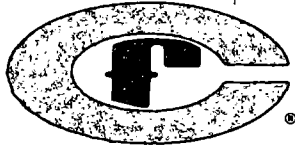


CENTRAL PHOSPHATES, INC., Subsidiary of

P.O. Drawer L.  
Plant City, Florida 33566  
Telephone: 813/782-1591



**CF Industries, Inc.**

Plant City Phosphate Complex

June 28, 1989

RECEIVED  
DER - MAIL ROOM  
1989 JUL -5 AM 10:31

Mr. C.H. Fancy  
State of Florida  
Department of Environmental Regulation  
Bureau of Air Quality Management  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

SUBJECT: Construction Permit Application  
for an Existing Sulfur Storage  
and Handling Facility

Dear Mr. Fancy:

Enclosed are five (5) copies of the referenced application, along with a check in the amount of \$200.00 to cover the application fee. A check has been sent to Hillsborough County Environmental Protection Commission to cover their fee (see attached reference letter).

If any additional information is needed, please call Jim Martin at 813/782-1591.

Sincerely,

J.E. Parsons  
General Manager

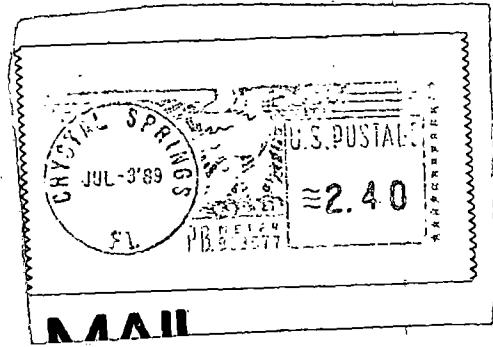
JEP/CJM/lh  
Enclosures

cc: With Enclosures:  
P.R. Roberts/T.A. Edwards  
C.J. Martin/Env. File  
J.J. Mulqueen  
Hillsborough County Env. Protection Commission  
(Reference Letter Only)

1031

# CF Industries, Inc.

PLANT CITY PHOSPHATE COMPLEX  
P.O. DRAWER "L"  
PLANT CITY, FL 33566



Mr. C.H. Fancy  
State of Florida  
Department of Environmental Regulation  
Bureau of Air Quality Management  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400



# Priority Mail™

LABEL 107: MARCH 1983

CLASS

CLASS

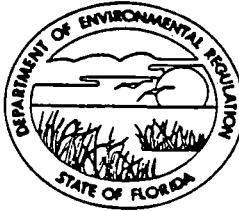
CLASS

CLASS

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

\$300 pd.  
7-5-89  
Recpt. # 117631

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32399-2400



AC29-167204

BOB MARTINEZ  
GOVERNOR

DALE TWACHTMANN  
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Sulfur Storage Vents  New  Existing  
APPLICATION TYPE:  Construction  Operation  Modification  
COMPANY NAME: Central Phosphates, Inc. COUNTY: Hillsborough

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) 3 Sulfur Storage Vents

SOURCE LOCATION: Street 10609 Highway 39 North City Plant City  
UTM: East 17-388.3 North 3115.7  
Latitude 28 ° 09 ' 52 "N Longitude 82 ° 08 ' 30 "W

APPLICANT NAME AND TITLE: J.E. Parsons, General Manager  
APPLICANT ADDRESS: P.O. Drawer L, Plant City, Florida 33566

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative\* of \_\_\_\_\_

I certify that the statements made in this application for a \_\_\_\_\_ permit are true, correct and complete to the best of my knowledge and belief. Further I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permit establishment.

\*Attach letter of authorization

Letter of Authorization  
file in your office

Signed: J.E. Parsons  
J.E. Parsons, General Manager  
Name and Title (Please Type)  
Date: 6/30/89 Telephone No. (813)782-1591

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

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 treatment and disposal of pollutants characterized in this permit application. There is reasonable assurance, in my professional judgment, that

<sup>1</sup> See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies 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, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed John J. Mulqueen

John J. Mulqueen  
Name (Please Type)

Company Name (Please Type)

2306 S. Valrico Road, Valrico, Florida 33594

Mailing Address (Please Type)

Florida Registration No. 18919 Date: 6-30-89 Telephone No. (813)689-9644

**SECTION II: GENERAL PROJECT INFORMATION**

- A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

This is an existing facility with two (2) molten sulfur storage pits with a capacity of 629 tons each and one tank with a capacity of 2,600 tons. Annual throughput for 1988 was 643,333 short tons. Emissions are estimated at less than one ton per year.

