EXHIBIT - B

STATE OF FLORIDA
DEPARTMENT OF POLLUTION CONTROL
500 EAST CENTRAL AVENUE P.O. BOX 9205
WINTER HAVEN, FLORIDA 33881

PETER P. BALJET
EXECUTIVE DIRECTOR

POLK COUNTY AP
USS AGRI-CHEMICALS (FT. MEADE)

W. D. FREDERICK, JR.
CHAIRMAN

RECEIVED
OCT 25 1974

Mr. George W. Beck
General Manager
USS Agri-Chemicals
P.O. Box 150
Bartow, Florida 33830

Dear Mr. Beck:

Pursuant to your recent application, please find enclosed a permit (No. AC53-2582) dated Oct. 21, 1974 to construct/ ~~xxxxxxxxx~~ the subject pollution source.

This permit will expire on August 21, 1975 and will be subject to the conditions, requirements and restrictions checked or indicated otherwise in the attached sheet "Construction/~~xxxxxxxxx~~ Permit Conditions".

This permit is issued under the authority of Florida Statute 403.061(16). The time limits imposed herein are a condition to this permit and are enforceable under Florida Statute 403.161. You are hereby placed on Notice that the Department will review this permit before the scheduled date of expiry and will seek court action for violation of the conditions and requirements of this permit.

You have ten days from the date of receipt hereof within which to seek a review of the conditions and requirements contained in this permit. Failure to file a written request to review or modify the conditions or requirements contained in this permit shall be deemed a waiver of any objections thereto.

Your continued cooperation in this matter is appreciated and in future communication please refer to your permit number.

Yours very truly,

for J. H. Kerns, P.E.
Regional Engineer
West Central Region

JHK/FW/pm
cc: Nickonovitz

FS3
1-74

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

FOR USS Agri-Chemicals
P.O. Box 150
Bartow, Florida 33830

PERMIT NO. AC53-2582 DATE October 21, 1974

PURSUANT TO THE PROVISION OF SECTION 403.061(16) OF CHAPTER 403, FLORIDA STATUTES, AND CHAPTER 17-4 FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO:
Mr. George W. Beck, General Manager

FOR THE CONSTRUCTION OF:
A limestone scrubbing process to serve existing sulfuric acid plants

LOCATED AT:
Ft. Meade chemical plant, S.R. 630, 3 miles West of Ft. Meade, Polk County UTM 17-416000 East, 3069000 North

IN ACCORDANCE WITH THE APPLICATION DATED September 5, 1974

AND IN CONFORMITY WITH THE STATEMENTS AND SUPPORTING DATA ENTERED THEREIN, ALL OF WHICH ARE FILED WITH THE DEPARTMENT AND ARE CONSIDERED A PART OF THIS PERMIT.

THIS PERMIT SHALL BE EFFECTIVE FROM THE DATE OF ITS ISSUANCE UNTIL Aug. 21, 1975 AND SHALL BE SUBJECT TO ALL APPLICABLE LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

CHIEF, BUREAU OF PERMITTING

J. H. KERNS, P.E. EXECUTIVE DIRECTOR
WEST CENTRAL REGION

FORM 1-J

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT PROVISOS

AIR POLLUTION SOURCES

Permit No. AC53-2582

Date: October 21, 1974

(X) 1. Construction of this installation shall be completed by June 30, 1975. Application for Permit to Operate to be submitted by _____.

(X) 2. This construction permit expires on August 21, 1975 following an initial period of operation for appropriate testing to determine compliance with the Rules of the Florida Pollution Control Board.

(X) 3. All applicable rules of the Department including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction.

(X) 4. The applicant shall continue the retention of the engineer of record for the inspection of the construction of this project. Upon completion the engineer shall inspect for conformity to construction permit applications and associated documents. A report of such inspection shall be submitted by the engineer to the Department of Pollution Control for consideration toward the issuance of an operation permit.

(X) 5. This scrubber stack shall be tested* for sulfur dioxide and sulfuric acid mist within 10 days after it is placed in operation. These test results are required prior to our issuance of an operation permit and shall be submitted in duplicate to the DPC West Central Florida Regional Office P.O. Box 9205, Winter Haven, Florida 33880

*FUEL ANALYSIS MAY BE SUBMITTED FOR REQUIRED SULFUR DIOXIDE EMISSION TEST.

