

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

June 21, 1985

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. J. C. Daniel, Manager
USS Agri-Chemicals
P. O. Box 867
Ft. Meade, Florida 33841

Dear Mr. Daniel:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permits to modify your existing phosphoric acid plants and one copy of the Technical and Preliminary Determination, and proposed permits to modify your existing sulfuric acid plants that are located in Polk County, Florida.

Before final action can be taken on your draft permits, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Polk County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permits.

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

Sincerely,


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

CHF/pa

Attachments

cc: Bill Thomas

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application

The Department gives notice of its Intent to Issue permits to USS Agri-Chemicals to authorize increases in production of two existing phosphoric acid plants and two existing sulfuric acid plants. These plants are located in Polk County, 3.5 miles west of Ft. Meade on State Road 630.

Maximum allowable production of each phosphoric acid plant will be increased from 800 to 1,000 TPD P_2O_5 . Fluoride emissions from each plant will increase by 0.8 TPY. A best available control technology (BACT) determination was not required for the modifications of the phosphoric acid plants.

Maximum allowable production of each sulfuric acid plant will be increased from 2,200 to 3,000 TPD acid. Emissions from each plant will increase by the following amounts; 532 TPY sulfur dioxide, 19.9 TPY acid mist, and 29.6 TPY nitrogen oxides. A BACT determination was required for the modifications of the sulfuric acid plants.

The increased emissions resulting from these modifications will not cause or contribute to a violation of any PSD increment or ambient air quality standard.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and 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 fourteen (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 an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this preliminary statement. Therefore, persons who may not object to the proposed agency action may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days

before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application, technical evaluation, and Department's Intent for the proposed project 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 the following locations:

Dept. of Environmental Regulation
Southwest District
7601 Highway 301 N
Tampa, Florida 33610

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Bartow Public Library
Bartow, Florida 33830

Any person may send written comments on the proposed action to Mr. Bill Thomas 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.

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
 - (a) The name and address of each agency affected and each agency's file or identification number, if known;
 - (b) The name and address of the petitioner or petitioners;
 - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
 - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
 - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
 - (f) A demand for the relief to which the petitioner deems himself entitled; and
 - (g) Such other information which the petitioner contends is material.

No. 0155582

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

SENT TO		
Mr. J. C. Daniel		
STREET AND NO.		
P.O., STATE AND ZIP CODE		
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		
6/27/85		

PS Form 3800, Apr. 1976

PS Form 3811, July 1983

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

- Show to whom, date and address of delivery.
- Restricted Delivery.

3. Article Addressed to:
Mr. J. C. Daniel
USS Agri-Chemicals
P. O. Box 867
Ft. Meade, FL 33841

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	0155582

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature — Addressee
X
6. Signature — Agent
X *[Signature]*
7. Date of Delivery
7/1/85
8. Addressee's Address (ONLY if requested and fee paid)

DOMESTIC RETURN RECEIPT

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of)	
Application for Permits by:)	
)	
USS Agri-Chemical)	
Post Office Box 867)	DER File No. AC 53-103831
Ft. Meade, Florida 33841)	53-103830
)	
)	

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes, for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, USS Agri-Chemicals, applied on January 23, 1984, to the Department of Environmental Regulation for permits to modify their existing phosphoric acid plants located in Polk County on State Road 630, 3.5 miles west of Ft. Meade, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that air construction permits were required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

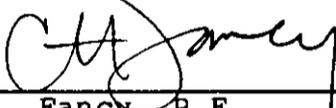
Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

Executed the 26 day of June, 1985, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



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

Copies furnished to:

Mr. J. C. Daniel, Manager
USS Agri-Chemicals
P. O. Box 867
Ft. Meade, Florida 33841

Bill Thomas
Department of Environmental Regulation
Southwest District
7601 Highway 301 North
Tampa, Florida 33610

CERTIFICATION

This is to certify that the foregoing Intent to Issue and all copies were mailed before the close of business on June 27, 1985 1985.



C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management
2600 Blair Stone Road
Tallahassee, Florida 32301

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby acknow-
ledged.

Patricia G. Adams June 27, 1985
Clerk Date

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of)
Application for Permits by:)
)
USS Agri-Chemical)
Post Office Box 867) DER File No. AC 53-103829
Ft. Meade, Florida 33841) 53-081664
)
)

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes, for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, USS Agri-Chemicals, applied on January 23, 1984, to the Department of Environmental Regulation for permits to modify their existing sulfuric acid plants located in Polk County on State Road 630, 3.5 miles west of Ft. Meade, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that air construction permits were required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

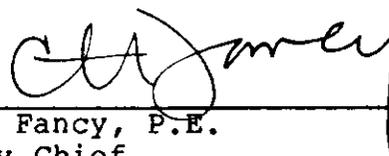
Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

Executed the 26 day of June, 1985, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



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

Copies furnished to:

Mr. J. C. Daniel, Manager
USS Agri-Chemicals
P. O. Box 867
Ft. Meade, Florida 33841

Bill Thomas
Department of Environmental Regulation
Southwest District
7601 Highway 301 North
Tampa, Florida 33610

CERTIFICATION

This is to certify that the foregoing Intent to Issue and all copies were mailed before the close of business on June 27, 1985, 1985.



C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management
2600 Blair Stone Road
Tallahassee, Florida 32301

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby acknow-
ledged.

Patricia G. Adams June 27, 1985
Clerk Date

Technical Evaluation
and
Preliminary Determination

USS Agri-Chemicals
Ft. Meade, Florida
Polk County

Sulfuric Acid Plant Modifications

File Numbers

AC 53-103829 - No. 1 Plant
AC 53-081664 - No. 2 Plant

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

June 21, 1985

I. Applicant

A. USS Agri-Chemicals
P. O. Box 867
Ft. Meade, Florida 33841

B. Request

Mr. G. W. Beck, General Manager of Administrative Services, submitted applications for permits to modify two existing sulfuric acid plants (SIC 2819) on January 23, 1984. The applications were considered complete on receipt of DER Forms 17-2.202(1) on May 6, 1985.

C. Project and Location

USS Agri-Chemicals proposes to increase production in two existing sulfuric acid plants from 2,200 to 3,000 TPD of 100 percent sulfuric acid. Except for the addition of more catalyst to the converter towers, no major modifications to the plants are anticipated.