- B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction N/A Completion of Construction N/A

- C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

These are existing vents with no components serving pollution control purposes only.

- D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

NONE

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;  
if power plant, hrs/yr \_\_\_\_\_ ; if seasonal, describe: \_\_\_\_\_

F. If this is a new source or major modification, answer the following questions.  
(Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? NO
  - a. If yes, has "offset" been applied? -
  - b. If yes, has "Lowest Achievable Emission Rate" been applied? -
  - c. If yes, list non-attainment pollutants. \_\_\_\_\_
2. Does best available control technology (BACT) apply to this source?  
If yes, see Section VI. NO
3. Does the State "Prevention of Significant Deterioration" (PSD)  
requirement apply to this source? If yes, see Sections VI and VII. NO
4. Do "Standards of Performance for New Stationary Sources" (NSPS)  
apply to this source? NO
5. Do "National Emission Standards for Hazardous Air Pollutants"  
(NESHAP) apply to this source? NO

- H. Do "Reasonably Available Control Technology" (RACT) requirements apply  
to this source? NO\*
- a. If yes, for what pollutants? \_\_\_\_\_
  - b. If yes, in addition to the information required in this form,  
any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justifi-  
cation for any answer of "No" that might be considered questionable.

This source is in the area of influence of the particulate non-attainment area in  
Hillsborough County. The source was exempted from RACT by modelling.

**SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)**

**A. Raw Materials and Chemicals Used in your Process, if applicable:**

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Sulfur	Particulate	-	80 tons/hour	

**B. Process Rate, if applicable: (See Section V, Item 1)**

- 1. Total Process Input Rate (lbs/hr): N/A
- 2. Product Weight (lbs/hr): \_\_\_\_\_

**C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)**

Name of Contaminant	Emission <sup>1</sup>		Allowed Emission <sup>2</sup> Rate per Rule 17-2	Allowable <sup>3</sup> Emission lbs/hr	Potential <sup>4</sup> Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Particulate	0.28	0.36	1 ton/yr.	34.9	0.28	0.36	
SEE ATTACHED CALCULATIONS FOR BASIS OF ESTIMATE							

<sup>1</sup>See Section V, Item 2.

<sup>2</sup>Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

<sup>3</sup>Calculated from operating rate and applicable standard.

<sup>4</sup>Emission, if source operated without control (See Section V, Item 3).



H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: \_\_\_\_\_ ft. Stack Diameter: \_\_\_\_\_ ft.  
 Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM Gas Exit Temperature: \_\_\_\_\_ °F.  
 Water Vapor Content: \_\_\_\_\_ % Velocity: \_\_\_\_\_ FPS

SEE ATTACHED DESCRIPTION  
**SECTION IV: INCINERATOR INFORMATION**

N/A

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq. & Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste \_\_\_\_\_

Total Weight Incinerated (lbs/hr) \_\_\_\_\_ Design Capacity (lbs/hr) \_\_\_\_\_

Approximate Number of Hours of Operation per day \_\_\_\_\_ day/wk \_\_\_\_\_ wks/yr. \_\_\_\_\_

Manufacturer: \_\_\_\_\_

Date Constructed \_\_\_\_\_ Model No. \_\_\_\_\_

	Volume (ft) <sup>3</sup>	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: \_\_\_\_\_ ft. Stack Diameter: \_\_\_\_\_ Stack Temp. \_\_\_\_\_

Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM\* Velocity: \_\_\_\_\_ FPS

\*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device:  Cyclone  Wet Scrubber  Afterburner  
 Other (specify) \_\_\_\_\_



Brief description of operating characteristics of control devices: \_\_\_\_\_

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

#### SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

- 9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
- 10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

**SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY**

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

Yes  No N/A

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (if yes, attach copy)

Yes  No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

- |                           |                          |
|---------------------------|--------------------------|
| 1. Control Device/System: | 2. Operating Principles: |
| 3. Efficiency:*           | 4. Capital Costs:        |

\*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

- a. Height: ft.
- b. Diameter: ft.
- c. Flow Rate: ACFM
- d. Temperature: °F.
- e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:<sup>1</sup>
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:<sup>2</sup>
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:<sup>1</sup>
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:<sup>2</sup>
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:

<sup>1</sup>Explain method of determining efficiency.