( ) 6. The operation of this installation shall be observed for visible emissions in accordance with Method 9 - Visible Determination of the Opacity of Emissions from Stationary Sources (36FR24895; Federal Register, December 23, 1971). The observation results are required prior to our issuance of an operation permit, and shall be submitted in duplicate to the DPC _____ Florida Regional Office, _____.

(X) 7. Satisfactory ladders, platforms, and other safety devices shall be provided/available as well as necessary ports to facilitate the carrying out of an adequate sampling program.

( ) 8. There shall be no discharges of liquid effluents or contaminated runoff from the plant site.

( ) 9. All fugitive dust generated at this site shall be adequately controlled.

FS17
1-74

(X) 10. Recognition of the foregoing estimated date of completion shall not be construed as the granting of a variance or the waiver of permittee's responsibility to conduct operations in timely compliance with applicable law.

(X) 11. The compliance schedule for this plant established by permit AO53-2144 remains in effect.

53-493

STATE OF FLORIDA
DEPARTMENT OF POLLUTION CONTROL

SEP 10 1973

APPLICATION TO ~~OPERATE~~/CONSTRUCT POLLUTION ~~SOURCE~~/CONTROL FACILITY

SECTION I – GENERAL INFORMATION FOR ALL POLLUTION SOURCES
I TO BE FILLED IN BY APPLICANT

Source Type: Air Pollution
Type application: [ ] Operation [ ] Temporary Operation [x] Construction
Status Source: [x] New [ ] Existing [ ] Modification

Source Name: Ft. Meade Phosphate Chemical Plant County: Polk

Source Location: Street: 3 miles west of City: Ft. Meade
(Water Source Only) Lat: ____° ____' ____" Long: ____° ____' ____"
(Air Source Only) UTM: East ~~166.2~~ 17-416000 North ~~377.9~~ 3069000

Appl. Name and Title: G. W. Beck, Manager Florida Phosphate Operations
Appl. Address: c/o USS Agri-Chemicals, P.O.Box 150, Bartow, Florida 33830

II TO BE FILLED IN BY REGION (*BY BUREAU OF PERMITTING)

Control No: Region ____ County ____ Type ____ *Project ____

Type Permit	Date Rec'd	*Permit No.	*Issue Date	*Compl. Date	*Exp. Date

Source Description: ____
Control Equipment: ____

Water Permits

Receiving Body Code: ____ Surface Water Code: ____
Station No.: Influent: ____ Effluent: ____

Effluent:	Average	Design	% Reduction
Flow rate, MGD			
BOD, lbs/day			
Susp. Sol., lbs/day			
Other:			

Air Permits

Operating Time: [ ] Continuous [ ] Intermittent
Fuel: Type ____ M-BTU/hr. In Put ____
Incinerator: Capacity, tons/day ____ Type Waste ____
Mfg. & Model ____

Pollutant Emissions, lbs/day	Actual	Design	Allowable
Particulate			
Sulfur Oxides			
Other:			

Implementation: Estimated Appl. Filing Date ____
Estimated Start of Const. ____ Estimated Compliance Date ____

DESCRIPTION OF PROPOSED PROJECT

A. Describe the nature and extent of the proposed project. Refer to existing pollution control facilities, DPC permits, conditions, orders and notices, expected improvement in performance of the facilities and state whether the proposed project will result in full compliance of the source. Attach additional sheet if necessary.

The existing sulfuric acid plant is operating under permit no.A053-2144 which expires July 1, 1975. A compliance schedule was submitted to DPC on February 25, 1974. Work is on schedule and, subject to the prior issue of a construction permit, construction is expected to begin on the dates shown below. The Peabody Limestone Scrubbing Process will be used to achieve emissions at the levels required for a compliance with Chapter 17-2 rules. Refer to flow diagram E-65011-0100/A for a further description of the process.

B. Schedule of Project Covered in this Application (Construction Permit Application Only).

Federally or State Financed Projects only:

Planning Complete NA

Financing Program Complete NA

Indicate other local, state and/or federal agency approvals and dates NA

NA-Not applicable

All projects:

Start of Construction On or before 10/31/74

Completion of Construction 6/1/75 to 6/31/75 (Start-up by 6/15/75)

C. Costs of Construction (Show a breakdown of costs for individual components/units of the proposed project serving pollution control purpose only). Information on actual costs shall be furnished with the application for operation permit.