The plants are located in Polk County, 3.5 miles west of Ft. Meade on State Road 630. The UTM coordinates of this site are zone 17, 416.12 km E and 3068.67 km N.

D. Air Pollutant Emissions

The following table summarizes the permitted emissions from each sulfuric acid plant before and after the modification:

	Emissions							
	Production TPD 100% acid	Sulfur Dioxide			Acid Mist			NOx
		lb/T acid	lb/hr	TPY	lb/T acid	lb/hr	TPY	TPY
Proposed*	3000	4	500	1992	0.15	18.8	74.7	73.6
Present*	2200	4	367	1460	0.15	13.8	51	44.0
Change	800	0	+133	+532	0	+5.0	+19.9	29.6

* Based on 7,967 hr/year operation

As two sulfuric acid plants are involved in the modification the total increase in emission could double the values shown in the table.

II. Rule Applicability

The proposed project, modifications to existing sulfuric acid plants, is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapters 17-2 and 17-4, Florida Administrative Code.

The proposed facility is located in an area designated "Unclassifiable" for the criteria pollutant particulate matter (17-2.430) but in the area of influence of the Hillsborough County particulate matter nonattainment area (17-2.410). The area is designated attainment for the other criteria pollutants (17-2.420).

The modifications are not subject to New Source Review for Nonattainment Areas because sulfuric acid plants are not a source of particulate matter emissions.

Sulfuric acid plants are listed in Chapter 17-2, Table 500-1, Major Facility Categories. The USS Agri-Chemical plant is considered a major facility because sulfur dioxide emissions exceed 100 TPY. In addition, the increase in sulfur dioxide, acid mist and nitrogen oxides emissions associated with the proposed production increase, will exceed the significant emission rates listed in Table 500-2.

The modifications are subject to Prevention of Significant Deterioration (PSD) regulations, 17-2.500, because of the significant increase in sulfur dioxide, acid mist, and nitrogen oxide emissions. Allowable emissions of these pollutants shall be established by a best available control technology (BACT) determination as required by 17-2.500(5)(c), FAC.

The modified plants will also be subject to 40 CFR 60.80, Subpart H, new source performance standards (NSPS) for sulfuric acid plants.

III. Technical Evaluation

The state and federal construction permits for the two existing sulfuric acid plants were issued in 1980 and 1981. A condition of these construction permits was that the plants comply with the new source performance standards (NSPS) for sulfuric acid plants (40 CFR 60, Subpart H). The plants have been built and were placed in operation in 1983. Compliance tests showed the emissions from each plant were below the NSPS of 4 lb/ton sulfur dioxide, 0.15 lb/ton acid mist, and 10 percent opacity. No nitrogen oxides standard exists for these plants.

Most of the process and control equipment appears to be oversized for the original 2,200 TPD production rate design. The applicant believes each plant can produce 3,000 TPD sulfuric acid by adding additional catalyst to the converter tower and by making minor changes in the process equipment.

Compliance tests have shown these plants can meet NSPS. The department believes that NSPS can be met at higher production rates in these plants.

A more detailed evaluation can be found in the department's best available control technology determination (BACT) in the Appendix and in the Tampa and Tallahassee files for the original construction permits that were issued for these sulfuric acid plants.

IV. Air Quality Impact

A. Introduction

An air quality impact analysis is required and has been performed for SO₂, NO₂, and sulfuric acid mist, pollutants for which a significant increase in annual emissions has been determined.

The analysis consists of:

- o An analysis of existing air quality;
- o A PSD increment analysis (SO₂ only);
- o A Florida Ambient Air Quality Standards (AAQS) analysis;
- o An analysis of impacts on soils, vegetation, and visibility and of growth-related air quality impacts; and
- o A "good engineering practice" (GEP) stack height determination.

Based on this required analysis, the department has reasonable assurance that the proposed modifications at the USS Agri-Chemicals Fort Meade chemical complex, as described in these permits and subject to the conditions of approval proposed herein, will not cause or contribute to a violation of any PSD increment or ambient air quality standard. A discussion of the modeling methodology and required portions of the analysis follows.

B. Modeling Methodology

The Industrial Source Complex Short-Term (ISCST) model, an EPA approved atmospheric dispersion model, was used to satisfy the modeling requirements of these applications for both the short-term (24 hours or less) and long term (annual) averaging periods. The applicant used this model to first determine the area of significant impact of the new (or increment consuming) sources of SO₂

involved in the modification¹. The area of significant impact is the area enclosed by a circle centered on the applicant's facility, the radius of which is defined by the farthest distance to which a significant impact is determined. A significant impact is defined for the annual (1 ug/m^3), the 24-hour (5 ug/m^3), and the 3-hour (25 ug/m^3) averaging periods. This distance was determined to be 4.5 kilometers. Thus, beyond this distance the increased emissions resulting from the new sources are presumed to not have a significant impact on ambient air quality.

After determining the area of significant impact the applicant then modeled further to determine the critical days of meteorology which result in maximum ground-level impacts. To do this all major sources within 50 kilometers of the USS Agri-Chemicals facility were included in the modeling. Receptors were placed within the area of significant impact in a coarse mesh grid. Highest and highest, second-high ground-level concentrations were calculated considering three groups of sources:

- (1) those sources which consume PSD increment (new sources);
- (2) those sources which are considered in the baseline; and
- (3) all sources currently permitted or proposed to be permitted.

The results of these runs, using five years of meteorological data, determined the critical days of meteorology for which more refined modeling was completed.

Refined modeling was completed for the critical days using a 0.1 kilometer-mesh receptor grid. Again, new, baseline, and all sources were modeled.

The surface and upper air meteorological data used in the models were National Weather Service (NWS) data collected at Tampa, Florida located approximately 67 kilometers west of USS Agri-Chemicals. Meteorological data for the years 1973, 1974, 1975, 1978, and 1979 were used in the models. The data for 1976 and 1977 are not available in a form suitable for input to the models, therefore, a noncontinuous five-year period was approved by the department.

The stack parameters and emission rates for the sources involved in the modifications are given in Tables 1 and 2.

C. Analysis of Existing Air Quality

Under the state PSD regulations the applicant is required to submit preconstruction ambient air monitoring data for all pollu-

¹ Strictly speaking, the area of significant impact should be determined from the net emissions increase. However, in this case the difference has been determined to be minimal.