<sup>2</sup>Energy to be reported in units of electrical power - KWH design rate.

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:<sup>1</sup>

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:<sup>2</sup>

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:<sup>1</sup>

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:<sup>2</sup>

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:<sup>1</sup>

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:<sup>2</sup>

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

<sup>1</sup>Explain method of determining efficiency.

<sup>2</sup>Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:<sup>1</sup>

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

(8) Process Rate:<sup>1</sup>

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:<sup>1</sup>

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

(8) Process Rate:<sup>1</sup>

10. Reason for selection and description of systems:

<sup>1</sup>Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. \_\_\_\_\_ no. sites \_\_\_\_\_ TSP \_\_\_\_\_ ( ) SO<sub>2</sub>\* \_\_\_\_\_ Wind spd/dir

Period of Monitoring \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
month day year month day year

Other data recorded \_\_\_\_\_

Attach all data or statistical summaries to this application.

\*Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

- a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No
- b. Was instrumentation calibrated in accordance with Department procedures?  
[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

- 1. \_\_\_\_\_ Year(s) of data from \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
month day year month day year
- 2. Surface data obtained from (location) \_\_\_\_\_
- 3. Upper air (mixing height) data obtained from (location) \_\_\_\_\_
- 4. Stability wind rose (STAR) data obtained from (location) \_\_\_\_\_

C. Computer Models Used

- 1. \_\_\_\_\_ Modified? If yes, attach description.
- 2. \_\_\_\_\_ Modified? If yes, attach description.
- 3. \_\_\_\_\_ Modified? If yes, attach description.
- 4. \_\_\_\_\_ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
ISP	_____ grams/sec
SO <sub>2</sub>	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

- F. Attach all other information supportive to the PSD review.
- G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.
- H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

EMISSIONS CALCULATIONS BASED ON  
PENNZOIL STUDY

Pennzoil Maximum Results

0.072 lbs/hr from 15,000 ton tank  
0.209 lbs/hr when filling

CPI Storage Capacity

2 - sulfur pits at 679 tons each	1,358
1 - sulfur tank	<u>2,600</u>
Total Capacity	3,958 tons

CPI Consumption

Received by truck	24 tons/truck
Unloading rate	24 tons in 6 minutes
Trucks per Day	80, or 3.33 per hour average

Calculations

While Unloading:

$$\frac{.209 \text{ lbs/hr} \times 8,760 \text{ hours/yr.}}{3.33 \text{ trucks} \times 6 \text{ minutes}} = 610 \text{ lbs/yr} = 0.305$$

When not Unloading:

$$.072 \text{ lbs/hr} \times \left( \frac{3,958 \text{ tons storage}}{15,000 \text{ tons for Pennzoil}} \right) \times 8,760 \text{ hrs/yr} = 166 \text{ lbs}$$

$$1 - \frac{166 \text{ lbs}}{60 \text{ minutes/hour}} = 111 \text{ lbs/yr} = 0.055 \text{ TPY}$$

Therefore: Total emissions per year = 610 + 111 = 721 lbs/yr

or

0.361 tons/year

$(0.209 + 0.072) = 0.281 \text{ lbs/hr}$

or

## PHYSICAL DESCRIPTION

### A Sulfur Pit

Length - 96'; Width - 25'-8"; 679 tons

Vent: 8" diameter x 12' high with 12" steam jacket and rain cap  
CFM = 22.7' ACFM at 212°F

### B Sulfur Pit

Length - 96'; Width - 25'-8"; 679 tons

Vent: 8" diameter x 12' high with 12" steam jacket and rain cap  
CFM = 22.7' ACFM at 212°F

### Storage Tank

Diameter - 45'; Height 30'; Capacity 2,600 tons

Vent: 2' diameter x 8' high with a 5' rain cap 1'6" above vent  
CFM = 204.1' ACFM at 212°F

See attached drawings

Molten sulfur is unloaded from the trucks into either A or B Storage Pits. A pump transfers sulfur from the pits to the sulfur tank. A gravity flow return line returns sulfur to the pits when the sulfur tank is full. Normal level in the sulfur tank is 50 to 95% of capacity.

A flap made of rubber belting strips covers the housing of the unloading pipe to minimize the escape of fumes around the pipe when sulfur is being unloaded.