SO_2 Abatement Process Unit	$2,514,000
Disposal Pond	156,000
Supernate Pumping	63,000
Utility Tie-ins	63,000
Total	$2,796,000

D. Indicate any previous DPC permits, issuance dates, and expiration dates.

This construction permit application is for a new facility. No previous permits have been issued.

AIR POLLUTION SOURCES & CONTROL DEVICES

A. Identification of Air Contaminants

1) [ ] Particulates
   a) [ ] Dust b) [ ] Fly Ash c) [ ] Smoke d) [ ] Other (Identify)

2) [x] Sulfur Compounds
   a) [x] SO_x as SO_2 b) [ ] Reduced Sulfur as H_2S c) [ ] Other (Identify)

3) [ ] Nitrogen Compounds
   a) [ ] NO_x as NO_2 b) [ ] NH_3 c) [ ] Other (Identify)

4) [ ] Flourides 5) [x] Acid Mist 6) [ ] Odor

7) [ ] Hydrocarbons 8) [ ] Volatile Organic Compounds

9) [ ] Other (Specify): _____

B. Raw Materials and Chemicals Used (Be Specific)

Description	Utilization ~~Tons/day, lbs/hr, xxxx~~ lbs./hr.	Approximate Contaminant Content		Relate to Flow Diagram
		Type	% Wt.	
Tail gas from an existing 1500 ton/day sulfuric acid plant	609,190	SO_x+ acid mist	0.786	E-65011-0100/A (Stream #1)

C. Process Weight:

1) Total Process Weight Rate NA lbs./hr. [See Sec. 17-2.04(2)]
2) Product Weight NA lb./hr. expressed as NA
3) Normal Operating Time 24 hrs. per day, if seasonal describe: Not seasonal
   NA-Not applicable

D. Airborne Contaminants Discharged:

Name of Contaminant	Design Actual Discharge	Discharge Criteria*	Allowable Discharge*	Relate Location to Flow Diagram
SO_2	10 max.	#/ton H_2SO_4	10	E-65011-0100/A
Acid mist	0.15 max.	#/ton H_2SO_4	0.15	(Stream #4)

* Refer to Chapter 17-2 Florida Administrative Code
(Discharge Criteria: Process Weight Rate, #/ton P_2O_5, #/M BTU/hr etc.)

E. Control Devices:

Name	% Eff.	Conditions of Operation, Particle Size Range, etc.	Relate to Flow Diagram
Limestone Scrubbing Unit	86.9	Continuous	E-65011-0100/A

F. Fuels:

Type (Be specific)	Daily Consumption	Heat Input BTU/hr.	Relate to Flow Diagram
None	None	None	----

G. Describe briefly, without revealing trade secrets, the unit processes/operations generating the airborne emissions identified in this application:

The control devices of this construction permit application are to reduce the airborne emissions generated in an existing sulfuric acid plant.

H. Indicate liquid or solid wastes generated and method of disposal.

Slurry discharges to the disposal pond where solids settle to the bottom. The supernate is recycled to the existing rock beneficiation plant. Alternatively the recycle may be recycled to the chemical plant. Disposal pond and recycle system totally contained on company property.

STATEMENTS BY APPLICANT AND ENGINEER

A. Applicant

The undersigned owner or authorized representative of * USS Agri-Chemicals is fully aware that the statements made in this application for a construction permit are true, correct and complete to the best of his knowledge and belief. Further, the undersigned agrees to maintain and operate the pollution source and pollution control facilities in such a manner as to comply with the provisions of Chapter 403 Florida Statutes and all the rules and regulations of the Department or revisions thereof. He also understands that a permit, if granted by the Department, will be non-transferable and he will promptly notify the Department upon sale or legal transfer of the permitted establishment.

Signature of the Owner or Authorized Representative

G. W. Beck, Manager Florida Phosphate Operations
Name and Title (Please Type)

Date: 9-5-74 Telephone No.: (813) 533-1495

* Attach a letter of authorization

B. Professional Engineer Registered in Florida:

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the control and discharge of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution source(s) with appropriate control facilities, when properly maintained and operated, will comply with all applicable statutes of the State of Florida and the rules and regulations of the Department. It is also agreed that the undersigned will furnish the applicant a set of instructions for the proper maintenance and operation of the installation covered in this application.