Table 1 -- Stack Parameters

Source	Stack Height (m)	Stack Gas Temp. (K)	Stack Gas Velocity (m/s)	Stack Diameter (m)
H ₂ SO ₄ plant 1	53.4	355	15.91(1)	2.59
H ₂ SO ₄ plant 2	53.4	355	15.91(1)	2.59

(1) The stack gas exit velocity before the modification was 9.45 m/s.

Table 2 -- Emission Rates (g/s)

Source	SO ₂		NO ₂		Sulfuric Acid Mist	
	Previous	Proposed	Previous	Proposed	Previous	Proposed
H ₂ SO ₄ plant 1	46.2	63.0	1.39	2.33	1.74	2.37
H ₂ SO ₄ plant 2	46.2	63.0	1.39	2.33	1.74	2.37

tants for which a significant emissions increase will occur and for which an ambient air quality standard exists. An exemption to this requirement may be obtained if the maximum predicted air quality impact of the net emissions increase is less than a specified de minimus concentration. For the applicable pollutants in this application the de minimus values are: SO₂ - 13 ug/m³, 24-hour average; and NO₂ - 14 ug/m³, annual average. No ambient standard or de minimus value exists for sulfuric acid mist.

The maximum predicted impact of NO₂ is less than the de minimus level for this pollutant. Therefore, no preconstruction monitoring was required.

The applicant performed the required ambient air quality monitoring for the pollutant SO₂. The data was collected during the period of February 2, 1983, through June 3, 1983. The four-month average SO₂ concentration was 5.4 ug/m³. The highest measured three-hour average concentration was 131 ug/m³ and the second highest was 130 ug/m³. The highest 24-hour average was 43.7 ug/m³ and the second highest was 39.8 ug/m³. In all, 81 percent of the hourly data collected measured a zero concentration.

D. PSD Increment Analysis

The USS Agri-Chemicals facility is located in an area where the Class II PSD increments apply. The nearest Class I area is the Chassahowitzka National Wilderness Area located over 100 kilometers to the northwest. A PSD analysis is required for SO₂ in the Class II area. No analysis is required for the Class I area because of its distance.

All increment consuming sources of SO₂ at the USS Agri-Chemicals facility and other surrounding facilities were included in the modeling analysis. The results of the analysis are contained in Table 3.

Table 3 -- PSD Increments

Pollutant and Averaging Time	Class II Increment (ug/m ³)	Predicted Increase (ug/m ³)	Percent Consumed
SO ₂			
Three-hour (1)	512	148	29
24-hour (1)	91	27	30
Annual	20	0	0

(1) Not to be exceeded more than once per year.

No violation of a PSD increment is predicted to occur as a result of the proposed modification.

E. AAQS Analysis

An ambient air quality standards (AAQS) analysis is required for all pollutants for which a significant increase in annual emissions is proposed and for which an AAQS exists. The analysis includes an evaluation of background concentration of the subject pollutants and a modeling evaluation of all sources of those pollutants in the area surrounding the modified facility. The pollutants for which this section applies are SO₂ and NO₂.

A background value has been proposed by the applicant of 0 ug/m³ for SO₂ for all averaging times. This value represents the measured concentration when no sources of SO₂ are impacting the area. No background value for NO₂ was proposed because the ambient impact caused by the proposed increase in emissions of this pollutant was insignificant.

All major sources of SO₂ in the region were included in the modeling analysis. The maximum predicted ground level concentrations (all modeled sources plus background) near the USS Agri-Chemicals facility, off plant property, are shown in Table 4.

Table 4 -- Ambient Air Quality Standards

Pollutant and Averaging Time	Florida AAQS (ug/m ³)	Predicted USS Agri-Chem. Impact (ug/m ³)	Predicted Total Impact (ug/m ³)
SO ₂			
Three-hour (1)	1300	632(3)	1040(2)
24-hour (1)	260	207(3)	236(2)
Annual	60	18(3)	45
NO ₂			
Annual	100	<1(3)	<2

(1) Not to be exceeded more than once per year

(2) Highest, second-high predicted concentration

(3) Highest predicted concentrations based on one year of meteorological data; modeling performed by FDER.

In addition to the emissions of the criteria pollutants SO₂ and NO₂, there are significant emissions of sulfuric acid mist, a noncriteria pollutant. Although there is no ambient air quality standard for this pollutant, there is a de minimus impact level of 1 ug/m³, 24-hour average. The modeling has shown that the increased emissions of sulfuric acid mist results in an ambient air increase at ground-level of less than that de minimus level.

There are no nonattainment areas for SO₂ or NO₂ within 50 kilometers of the USS Agri-Chemicals facility. As such, no analysis of the impact on these areas is necessary.

F. Additional Impacts Analysis

1. Impacts on Soils, Vegetation, and Visibility

The maximum ground-level concentrations predicted to occur in the area surrounding the USS Agri-Chemicals facility are below the Florida AAQS for SO₂ and NO₂. These standards are set to protect public welfare-related values. Therefore, no adverse impact on soils and vegetation are expected. The increased emissions of sulfuric acid mist is predicted to increase ambient levels by less than 1 ug/m³. No adverse impact is expected.

The nearest Class I area is located over 100 kilometers from the facility. No impact on visibility is expected on this area due to the USS Agri-Chemicals facility.

2. Growth-Related Air Quality Impacts

No new jobs will be created; therefore, no growth-related impact is expected.

3. GEP Stack Height Determination

Regulations published by the EPA in the Federal Register of February 8, 1982, define GEP stack height as the highest of:

1. 65 meters; or
2. The maximum nearby building height plus 1.5 times the building height or width, whichever is less.

While the actual stack height employed can exceed this height, the stack height used in modeling to determine compliance with the AAQS and PSD increments cannot. All stacks at the USS Agri-Chemicals facility are less than the GEP limit of 65 meters.

V. Conclusion

Based on the data submitted by USS Agri-Chemicals, the department has concluded that its two sulfuric acid plants can be modified to increase production and be operated in compliance with all state and federal air pollution control regulations. The department proposes to issue construction permits that will authorize the increased production and sulfur dioxide/acid mist emissions from these plants. The General and Specific Conditions in the proposed permits (drafts attached) will assure compliance of the modified sulfuric acid plants with the air pollution control regulations.