Spills from the unloading operation are minimal, but when spills occur, they are cleaned up after the sulfur cools, if it is a significant amount. Otherwise, the area is cleaned weekly.

The vents have no fans. The air flow is strictly convective and is estimated to be 65 feet/minute based on the Pennzoil Study.

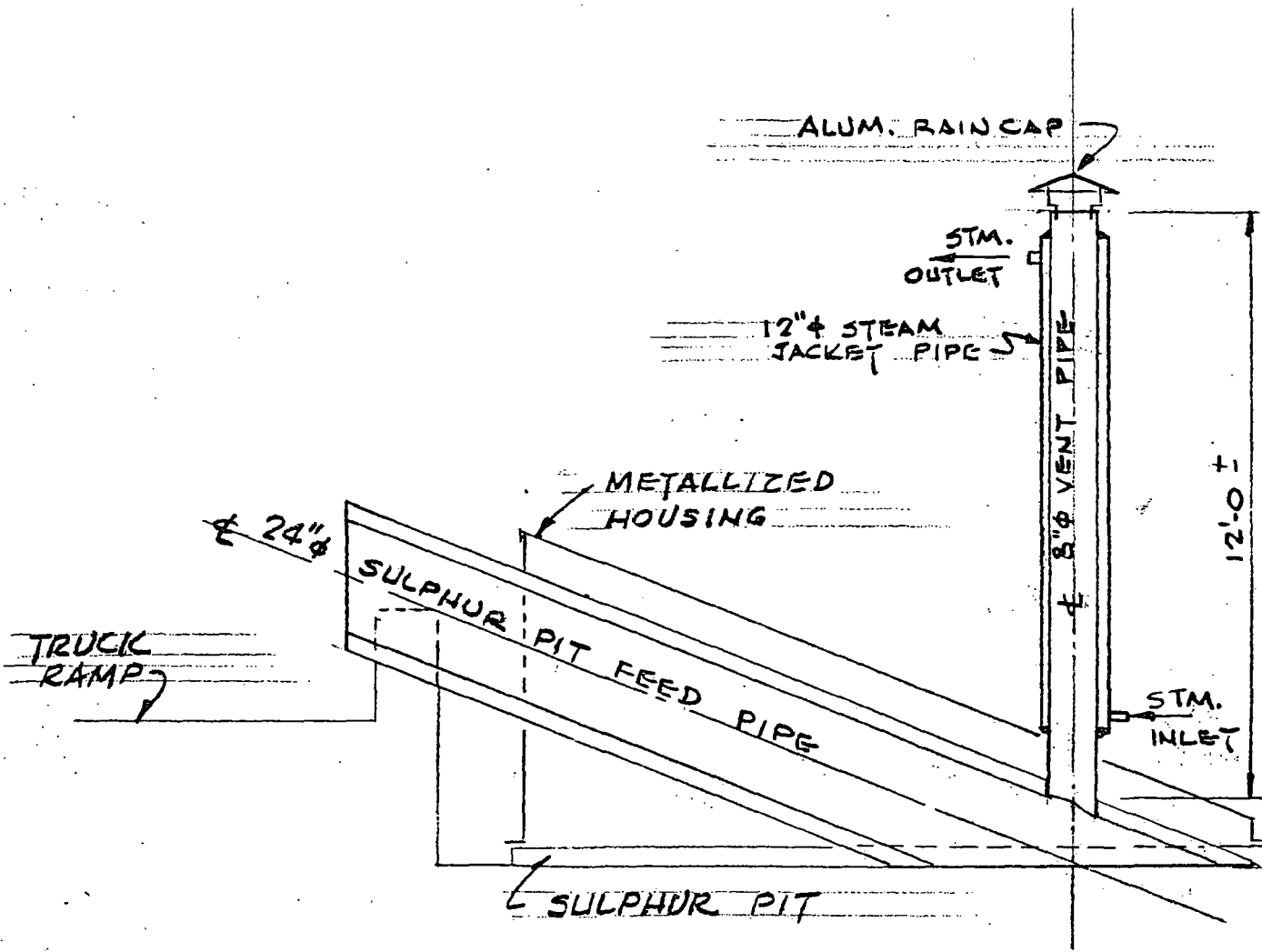


DESCRIPTION

BY

DATE

REV.