Signature _____ Mailing Address: P. O. Box 150
Bartow, Florida 33830

Name: Arthur O. Hansen (please type) Telephone No.: (813) 533-1495

Florida Registration Number 12237 Date: 9/6/74
(Please affix seal)

PERMIT NO. AC53-2562
DATE October 21, 1974

E-6501-0100

STACK CONDITIONS

Flow - 149,000 ACFM
Temp - 89°F
Inside Diameter - 995'
Velocity - 315 ft per sec.

100' above ground

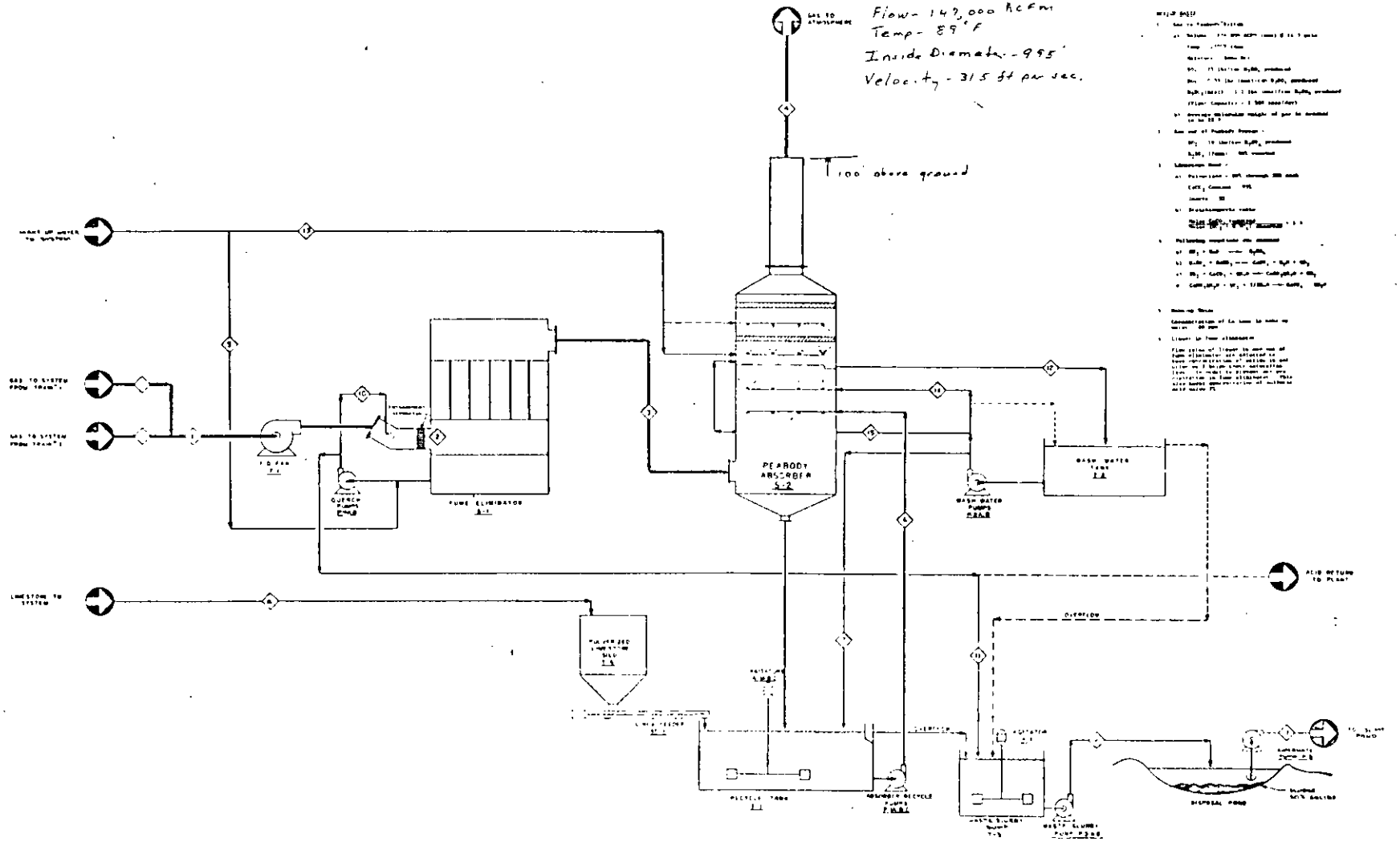

EXHIBIT - C

REFERENCES

STUDY OF SO_2 SCRUBBERS
NATIONAL AIR POLLUTION CONTROL ADMINISTRATION

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2. Backstrom, H. L. J., "The Chain-Reaction Theory of Negative Catalysis," *Journal of the American Chemical Society*, 49, 1460, 1927