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

PERMITTEE:
USS Agri-Chemicals
P. O. Box 867
Ft. Meade, Florida 33841

Permit Number: AC 53-103829
Expiration Date: April 1, 1987
County: Polk
Latitude/Longitude: 24° 44' 27"N/
81° 51' 4"W
Project: No. 1 Sulfuric Acid
Plant Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

Modifications to an existing No. 1 Sulfuric Acid Plant to increase production from 2,200 to 3,000 TPD 100 percent sulfuric acid. Sulfur dioxide emissions are controlled by the double contact/double absorption process. Acid mist emissions are controlled by a demister. The plant is located in Polk County, 3.5 miles west of Ft. Meade on State Road 630. The UTM coordinates of this site are zone 17, 416.12 km E and 3068.62 km N.

This construction permit replaces permit No. AO 53-69837.

The modifications shall be in accordance with the plans and schedule submitted by the permittee and attached to the permit except for the changes listed in the Specific Conditions.

attachments: Application received May 6, 1985.
USS Agri-Chemicals letter dated April 24, 1985.
Application for PSD Approval dated January, 1984.
USS Agri-Chemicals letter dated August 20, 1984.
Sholtes & Koogler letter dated May 18, 1984.
USS Agri-Chemicals letter dated January 19, 1984.

Project: 101 Sulfuric Acid
Plant Modification
81° 21' 43W
Longitude/Elevation: 24° 44' 27W
County: Polk
Expiration Date: April 1, 1987
Permit Number: 23-103329

Permittee:
Dow Agro-Chemicals
P. O. Box 667
Wt. Madison, Florida 32801

PERMITTEE:
USS Agri-Chemicals

Permit Number:AC 53-103829
Expiration Date: April 1, 1987

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 Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement 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 applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), 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. This permit does not constitute a waiver of 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.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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.

5. 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, unless specifically authorized by an order from the department.

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-103829
Expiration Date: April 1, 1987

GENERAL CONDITIONS:

6. The permittee shall at all times 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.

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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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.

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 notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
USS Agri-Chemicals

Permit Number:AC 53-103829
Expiration Date: April 1, 1987

GENERAL CONDITIONS:

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.

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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-103829
Expiration Date: April 1, 1987

GENERAL CONDITIONS:

- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The sulfuric acid plant shall comply with all requirements of 40 CFR 60, Subpart H - Standards of Performance for Sulfuric Acid Plants.
2. Sulfuric acid production shall not exceed 3,000 TPD (100% acid).
3. Sulfur dioxide emissions shall not exceed 4 lb/ton acid produced and 500 lb/hr.

Formic Number: WJ 53-103829
Expiration date: April 1, 1983

US - Chemical
Reference:

Formic Number: WJ 53-103829

Formic Number: WJ 53-103829

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-103829
Expiration Date: April 1, 1987

SPECIFIC CONDITIONS:

4. Acid mist emissions shall not exceed 0.15 lb/ton acid and 18.8 lb/hr.
5. Visible emissions shall not exceed 10 percent opacity, average for any consecutive 6 minute period.
6. Nitric oxide emissions shall not exceed 18 ppm or 73.6 TPY.
7. The test methods and procedures described in 40 CFR 60.85 shall be used to determine the compliance status of the source with the sulfur dioxide and acid mist standards and Method 9, as described in 40 CFR 60, Appendix A, shall be used to determine the compliance status of the source with the visible emissions standard. Method 7, as described in 40 CFR 60, Appendix A, shall be used to determine the nitrogen oxide emissions. Compliance tests shall be conducted while the plant is operating at its maximum permitted capacity ($\pm 10\%$).
8. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated on this plant as specified in 40 CFR 60.84. Excess emissions shall be reported to the Southwest District and the Bureau of Air Quality Management.
9. This plant shall not be operated more than 7,967 hours per year without prior approval of the Southwest District.
10. This construction permit replaces the current operation permit for this sulfuric acid plant. While the plant is being modified, the emissions shall not exceed 4 lb SO₂ and 0.15 lb acid mist per ton of acid produced and 10 percent opacity when the plant is being operated commercially.
11. Construction shall reasonably conform to the plan and schedule in the application. Any changes in the plan or schedule shall be reported to the Southwest District. The company shall submit semi-annual status reports on the plant modifications to the Southwest District that describe what modifications were done during the proceeding 6 months, what modifications are planned for the next 6 months, and the maximum hourly and daily production rates achieved during the proceeding six months.
12. USS Agri-Chemicals shall take precautionary measures to prevent gas leaks and promptly repair any gas leaks that occur at this

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-103829
Expiration Date: April 1, 1987

SPECIFIC CONDITIONS:

plant. A portable industrial vacuum unit equipped with classification and air filtering equipment shall be used to rejuvenate the existing catalyst. Spent catalyst shall be disposed of in an environmentally sound manner.

13. USS Agri-Chemicals shall submit a complete application for permit to operate the sulfuric acid plant, which must include an emissions test report, to the Southwest District at least 90 days prior to the expiration date of this construction permit or no later than 45 days after reaching the permitted production capacity, whichever date occurs first. If the compliance tests are conducted at a plant operating rate of less than 90 percent of the permitted capacity (3,000 TPD), then any permit to operate issued for the plant shall restrict maximum production to not more than 10 percent above the production rate that existed during the compliance tests. USS Agri-Chemicals may continue to operate this sulfuric acid plant, if it is in compliance with all conditions of this construction permit, until its expiration date or until the expiration date of any permit to operate that is issued for this source.

14. Upon obtaining a permit to operate, USS Agri-Chemicals will be required to submit quarterly excess emissions reports (40 CFR 60.7) and annual operation reports which shall include, as a minimum, the annual production and a recent emissions test report, to the Southwest District. A copy of the excess emissions report shall be sent to the Bureau of Air Quality Management.