SECTION THRU FEED PIPE

DRAWN BY:	TMM
DATE:	6-22-19
SCALE:	1" = 1'
REVISION:	

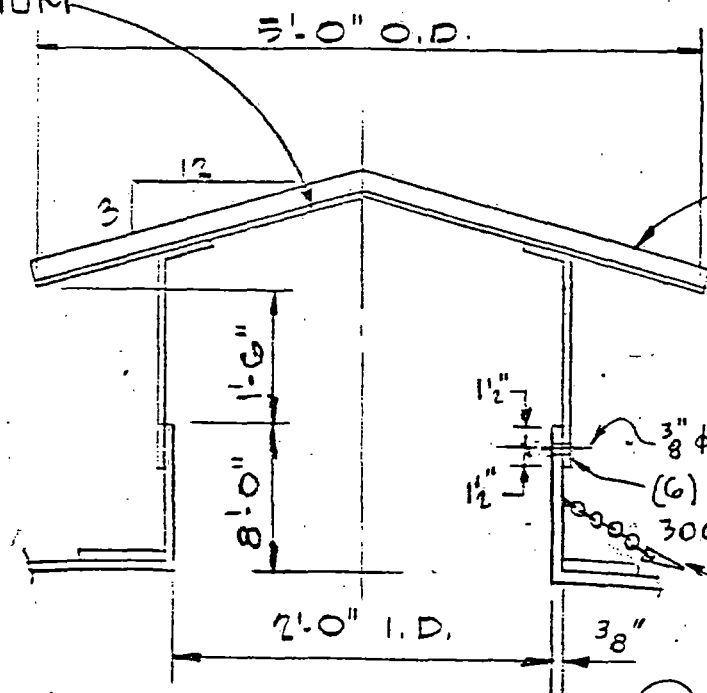
TITLE:	SULPHUR PIT VENT ARRANGEMENT
SECTIONAL ELEVATION	

**CF Industries, Inc.**  
 Plant City Phosphate Complex  
 P. O. Drawer L  
 PLANT CITY, FLORIDA 33546

Page \_\_\_\_\_ of \_\_\_\_\_

DESCRIPTION

ALUMINUM



(5) 1 1/2" x 3/16" STIFFS  
3003-H14 ALUMINUM  
OR EQUAL

3/8"  $\phi$  HOLE  $\triangle 2$   
(6) 1 1/2" x 1/4" BENT BARS  
3003-H14 ALUMINUM OR EQ

PROVIDE 6- 3/8"  $\phi$  TAPER  
PINS. ATTACH TO CHAIN.  
WELD CHAIN TO NOZZLE  
NECK. CHAIN & PINS  
CARBON STEEL.

VENT OUTLET  $\odot C$   
SULPHUR TANK

BY

DATE

REV.