3. Barron, C. H., and O'Hern, H. A., "Reaction Kinetics of Sodium Sulfite Oxidation by the Rapid-Mixing Method," *Chemical Engineering Science*, 21, 397, 1966

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15. Maxon, W. D., and Johnson, M. J., "Aeration Studies on Propagation of Baker's Yeast," *Industrial and Engineering Chemistry*, 45, 2554, 1953

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ADDITIONAL REFERENCES

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EXHIBIT-D

AVERAGE AND MAXIMUM PRODUCTION/EMISSION RATES

The material balance on the contractors drawing, Attachment-E of the permit application, represents nominal design rates under average conditions.

USSAC expects maximum sustainable production rates to be 10% in excess of the nominal design. The application form section III C, first column, specifies emissions to be recorded as "maximum,lbs./hr.", and the numbers entered comply with this specification. For consistency, maxima were also used in section III B.

For further clarification tables have been prepared to summarize average and maximum rates, and are included as part of EXHIBIT-D. See tables IA, IB, IIA, and IIB. Numbers are given in lbs./hr. to be more easily identified with permit application numbers which are also in lbs./hr.

There are no fluoride emissions in streams 22 and 23 on Attachment-E of the permit application. This is verified by the designer/contractor letter which is included with this EXHIBIT-D.

EXHIBIT D

TABLE IA-AVERAGE RAW MATERIAL & PRODUCTION RATES
(Refer Attachment E)

	Pounds Per Hour Train A	Pounds Per Hour Train B	Pounds Per Hour Total	(Tons/Day)
Rock Feed, P_2O_5	61,085	61,085	122,170	(1466)
Production, P_2O_5	58,335	58,335	116,670	(1400)

TABLE IB-FLUORIDE EMISSIONS AT AVERAGE PRODUCTION RATE
(Refer Attachment E)

	Pounds Per Hour Train A	Pounds Per Hour Train B	Pounds Per Hour Total	(Lbs./Day)
Reaction Area, Stream 20	0.45	0.45	0.90	(21.6)
Storage Area, Stream 21	0.16	0.16	0.32*	(7.6)
Other	0	0	0	0
Total	0.61	0.61	1.22	(29.2)

*The storage area scrubber is common to both trains.

TABLE IIA-MAXIMUM RAW MATERIAL & PRODUCTION RATES

	Pounds Per Hour Train A	Pounds Per Hour Train B	Pounds Per Hour Total	(Tons/Day)
Rock Feed, P_2O_5	70,510	70,510	141,020	(1692)
Production, P_2O_5	64,165	64,165	128,330	(1540)

TABLE IIB-FLUORIDE EMISSIONS AT MAXIMUM PRODUCTION RATE

	Pounds Per Hour Train A	Pounds Per Hour Train B	Pounds Per Hour Total	(Lbs./Day)
Reaction Area, Stream 20	0.53	0.53	1.06	(25.4)
Storage Area, Stream 21	0.18	0.18	0.36*	(8.6)
Other	0	0	0	0
Total	0.71	0.71	1.42	(34.0)

*The storage area scrubber is common to both trains.

Badger

GULF DESIGN DIVISION

1401 NORTH WESTSHORE BOULEVARD ▫ P.O. BOX 22317 ▫ TAMPA, FLORIDA 33622 ▫ TELEPHONE: 813/879-0715

EXHIBIT - D

September 19, 1980
Letter No. GD/USSAC-030L

USS Agri-Chemicals
P.O. Box 150
Bartow, Florida 33830

Attention: Mr. R. T. Lindsay
Project Manager

Subject: Exhaust Gases from Vacuum Pump Silencer
Phosphoric Acid Plant
Fort Meade, Florida
Badger Study No. E-7541

Dear Bob:

In recent discussions, your technical team questioned the nature of gases exhausting from the Reactor and Filter Vacuum Pumps in our phosphoric acid plant. Please be advised that these gases are primarily air, carbon dioxide, and water vapor. We have not detected fluorine compounds in gases leaving these silencers.