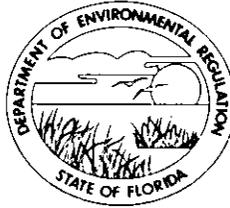
Issued this ____ day of _____, 1985

**STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION**

VICTORIA J. TSCHINKEL, Secretary

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

PERMITTEE:
USS Agri-Chemicals
P. O. Box 867
Ft. Meade, Florida 33841

Permit Number: AC 53-081664
Expiration Date: April 1, 1987
County: Polk
Latitude/Longitude: 24° 44' 29"N/
81° 51' 4"W
Project: No. 2 Sulfuric Acid
Plant Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

Modifications to an existing No. 2 Sulfuric Acid Plant to increase production from 2,200 to 3,000 TPD 100 percent sulfuric acid. Sulfur dioxide emissions are controlled by the double contact/double absorption process. Acid mist emissions are controlled by a demister. The plant is located in Polk County, 3.5 miles west of Ft. Meade on State Road 630. The UTM coordinates of this site are zone 17, 416.12 km E and 3068.62 km N.

This construction permit replaces permit No. AO 53-69838.

The modifications shall be in accordance with the plans and schedule submitted by the permittee and attached to the permit except for the changes listed in the Specific Conditions.

attachments: Application received May 6, 1985.
USS Agri-Chemicals letter dated April 24, 1985.
Application for PSD Approval dated January, 1984.
USS Agri-Chemicals letter dated August 20, 1984.
Sholtes & Koogler letter dated May 18, 1984.
USS Agri-Chemicals letter dated January 19, 1984.

Project: 50% Sulfuric Acid
Plant Addition
81° 21' 4" N
Latitude/Longitude: 24° 44' 28" N
County: Polk
Expiration Date: April 1, 1987
Permit Number: 40 23-081664

Permittee:
US Agr-Chemicals
P. O. Box 887
St. Joseph, Florida 32841

PERMITTEE:
USS Agri-Chemicals

Permit Number:AC 53-081664
Expiration Date: April 1, 1987

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 Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement 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 applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), 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. This permit does not constitute a waiver of 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.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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.

5. 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, unless specifically authorized by an order from the department.

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-081664
Expiration Date: April 1, 1987

GENERAL CONDITIONS:

6. The permittee shall at all times 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.

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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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.

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 notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

Revised number: AG 53-08163
Application Date: April 1, 1987

REVISION:
See also Chemicals

GENERAL COMMENT 13:

PERMITTEE:
USS Agri-Chemicals

Permit Number:AC 53-081664
Expiration Date: April 1, 1987

GENERAL CONDITIONS:

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.

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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-081664
Expiration Date: April 1, 1987

GENERAL CONDITIONS:

- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The sulfuric acid plant shall comply with all requirements of 40 CFR 60, Subpart H - Standards of Performance for Sulfuric Acid Plants.
2. Sulfuric acid production shall not exceed 3,000 TPD (100% acid).
3. Sulfur dioxide emissions shall not exceed 4 lb/ton acid produced and 500 lb/hr.

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-081664
Expiration Date: April 1, 1987

SPECIFIC CONDITIONS:

4. Acid mist emissions shall not exceed 0.15 lb/ton acid and 18.8 lb/hr.
5. Visible emissions shall not exceed 10 percent opacity, average for any consecutive 6 minute period.
6. Nitric oxide emissions shall not exceed 18 ppm or 73.6 TPY.
7. The test methods and procedures described in 40 CFR 60.85 shall be used to determine the compliance status of the source with the sulfur dioxide and acid mist standards and Method 9, as described in 40 CFR 60, Appendix A, shall be used to determine the compliance status of the source with the visible emissions standard. Method 7 as described in 40 CFR 60, Appendix A, shall be used to determine the nitrogen oxides emissions. Compliance tests shall be conducted while the plant is operating at its maximum permitted capacity (+ 10%).
8. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated on this plant as specified in 40 CFR 60.84. Excess emissions shall be reported to the Southwest District and the Bureau of Air Quality Management.
9. This plant shall not be operated more than 7,967 hours per year without prior approval of the Southwest District.
10. This construction permit replaces the current operation permit for this sulfuric acid plant. While the plant is being modified, the emissions shall not exceed 4 lb SO₂ and 0.15 lb acid mist per ton of acid produced and 10 percent opacity when the plant is being operated commercially.
11. Construction shall reasonably conform to the plan and schedule in the application. Any changes in the plan or schedule shall be reported to the Southwest District. The company shall submit semi-annual status reports on the plant modifications to the Southwest District that describe what modifications were done during the proceeding 6 months, what modifications are planned for the next 6 months, and the maximum hourly and daily production rates achieved during the proceeding six months.
12. USS Agri-Chemicals shall take precautionary measures to prevent gas leaks and promptly repair any gas leaks that occur at this

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-081664
Expiration Date: April 1, 1987

SPECIFIC CONDITIONS:

plant. A portable industrial vacuum unit equipped with classification and air filtering equipment shall be used to rejuvenate the existing catalyst. Spent catalyst shall be disposed of in an environmentally sound manner.

13. USS Agri-Chemicals shall submit a complete application for permit to operate the sulfuric acid plant, which must include an emissions test report, to the Southwest District at least 90 days prior to the expiration date of this construction permit or no later than 45 days after reaching the permitted production capacity, whichever date occurs first. If the compliance tests are conducted at a plant operating rate of less than 90 percent of the permitted capacity (3,000 TPD), then any permit to operate issued for the plant shall restrict maximum production to not more than 10 percent above the production rate that existed during the compliance tests. USS Agri-Chemicals may continue to operate this sulfuric acid plant, if it is in compliance with all conditions of this construction permit, until its expiration date or until the expiration date of any permit to operate that is issued for this source.

13. Upon obtaining a permit to operate, USS-Agri Chemicals will be required to submit quarterly excess emissions reports (40 CFR 60.7) and annual operation reports which shall include, as a minimum, the annual production and a recent emissions test report, to the Southwest District. A copy of the excess emissions report shall be sent to the Bureau of Air Quality Management.

Issued this ____ day of _____, 1985

**STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION**

VICTORIA J. TSCHINKEL, Secretary

Best Available Control Technology (BACT) Determination
USS Agri-Chemicals
Polk County

The applicant plans the following modifications at its Ft. Meade chemical complex.

- 1) the total productive output from the two existing sulfuric acid plants will be increased from 4400 to 6000 tons per day of 100 percent acid,
- 2) the total acid output from the two phosphoric acid plants will be increased from 1600 to 2000 tons per day of P₂O₅.

The planned increase in production capacities will increase the amount of the following air pollutants released to the atmosphere.