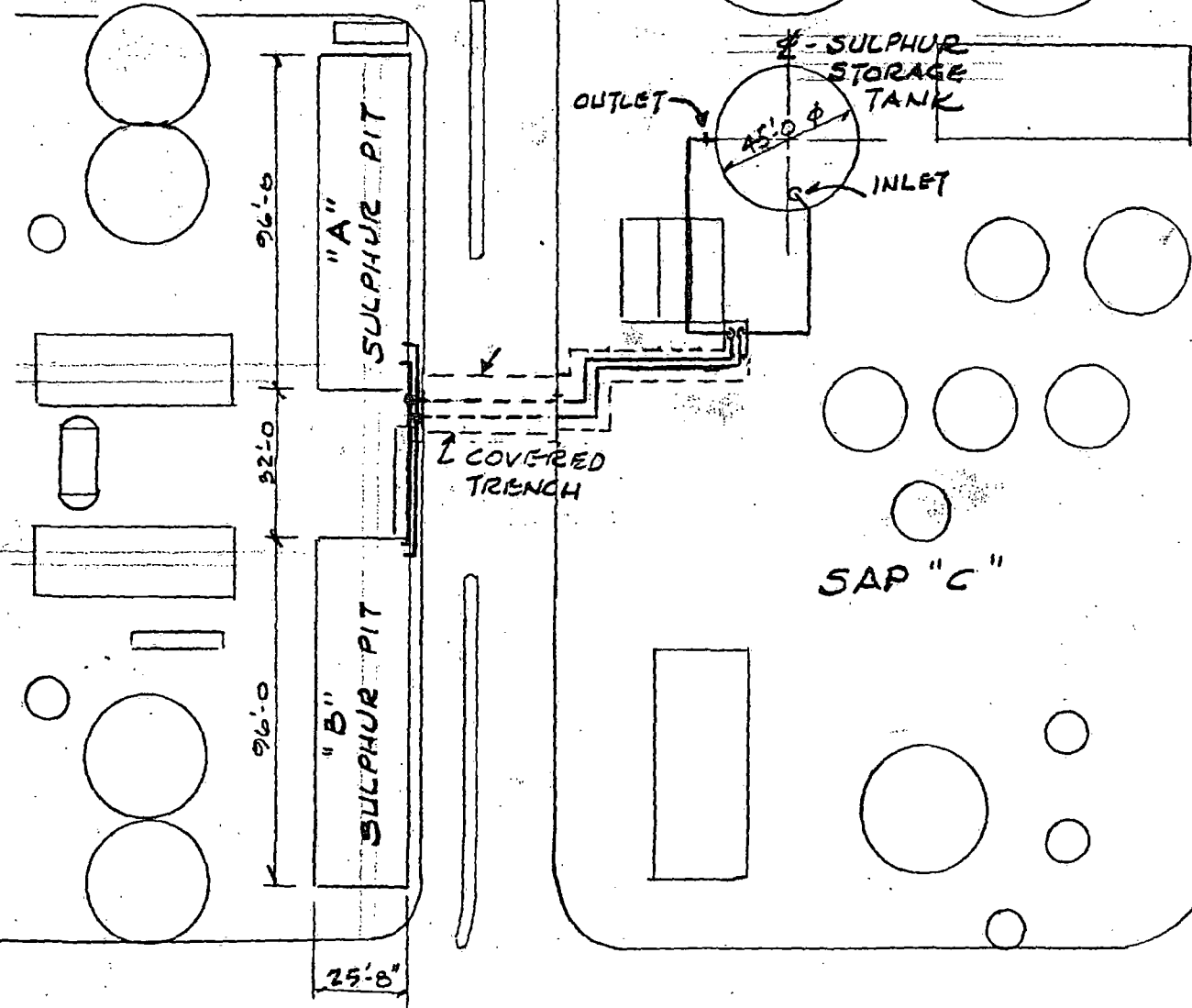
DRAWN BY: T.M.M  
 DATE: 6-22-89  
 SCALE:  
 REVISION:

TITLE:  
 SULPHUR STORAGE  
 TANK  
 VENT DETAIL

**CF Industries, Inc.**  
 Plant City Phosphate Complex  
 P. O. Drawer 1  
 PLANT CITY, FLORIDA 33646

Page \_\_\_\_\_ of \_\_\_\_\_

DESCRIPTION



DRAWN BY: T.M.M.

DATE: 6-22-89

SCALE:

REVISION:

TITLE:

SULPHUR PIPING  
PIT TO STORAGE

PLAN



CF Industries, Inc.

Plant City Phosphate Complex  
P. O. Drawer L  
PLANT CITY, FLORIDA 33644

VISIBLE EMISSION OBSERVATION FORM

No.

COMPANY NAME  
*Central Phosphates, Inc.*

STREET ADDRESS  
*State route 39 and County Line Road;*  
*8 miles north of Plant City*

CITY  
*Plant City*

STATE  
*FL*

ZIP  
*33566*

PHONE (KEY CONTACT)  
*(813) 782-1591*

SOURCE ID NUMBER

OBSERVATION DATE		START TIME				END TIME
<i>6/26/89</i>		<i>1400</i>				<i>1430</i>
MIN	SEC	0	15	30	45	COMMENTS
	1	5	5	5	5	
2	10	5	5	10		
3	5	5	10	5		
4	5	5	5	5		
5	5	5	5	5		
6	5	5	10	5		
7	10	5	10	10		
8	10	10	5	10		
9	10	10	10	10		
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22	10	5	10	5		
23	10	5	5	10		
24	10	10	10	10		
25	10	10	10	10		
26	15	15	15	15		
27	10	15	15	15		
28	15	10	15	10		
29	10	10	10	15		
30	10	15	10	10		