Very truly yours,

BADGER AMERICA, INC.

J. W. Salter
Project Manager

JWS:mey

EXHIBIT-E

ERRATA

A numerical error has been found in Attachment-B, paragraph 3, of the permit application.

Attachment-B revised for correction is included as EXHIBIT-E. The error was not reflected elsewhere in the application.

EXHIBIT-E

TRAIN - A

ATTACHMENT B

(For Section V of Application)

1. Total Process Input Rate and Product Weight

P_2O_5 Input	=	70510	lb/h
P_2O_5 in Product	=	64165	lb/h
P_2O_5 Loss to Gypsum Storage	=	6345	lb/h

2. Emission Estimate and Test Methods

(a) Basis of Emission Estimate - performance guarantee from Badger America Inc. (Attachment A) which equates to meeting Federal NSPS and Florida Emission Limiting Standards.

(b) Compliance Test Methods - in accordance with 40 CFR 60, or DER/EPA approved alternate methods.

3. Basis of Potential Discharge

(Refer to Flow Diagram, Attachment E)

Based on guarantees from Bader America, fluoride emissions from the reactor area fume scrubber will be 10.8 pounds per day (lb/d) at a scrubber efficiency of 99%. Fluoride emissions from the storage tank area fume scrubber will be 3.8 lb/d at a scrubber efficiency of 95%. Total potential (uncontrolled) emission rates will be as follows:

Reactor Area	= 10.8 lb/d / 0.01 (effic. factor)	=	~~2090~~ 1080 lb/d ★
Storage Tank Area	= ~~7.8~~ 3.8 lb/d / 0.05 (effic. factor)	=	~~156~~ 76 lb/d ★
TOTAL		=	~~2246~~ 1156 lb/d ★
		=	~~94~~ 48 lb/h ★

4. Design Details of Pollution Control Equipment

Design details are not yet available. Refer to flow diagram in Attachment E for additional information.

★ Revised to correct error - 9/15/80

EXHIBIT - E

TRAIN-B

ATTACHMENT B

(For Section V of Application)

1. Total Process Input Rate and Product Weight

P_2O_5 Input	=	70510	lb/h
P_2O_5 in Product	=	64165	lb/h
P_2O_5 Loss to Gypsum Storage	=	6345	lb/h

2. Emission Estimate and Test Methods

(a) Basis of Emission Estimate - performance guarantee from Badger America Inc. (Attachment A) which equates to meeting Federal NSPS and Florida Emission Limiting Standards.

(b) Compliance Test Methods - in accordance with 40 CFR 60, or DER/EPA approved alternate methods.

3. Basis of Potential Discharge

(Refer to Flow Diagram, Attachment E)

Based on guarantees from Bader America, fluoride emissions from the reactor area fume scrubber will be 10.8 pounds per day (lb/d) at a scrubber efficiency of 99%. Fluoride emissions from the storage tank area fume scrubber will be 3.8 lb/d at a scrubber efficiency of 95%. Total potential (uncontrolled) emission rates will be as follows:

Reactor Area	=	10.8 lb/d / 0.01 (effic. factor)	=	~~2090~~ 1080 lb/d ★
Storage Tank Area	=	~~7.8~~ 3.8 lb/d / 0.05 (effic. factor)	=	~~156~~ 76 lb/d ★
TOTAL			=	~~2246~~ 1156 lb/d ★
			=	~~94~~ 48 lb/h ★

4. Design Details of Pollution Control Equipment

Design details are not yet available. Refer to flow diagram in Attachment E for additional information.