Sulfur dioxide	1064	ton/yr
Sulfuric acid mist	39.8	ton/yr
Nitrogen oxides	59.2	ton/yr

The net emissions increase of sulfur dioxide, sulfuric acid mist and nitrogen oxides, exceed the significant emission rates listed in Table 500-2, Regulated Air Pollutants - Significant Emission Rates, and are subject to a Best Available Control Technology (BACT) determination as set forth in Florida Administrative Code Rule 17-2.630.

BACT Determination Requested by the Applicant:

Sulfur dioxide emissions not to exceed 4.0 pounds per ton of 100% acid produced using double absorption control technology. High efficiency mist eliminators will be used to control sulfuric acid mist emissions below 0.15 pound per ton of 100% acid produced. Nitrogen oxides emissions not to exceed 18 ppm or 73.6 TPY. There is no feasible method of further reducing the emissions of NO_x from a sulfuric acid plant.

Date of Receipt of a BACT application:

January 23, 1984

Date of Publication in the Florida Administrative Weekly:

February 10, 1984

Review Group Members:

The determination was based upon comments received from the New Source Review Section and the Southwest District Office.

BACT Determined by DER:

Pollutant	Emission Limit per plant
Sulfur dioxide	4 lb/ton expressed as 100% sulfuric acid produced
Sulfuric Acid Mist	0.15 lb/ton expressed as 100% sulfur acid produced
Nitrogen Oxides	18 ppm or 73.6 TPY
Visible Emissions	Not to exceed 10% opacity

Test methods and procedures as set forth in 40 CFR 60.85 shall be used to determine compliance with the sulfur dioxide and acid mist emission limits. Compliance with the nitrogen oxides emission limit shall be in accordance with 40 CFR 60, Appendix A, Method 7.

Compliance with the visible emissions limit will be in accordance with 40 CFR 60, Appendix A, Method 9.

A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained and operated as required in 40 CFR 60, Subpart H.

BACT Determination Rationale

Double absorption technology will be used to control SO₂ emissions from the sulfuric acid plant. This method of SO₂ emission control is currently considered the best demonstrated technology. No justification could be found to require a more

stringent SO₂ emission limit than the NSPS requirements (40 CFR 60, Subpart H) and DER concurs that the applicants proposal is BACT for the control of SO₂ emissions.

Use of high efficiency mist eliminators to control sulfuric acid mist as proposed by the applicant is considered BACT. The department could not find a reason to justify for a more stringent sulfuric acid mist emission limit then the NSPS standard.

No demonstrated commercial process is currently available to control NO_x emissions from contact sulfuric acid plants.

Air quality modeling predicts no violation of any PSD increment or ambient air quality standard resulting from the emissions determined as BACT.

Details of the Analysis may be Obtained by Contacting:

Edward Palagyi, BACT Coordinator
Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Recommended by:

C. H. Fancy, Deputy Bureau Chief

Date: _____

Approved by:

Victoria J. Tschinkel, Secretary

Date: _____

Technical Evaluation
and
Preliminary Determination

USS Agri-Chemicals
Ft. Meade, Florida
Polk County

Phosphoric Acid Plant Modifications

File Numbers

AC 53-103831 - Plant A
AC 53-103830 - Plant B

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

June 21, 1985

I. Applicant

A. USS Agri-Chemicals
P. O. Box 867
Ft. Meade, Florida 33841

B. Request

Mr. G. W. Beck, General Manager of Administrative Services, submitted applications for permits to modify two existing phosphoric acid plants (SIC 2874) on January 23, 1984. The applications were considered complete on receipt of DER Forms 17-2.202(1) on May 6, 1985.

C. Project and Location

USS Agri-Chemicals proposes to increase production in two existing phosphoric acid plants from 800 to 1,000 TPD of P₂O₅ per plant. No major modifications to the plants are anticipated.

The plants are located in Polk County, 3.5 miles west of Ft. Meade on State Road 630. The UTM coordinates of this site are zone 17, 416.07 km E and 3068.7 km N.

D. Air Pollutant Emissions

The following table summarizes the permitted emissions from each phosphoric acid plant before and after the modification:

	Production P ₂ O ₅	Fluoride Emissions		
		lb/T P ₂ O ₅	lb/hr	TPY
Proposed*	1000	0.02	0.88	3.5
Present**	800	0.02	0.71	2.7
Change	+200	0	+0.17	+0.8

* Based on 7,968 hr/year operation

** Based on 265,900 TPY P₂O₅ input

As two phosphoric acid plants will be modified, the total increase in emission could double the values shown in the table.

II. Rule Applicability

The proposed projects, modifying existing phosphoric acid plants, are subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code.

As the only regulated pollutant emitted by the proposed sources is fluorides, the Area Designation (17-2.400), Prevention of Significant Deterioration (17-2.500), and New Source Review for Nonattainment Areas (17-2.510) sections of Chapter 17-2, FAC, are not applicable.

Best Available Control Technology determinations (17-2.630) were not required because phosphoric acid plants have a specific emission limiting standard (17-2.600(3)(a)1.), and the increase in fluoride emissions is less than the significant emissions rate listed in Table 500-2 of Chapter 17-2, FAC.

The proposed projects are subject to Rule 17-2.520, FAC, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements. The plants will be required to comply with 40 CFR 60, Subpart T-Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants.

III. Technical Evaluation

The state and federal construction permits for the two existing phosphoric acid plants were issued in 1980 and 1981. A condition of these construction permits was that the plants comply with the new source performance standards (NSPS) for phosphoric acid plants (40 CFR 60, Subpart T). The plants have been built and were placed in operation in 1983. Compliance tests showed the emissions from each plant were below the NSPS of 0.02 lb F/T P₂O₅ input.

Most of the process and control equipment appears to be oversized for the original 800 TPD production rate design. The applicant believes each plant can produce 1,000 TPD P₂O₅ with only minor changes in the process and control equipment.

Compliance tests have shown these plants can meet NSPS. The department believes that NSPS can be met at higher production rates in these plants.

A more detailed evaluation can be found in the department's Tampa and Tallahassee files for the original construction permits that were issued for these phosphoric acid plants.

