state.
- The social and economic impact of the application of such technology.

**APPENDIX BD**  
**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)**

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The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine, for the emission unit in question, the most stringent control available for a similar or identical emission unit or emission unit category. If it is shown that this level of control is technically or economically unfeasible for the emission unit in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

The air pollutant emissions from this facility can be grouped into categories based upon the control equipment and techniques that are available to control emissions from these emission units. Using this approach, the emissions can be classified as indicated below:

- **Fluorides** (HF, SiF<sub>4</sub>). Controlled generally by scrubbing with pond water.
- **Particulate Matter** (PM, PM<sub>10</sub>). Controlled generally by wet scrubbing or filtration.
- **Combustion Products** (SO<sub>2</sub>, NO<sub>x</sub>, PM). Controlled generally by good combustion of clean fuels.
- **Products of Incomplete Combustion** (CO, VOC). Controlled generally by proper combustion.

Grouping the pollutants in this manner facilitates the BACT analysis because it enables the equipment available to control the type or group of pollutants emitted and the corresponding energy, economic, and environmental impacts to be examined on a common basis.

Although all of the pollutants addressed in the BACT analysis may be subject to a specific emission limiting standard as a result of PSD review, the control of "non-regulated" air pollutants is considered in imposing a more stringent BACT limit on a "regulated" pollutant (i.e., PM, SO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>, fluorides, etc.), if a reduction in "non-regulated" air pollutants can be directly attributed to the control device selected as BACT for the abatement of the "regulated" pollutants.

**APPENDIX BD**  
**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)**

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**BACT LIMITS PROPOSED BY APPLICANT:**

<b>POLLUTANT</b>	<b>EMISSION UNIT</b>	<b>EMISSION LIMIT</b>	<b>CONTROL TECHNOLOGY</b>
SO <sub>2</sub>	Sulfuric Acid Plant Nos. 1 and 2	3.5 lb/ton H <sub>2</sub> SO <sub>4</sub>	Double Absorption Process
SAM	Sulfuric Acid Plant Nos. 1 and 2	0.12 lb/ton H <sub>2</sub> SO <sub>4</sub>	Fiber Mist Eliminators
NO <sub>x</sub>	Sulfuric Acid Plant Nos. 1 and 2	0.12 lb/ton H <sub>2</sub> SO <sub>4</sub>	Good Combustion Practice
F	Phosphoric Acid Trains A and B	0.012 lb/ton P <sub>2</sub> O <sub>5</sub> input	Wet scrubbers using pond water
F	Phos. Acid Tank Farm	1.0 lb/hr	Wet scrubbers using pond water

The applicant has proposed to use the existing double absorption process and improved process parameters to achieve the proposed limits for the sulfuric acid plants. The existing scrubbing systems are proposed as BACT for the phosphoric acid trains and the phosphoric acid tank-farm.

**BACT POLLUTANT ANALYSIS**

The applicant will achieve the proposed emissions limits by improving the sulfur dioxide conversion of the traditional double absorption plant. The improvement will be accomplished by an increase in the catalyst loading. The emission limit of 3.5 pounds per ton of acid averaged over three hours was recently imposed on the new sulfuric acid plant at Farmland Hydro, L.P.

Control options involving production of by-products or wastes have been rejected as BACT. There is no indication that add-on control methods are competitive with process improvements that result in production of additional sulfuric acid. Recovery of sulfuric acid mist is an economic necessity as well as an environmental requirement. High efficiency mist eliminators are considered BACT for sulfuric acid mist.

The Department agrees with the applicant that the sulfur burning process utilized in the sulfuric acid plant inherently produces low NO<sub>x</sub> emissions, and is considered BACT for NO<sub>x</sub>.

Fluoride-containing gases, including hydrogen fluoride (HF), are evolved during the chemical reactions from the phosphoric acid process. Scrubbing the gas stream with pond water removes most of the fluoride evolved from the process.

The top-down BACT determination for fluorides identified the control technologies listed below starting with the most stringent:

1. Packed scrubber using once-through fresh water.
2. Packed scrubber using neutralized water from a dedicated pond (fresh water makeup).
3. Existing scrubber and process cooling pond water.