★ Revised to correct error - 9/15/80

	After	Before	metric units
emission rate (g/sec)	0.88 lb/hr	0.711b/hr	0.111
stack ht (meters)	85 ft		25.9
stack exit temp (°K)	100°F		311
stack exit velocity (m/s)	22 FT/sec		6.7
stack dia (m)	3.4 FT		1.04

```
@@PRNT
@XQT TSOURCE.TEST-STACK
 ENTER OPTIONS 1,2,3,TEMP K,MIX HT,AND RECEPTOR ELE
0 0 0 293 1500 0
 ENTER ANEMOMETER HEIGHT,AND SIX WIND EXPONENTS
 .10 .15 .20 .25 .30 .30
USS AGRI CHEM PHOS ACID PLT MODIF

FTN ERR ON UNIT-5       INPUT DATA DOES NOT CORRESPOND TO TYPE
```

```
 ENTER UP TO 80 COLUMNS OF HEADER INFORMATION
USS AGRI CHEM PHOS ACID PLTS MODIF
ENTER SRC STRENGTH,HT,GAS TEMP,GAS VELOCITY,& DIAM
0.111 25.9 311 6.7 1.04
```

PTPLU VERSION 80021, TOM PIERCE AND BRUCE TURNER : ENVIRONMENTAL OPERATIONS BRANCH

USS AGRI CHEM PHOS ACID PLTS MODIF

OPTIONS 1=YES USE THE OPTION 0=NO DO NOT USE THE OPTION

IOPT(1) = 0 (COMPUTE GRADUAL PLUME RISE) AMBIENT AIR TEMP = 293.00(DEG.K)

IOPT(2) = 0 (COMPUTE STACK DOWNWASH) WIND EXPONENTS = .15 .20 .25 .30 .30 .00

IOPT(3) = 0 (COMPUTE INITIAL PLUME SIZE) ANEMOMETER HT = .10 (METERS)

IF =1 USE PASQUILLS RECOMMENDATION

SOURCE PARAMETERS

EMISSION RATE = .11(G/SEC) PHYSICAL STACK HEIGHT = 25.90(METERS)

STACK TEMP = 311.00(DEG.K) STACK EXIT VELOCITY = 6.70(M/SEC)

STACK DIAM = 1.04(METERS) VOLUME FLOW = 5.69(CU M/SEC)

MIXING HT = 1500.0(METERS) RECEPTOR HT = .00(METERS)

Max Impact

after modif { 7.3 ug/m3 - 1 stack
14.6 ug/m3 - 2 stacks

Max Impact before Modif = $(14.6)\left(\frac{0.71}{0.88}\right) = 11.8 \frac{ug}{m^3}$ (1 hr)

Increased Impact = 14.6 x .4 = 5.84 (24h.)
11.8 x .4 = 4.72 (24h)
2.8 ug/m3 increase (1 hr)

X 0.4
1.12 ug/m3 max 24 hr impact

ANALYSIS OF CONCENTRATION AS A FUNCTION OF STABILITY AND WIND SPEED

STABILITY	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	****EXTRAPOLATED WINDS**** WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)
1	.50	7.3136-006	.331	69.7	1.15	6.7149-006	.225	44.9
1	.80	7.1592-006	.266	53.2	1.84	5.7276-006	.192	37.8
1	1.00	6.9160-006	.238	47.8	2.30	5.1565-006	.181	35.4
1	1.50	6.2050-006	.206	40.5	3.45	4.0767-006	.166	32.2
1	2.00	5.5207-006	.188	36.8	4.60	3.3510-006	.159	30.7
1	2.50	4.9366-006	.177	34.7	5.75	2.8389-006	.154	29.7
1	3.00	4.4484-006	.171	33.2	6.90	2.4605-006	.151	29.1

Max 1 new stack

STABILITY	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	****EXTRAPOLATED WINDS**** WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)

2	.50	6.6004-006	.505	69.7	1.52	6.0614-006	.289	40.3
2	.80	6.7456-006	.384	53.2	2.43	4.9935-006	.250	34.9
2	1.00	6.6432-006	.344	47.8	3.04	4.4224-006	.237	33.1
2	1.50	6.0855-006	.291	40.5	4.56	3.4069-006	.219	30.7
2	2.00	5.4707-006	.264	36.8	6.08	2.7586-006	.211	29.5
2	2.50	4.9225-006	.248	34.7	7.60	2.3142-006	.205	28.8
2	3.00	4.4552-006	.237	33.2	9.12	1.9919-006	.202	28.3
2	4.00	3.7244-006	.224	31.4	12.15	1.5582-006	.195	27.7
2	5.00	3.1898-006	.216	30.3	15.19	1.2792-006	.192	27.3