IV. Air Quality Impact

Screening modeling shows the maximum 24-hour ambient air impact of the fluoride emissions from both phosphoric acid plants will increase by 1.1 ug/m³ to 5.8 ug/m³. This is above the de minimus ambient impact of 0.25 ug/m³ but well below the published time weighted average (TWA) threshold limit value (TLV) of 2,500 ug/m³. The department does not have an ambient air quality standard for fluorides.

V. Conclusion

Based on the data submitted by USS Agri-Chemicals, the department has concluded that its two phosphoric acid plants can be modified to increase production and be operated in compliance with all state and federal air pollution control regulations. The department proposes to issue construction permits that will authorize the increased production and fluoride emissions from these plants. The General and Specific Conditions in the proposed permits (drafts attached) will assure compliance of the modified phosphoric acid plants with the air pollution control regulations.

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

PERMITTEE:
USS Agri-Chemicals
P. O. Box 867
Ft. Meade, Florida 33841

Permit Number: AC 53-103830
Expiration Date: April 1, 1987
County: Polk
Latitude/Longitude: 27° 44' 32"N/
81° 51' 6"W
Project: Phosphoric Acid Plant B
Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

Modification of an existing phosphoric acid plant to increase production from 800 to 1,000 TPD P_2O_5 . Fluoride emissions from the plant are controlled by a 12,000 ACFM venturi scrubber that discharges through a 3.4 foot diameter, 85 foot high stack. Fluoride emissions from the clarification and storage areas are controlled by a 6,000 ACFM venturi scrubber that discharges through a 2 foot diameter, 60 foot high stack. The plant is located in Polk County, 3.5 miles west of Ft. Meade on State Road 630. The UTM coordinates of this site are zone 17, 416.07 km E and 3068.70 km N.

This construction permit replaces permit No. AO 53-69839.

The modification shall be in accordance with the plans and schedule submitted by the permittee and attached to the permit except for the changes listed in the Specific Conditions.

attachments: Application received May 6, 1985.
USS Agri-Chemicals letter dated April 24, 1985.
Application for PSD Approval dated January, 1984.
USS Agri-Chemicals letter dated August 20, 1984.
Sholtes & Koogler letter dated May 18, 1984.
USS Agri-Chemicals letter dated January 19, 1984.

Modification
Project: Phosphoric Acid Plant 2
81° 51' 57"
Latitude/Longitude: 27° 44' 32"
County: Polk
Expiration Date: April 1, 1987
Permit Number: AC 53-103830

Permit No.:
Gas Agri-Chemicals
P. O. Box 867
Fort Meade, Florida 33841

PERMITTEE:
USS Agri-Chemicals

Permit Number:AC 53-103830
Expiration Date: April 1, 1987

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 Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement 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 applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), 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. This permit does not constitute a waiver of 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.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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.

5. 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, unless specifically authorized by an order from the department.

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-103830
Expiration Date: April 1, 1987

GENERAL CONDITIONS:

6. The permittee shall at all times 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.

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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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.

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 notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
USS Agri-Chemicals

Permit Number:AC 53-103830
Expiration Date: April 1, 1987

GENERAL CONDITIONS:

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.

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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-103830
Expiration Date: April 1, 1987

GENERAL CONDITIONS:

- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
- the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The phosphoric acid plant shall comply with all requirements of 40 CFR 60, Subpart T - Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid plants, prior to, during, and after the modifications.
2. Phosphorus bearing feed material to the modified plant shall not exceed 1,056 ton per day P_2O_5 input (1,000 TPD P_2O_5 product) and 45.8 TPH P_2O_5 production. Raw material input shall be monitored as required by 40 CFR 60.203. All records shall be kept for a minimum of 2 years.

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-103830
Expiration Date: April 1, 1987

SPECIFIC CONDITIONS:

3. Total fluoride (F) emissions from this plant's manufacturing, clarification, and storage equipment shall not exceed 0.02 lb F/T P₂O₅ input and 21.1 lb/day. The plant's emissions shall be the sum of the fluoride emissions from the manufacturing facilities and one half of the fluoride emissions from the clarification/storage area. Compliance with this condition shall be determined by the test methods and procedures specified in 40 CFR 60.204 while the plant is operating at the permitted capacity of 44 TPH P₂O₅ input (+ 10%). The acid plant venturi scrubber and storage/clarification venturi scrubber shall be tested within 24 hours of each other. Scrubber water pressure, scrubber water flow, and gas pressure drop shall be monitored during any compliance test and a summary of this data included in any emissions test report. The Southwest District shall be notified at least 15 days in advance of any compliance test.

4. The acid storage and clarification areas of this plant may operate continuously, 8760 hour per year. The manufacturing equipment shall not operate more than 7,968 hour per year unless prior approval has been obtained from the Southwest District.

5. All manhole openings, seal tanks, etc. shall be covered during plant operations to minimize fugitive fluoride emission.

6. The wetted area in the gypsum disposal area and the process cooling pond shall not be increased without prior approval from the Southwest District.

7. The Company shall submit semi-annual status reports on the plant modifications to the Southwest District that describe what modifications were done during the preceding 6 months, what modifications are planned for the next 6 months, and the maximum hourly and daily production rates achieved during the preceding 6 months.

8. The Company shall submit a complete application for permit to operate this phosphoric acid plant, which will include an emission tests report of the plant (manufacturing, clarification, and storage scrubbers), to the Southwest District at least 90 days prior to the expiration date of this construction permit or no later than 45 days after reaching the permitted production capacity, whichever date occurs first. If the compliance tests are conducted at an operating rate of less than 90 percent of the permitted capacity, then any permit to operate issued for the plant shall restrict its maximum production to not more than 10 percent

Report number AG 83-103830
Exposition Date April 1, 1987

83-103830
AG 83-103830

AG 83-103830

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-103830
Expiration Date: April 1, 1987

SPECIFIC CONDITIONS:

above the production rate that existed during the compliance tests. The Company may prorate the allowable fluoride emissions among the manufacturing, clarification and storage scrubbers.

9. Upon obtaining a permit to operate, the Company will be required to make periodic compliance tests and to submit annual operation reports to the Southwest District which shall include as a minimum: The amount of material processed during the preceding year, a recent fluoride emission tests report, the annual emissions from the plant (note calculation basis), and any change to the plant described in the information contained in the permit application.