**APPENDIX BD**  
**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)**

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Use of once-through fresh water would achieve the highest level of fluoride removal but this option is not practical for operations where water conservation is required and plant water balance problems would be created.

Option 2 is possible, the main considerations being the cost of installing the pond and equipment and the cost of operating a lime treatment unit. Costs for Option 2, based on data for a similar project amounted to almost \$40,000 per ton of fluorides removed. FDEP considers this figure sufficiently high to rule out Option 2. However, it should be noted that the low magnitude of fluoride emissions relative to their potential environmental impact justifies the consideration of higher fluoride cost effectiveness figures relative to the high tonnage pollutants such as sulfur dioxide and nitrogen oxides.

For the proposed project, Option 3, is determined by the top-down approach as the basis for the fluoride BACT emission limit.

The BACT limits tabulated above for the emission units evaluated are based on the recent compliance test results for the units between 1995 - 1999. These limits have been demonstrated to be achievable based on the historical test data for the emission units. The Department has concluded that the units can continue to achieve the same historically low emissions without the need for modifications.

**BACT DETERMINATION BY THE DEPARTMENT:**

Based on the information provided by the applicant, the above analysis and other information available to the Department, the following emission limits are established employing the top-down BACT approach.

<b>POLLUTANT</b>	<b>EMISSION UNIT</b>	<b>LIMIT BASIS</b>	<b>CONTROL TECHNOLOGY</b>
SO <sub>2</sub>	Sulfuric Acid Plant Nos. 1 and 2	3.5 lb/ton H <sub>2</sub> SO <sub>4</sub>	Double Absorption Process
SAM	Sulfuric Acid Plant Nos. 1 and 2	0.12 lb/ton H <sub>2</sub> SO <sub>4</sub>	Fiber Mist Eliminators
NO <sub>x</sub>	Sulfuric Acid Plant Nos. 1 and 2	0.12 lb/ton H <sub>2</sub> SO <sub>4</sub>	Good Combustion Practice
F	Phosphoric Acid Trains A and B	0.012 lb/ton P <sub>2</sub> O <sub>5</sub> input	Wet scrubbers using pond water
F	Phos. Acid Tank Farm	1.0 lb/hr	Wet scrubbers using pond water



**APPENDIX BD**  
**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)**

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These limits have been demonstrated to be achievable based on the historical test data for the emission units. SO<sub>2</sub> and F are the key parameters. The emission limits established for those are the lowest in the fertilizer industry.

**COMPLIANCE**

Compliance with the sulfur dioxide, sulfuric acid mist, nitrogen oxides and fluoride limits shall be demonstrated using EPA Reference Methods 1, 2, 3, 4, 6C, 7E, 8, 9 and 13A or 13B as appropriate, and contained in 40 CFR 60, Appendix A.

**DETAILS OF THE ANALYSIS MAY BE OBTAINED BY CONTACTING:**

Syed Arif, P.E., Permit Engineer, New Source Review Section  
Department of Environmental Protection  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Recommended By:

Approved By:

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C. H. Fancy, P.E., Chief  
Bureau of Air Regulation

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Howard L. Rhodes, Director  
Division of Air Resources Management

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Date:

\_\_\_\_\_  
Date:

**APPENDIX GC**  
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

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- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither 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. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use 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.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- (a) Have access to and copy and records that must be kept under the conditions of the permit;
  - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
  - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- G.8 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 provide the Department with the following information:
- (a) A description of and cause of non-compliance; and
  - (b) The period of noncompliance, including 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.

**APPENDIX GC**  
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

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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 for revocation of this permit.

- G.9 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The 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.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- (a) Determination of Best Available Control Technology (*X*)
  - (b) Determination of Prevention of Significant Deterioration (*X*); and
  - (c) Compliance with New Source Performance Standards (*X*).
- G.14 The permittee shall comply with the following:
- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - (c) Records of monitoring information shall include:
    - 1. The date, exact place, and time of sampling or measurements;
    - 2. The person responsible for performing the sampling or measurements;
    - 3. The dates analyses were performed;
    - 4. The person responsible for performing the analyses;
    - 5. The analytical techniques or methods used; and
    - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.