****EXTRAPOLATED WINDS****

STABILITY	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)
3	2.00	5.6734-006	.393	36.8	8.02	2.3438-006	.298	28.6
3	2.50	5.1306-006	.368	34.7	10.03	1.9487-006	.292	28.1
3	3.00	4.6601-006	.351	33.2	12.04	1.6669-006	.288	27.7
3	4.00	3.9138-006	.330	31.4	16.05	1.2923-006	.283	27.3
3	5.00	3.3618-006	.317	30.3	20.06	1.0549-006	.280	27.0
3	7.00	2.6130-006	.303	29.0	28.08	7.7122-007	.276	26.7
3	10.00	1.9535-006	.292	28.1	40.12	5.4946-007	.273	26.4
3	12.00	1.6711-006	.288	27.7	48.14	4.6105-007	.272	26.4
3	15.00	1.3728-006	.284	27.4	60.18	3.7140-007	.271	26.3

****EXTRAPOLATED WINDS****

STABILITY	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)
4	.50	4.3152-006	1.683	69.7	2.65	4.1157-006	.678	34.2
4	.80	5.1556-006	1.107	53.2	4.24	3.1493-006	.603	31.1
4	1.00	5.3355-006	1.000	47.8	5.30	2.7075-006	.578	30.0
4	1.50	5.0628-006	.836	40.5	7.94	1.9948-006	.545	28.7
4	2.00	4.6413-006	.744	36.8	10.59	1.5756-006	.529	28.0
4	2.50	4.2296-006	.690	34.7	13.24	1.3011-006	.520	27.6
4	3.00	3.8625-006	.654	33.2	15.89	1.1077-006	.513	27.3
4	4.00	3.2671-006	.610	31.4	21.19	8.5357-007	.505	26.9

4	5.00	2.8189-006	.584	30.3	26.48	6.9414-007	.500	26.7
4	7.00	2.2027-006	.554	29.0	37.08	5.0528-007	.495	26.5
4	10.00	1.6536-006	.532	28.1	52.97	3.5879-007	.491	26.3
4	12.00	1.4169-006	.524	27.7	63.56	3.0066-007	.489	26.2
4	15.00	1.1659-006	.515	27.4	79.45	2.4188-007	.488	26.2
4	20.00	8.9982-007	.507	27.0	105.93	1.8243-007	.486	26.1

					****EXTRAPOLATED WINDS****			
STABILITY	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)
5	2.00	1.8429-006	1.845	49.7	10.59	6.0767-007	1.283	39.6
5	2.50	1.6055-006	1.746	48.0	13.24	5.1684-007	1.233	38.6
5	3.00	1.4308-006	1.671	46.7	15.89	4.5180-007	1.195	37.8
5	4.00	1.1877-006	1.564	44.8	21.19	3.6398-007	1.140	36.7
5	5.00	1.0242-006	1.489	43.4	26.48	3.0681-007	1.102	36.0

					****EXTRAPOLATED WINDS****			
STABILITY	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)	WIND SPEED (M/SEC)	MAX CONC (G/CU M)	DIST OF MAX (KM)	PLUME RISE (M)
6	2.00	1.7009-006	3.000	45.7	2.00	1.7009-006	3.000	45.7
6	2.50	1.4851-006	3.000	44.2	2.50	1.4851-006	3.000	44.2
6	3.00	1.3219-006	2.898	43.2	3.00	1.3219-006	2.898	43.2
6	4.00	1.0947-006	2.705	41.6	4.00	1.0947-006	2.705	41.6
6	5.00	9.4195-007	2.572	40.5	5.00	9.4195-007	2.572	40.5

(1) NO COMPUTATION WAS ATTEMPTED AS THE DISTANCE TO THE POINT OF MAXIMUM CONCENTRATION IS SO GREAT THAT THE SAME STABILITY IS NOT LIKELY TO PERSIST LONG ENOUGH FOR THE PLUME TO TRAVEL THIS FAR.

(2) THE PLUME IS OF SUFFICIENT HEIGHT THAT EXTREME CAUTION SHOULD BE USED IN INTERPRETING THIS COMPUTATION AS THIS STABILITY TYPE MAY NOT EXIST TO THIS HEIGHT. ALSO WIND SPEED VARIATIONS WITH HEIGHT MAY EXERT A DOMINATING INFLUENCE.

(3) NO COMPUTATION WAS ATTEMPTED FOR THIS HEIGHT AS THE POINT OF MAXIMUM CONCENTRATION IS GREATER THAN 100 KILOMETERS FROM THE SOURCE.