Issued this ____ day of _____, 1985

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

VICTORIA J. TSCHINKEL, Secretary

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

PERMITTEE:
USS Agri-Chemicals
P. O. Box 867
Ft. Meade, Florida 33841

Permit Number: AC 53-103831
Expiration Date: April 1, 1987
County: Polk
Latitude/Longitude: 27° 44' 32"N/
81° 51' 6"W
Project: Phosphoric Acid Plant A
Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

Modification of an existing phosphoric acid plant to increase production from 800 to 1,000 TPD P₂O₅. Fluoride emissions from the plant are controlled by a 12,000 ACFM venturi scrubber that discharges through a 3.4 foot diameter, 85 foot high stack. Fluoride emissions from the clarification and storage areas are controlled by a 6,000 ACFM venturi scrubber that discharges through a 2 foot diameter, 60 foot high stack. The plant is located in Polk County, 3.5 miles west of Ft. Meade on State Road 630. The UTM coordinates of this site are zone 17, 416.07 km E and 3068.78 km N.

This construction permit replaces permit No. AO 53-69840.

The modification shall be in accordance with the plans and schedule submitted by the permittee and attached to the permit except for the changes listed in the Specific Conditions.

attachments: Application received May 6, 1985.
USS Agri-Chemicals letter dated April 24, 1985.
Application for PSD Approval dated January, 1984.
USS Agri-Chemicals letter dated August 20, 1984.
Sholtes & Koogler letter dated May 18, 1984.
USS Agri-Chemicals letter dated January 19, 1984.

Permit Number: AC 23-103831
Expiration Date: April 1, 1987
County: Polk
Latitude/Longitude: 27° 44' 32"N
81° 51' 0"W
Project: Phosphoric Acid Plant A
Modification

PERMITTEE:
Uss Agri-Chemicals
P. O. Box 887
St. Cloud, Florida 32341

PERMITTEE:
USS Agri-Chemicals

Permit Number:AC 53-103831
Expiration Date: April 1, 1987

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 Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement 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 applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), 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. This permit does not constitute a waiver of 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.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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.

5. 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, unless specifically authorized by an order from the department.

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-103831
Expiration Date: April 1, 1987

GENERAL CONDITIONS:

6. The permittee shall at all times 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.

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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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.

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 notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
USS Agri-Chemicals

Permit Number:AC 53-103831
Expiration Date: April 1, 1987

GENERAL CONDITIONS:

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.

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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-103831
Expiration Date: April 1, 1987

GENERAL CONDITIONS:

- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
- the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The phosphoric acid plant shall comply with all requirements of 40 CFR 60, Subpart T - Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid plants, prior to, during, and after the modifications.
2. Phosphorus bearing feed material to the modified plant shall not exceed 1,056 ton per day P_2O_5 input (1,000 TPD P_2O_5 product) and 45.8 TPH P_2O_5 production. Raw material input shall be monitored as required by 40 CFR 60.203. All records shall be kept for a minimum of 2 years.

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-103831
Expiration Date: April 1, 1987

SPECIFIC CONDITIONS:

3. Total fluoride (F) emissions from this plant's manufacturing, clarification, and storage equipment shall not exceed 0.02 lb F/T P₂O₅ input and 21.1 lb/day. The plant's emissions shall be the sum of the fluoride emissions from the manufacturing facilities and one half of the fluoride emissions from the clarification/storage area. Compliance with this condition shall be determined by the test methods and procedures specified in 40 CFR 60.204 while the plant is operating at the permitted capacity of 44 TPH P₂O₅ input ($\pm 10\%$). The acid plant venturi scrubber and storage/clarification venturi scrubber shall be tested within 24 hours of each other. Scrubber water pressure, scrubber water flow, and gas pressure drop shall be monitored during any compliance test and a summary of this data included in any emissions test report. The Southwest District shall be notified at least 15 days in advance of any compliance test.

4. The acid storage and clarification areas of this plant may operate continuously, 8760 hour per year. The manufacturing equipment shall not operate more than 7,968 hour per year unless prior approval has been obtained from the Southwest District.

5. All manhole openings, seal tanks, etc. shall be covered during plant operations to minimize fugitive fluoride emission.

6. The wetted area in the gypsum disposal area and the process cooling pond shall not be increased without prior approval from the Southwest District.

7. The Company shall submit semi-annual status reports on the plant modifications to the Southwest District that describe what modifications were done during the preceding 6 months, what modifications are planned for the next 6 months, and the maximum hourly and daily production rates achieved during the preceding 6 months.

8. The Company shall submit a complete application for permit to operate this phosphoric acid plant, which will include an emission tests report of the plant (manufacturing, clarification, and storage scrubbers), to the Southwest District at least 90 days prior to the expiration date of this construction permit or no later than 45 days after reaching the permitted production capacity, whichever date occurs first. If the compliance tests are conducted at an operating rate of less than 90 percent of the permitted capacity, then any permit to operate issued for the plant shall restrict its maximum production to not more than 10 percent

PERMITTEE:
USS Agri-Chemicals

Permit Number: AC 53-103831
Expiration Date: April 1, 1987

SPECIFIC CONDITIONS:

above the production rate that existed during the compliance tests. The Company may prorate the allowable fluoride emissions among the manufacturing, clarification and storage scrubbers.

9. Upon obtaining a permit to operate, the Company will be required to make periodic compliance tests and to submit annual operation reports to the Southwest District which shall include as a minimum: The amount of material processed during the preceding year, a recent fluoride emission tests report, the annual emissions from the plant (note calculation basis), and any change to the plant described in the information contained in the permit application.

Issued this ____ day of _____, 1985

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

VICTORIA J. TSCHINKEL, Secretary

APPROXIMATE DATE OF DEPARTURE: 04-22-1952
APPROXIMATE DATE OF ARRIVAL: 04-22-1952

APPROXIMATE DATE OF DEPARTURE: 04-22-1952
APPROXIMATE DATE OF ARRIVAL: 04-22-1952

APPROXIMATE DATE OF DEPARTURE: 04-22-1952
APPROXIMATE DATE OF ARRIVAL: 04-22-1952

APPROXIMATE DATE OF DEPARTURE: 04-22-1952
APPROXIMATE DATE OF ARRIVAL: 04-22-1952

APPROXIMATE DATE OF DEPARTURE: 04-22-1952
APPROXIMATE DATE OF ARRIVAL: 04-22-1952