PROCESS EQUIPMENT  
*South Sulfur Pit*

OPERATING MODE  
*Normal*

CONTROL EQUIPMENT

OPERATING MODE

DESCRIBE EMISSION POINT  
*cylindrical stack approx. 1 ft. in diameter*

HEIGHT ABOVE GROUND LEVEL  
*12 ft.*

HEIGHT RELATIVE TO OBSERVER  
Start *12 ft.* End *12 ft.*

DISTANCE FROM OBSERVER  
Start *40 ft.* End *40 ft.*

DIRECTION FROM OBSERVER  
Start *North* End *North*

DESCRIBE EMISSIONS  
Start *heat waves and sulfur vapor* End *heat waves and sulfur vapor*

EMISSION COLOR  
Start *brownish yellow* End *brownish yellow*

IF WATER DROPLET PLUME  
Attached  Detached

POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED  
Start *6 inches above stack* End *6 inches above stack*

DESCRIBE PLUME BACKGROUND  
Start *steam pipes* End *steam pipes*

BACKGROUND COLOR  
Start *dark gray* End *dark gray*

SKY CONDITIONS  
Start *partly cloudy* End *partly cloudy*

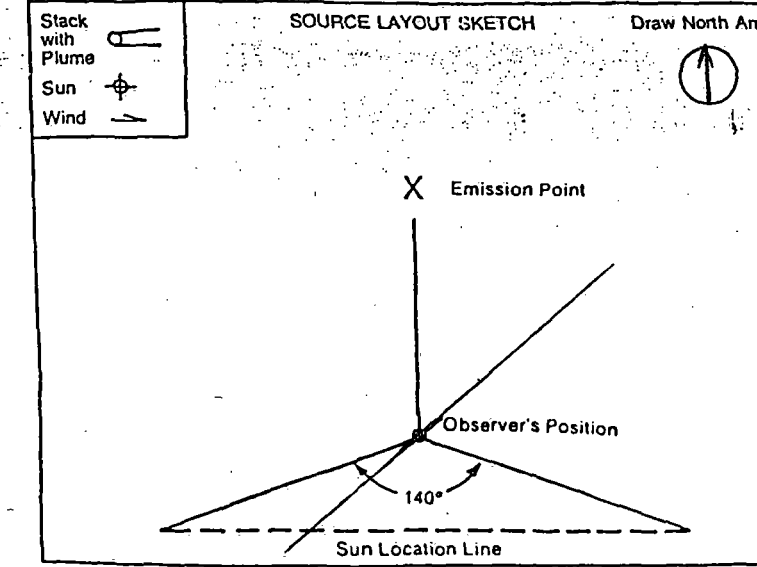
WIND DIRECTION  
Start *East* End *East*

WIND SPEED  
Start *2-6 mph* End *2-6 mph*

AMBIENT TEMP  
Start *93* End *93*

WET BULB TEMP  
*59*

RH, percent  
*59*



ADDITIONAL INFORMATION

OBSERVER'S NAME (PRINT)  
*Lloyd G. Camp*

OBSERVER'S SIGNATURE  
*Lloyd B. Camp*

DATE  
*6/26/89*

ORGANIZATION  
*Central Phosphates, Inc.*

CERTIFIED BY  
*Eastern Technical Associates*

DATE  
*3/9/89*

CONTINUED ON VEO FORM NUMBER

VISIBLE EMISSION OBSERVATION FORM

No.

COMPANY NAME  
*Central Phosphates, Inc.*

STREET ADDRESS  
*State route 39 and County Line Road;*  
*8 miles north of Plant City*

CITY  
*Plant City*

STATE  
*FL*

ZIP  
*33566*

PHONE (KEY CONTACT)  
*(813) 782-1591*

SOURCE ID NUMBER

OBSERVATION DATE		START TIME		END TIME	COMMENTS
<i>6/26/89</i>		<i>1439</i>		<i>1509</i>	
SEC	0	15	30	45	
MIN					
1	10	10	5	5	
2	5	5	5	5	
3	5	5	5	5	
4	5	10	5	10	
5	10	5	5	10	
6	5	5	5	10	
7	10	10	10	10	
8	10	10	10	15	
9	15	10	10	10	
10	10	10	15	15	
11	10	10	10	10	
12	10	10	10	10	
13	10	10	15	15	
14	10	10	10	10	
15	10	15	10	10	
16	10	15	15	10	
17	10	10	10	10	
18	10	10	15	15	
19	10	10	10	10	
20	10	10	10	10	
21	10	10	10	10	
22	10	10	10	10	
23	10	10	10	10	
24	10	10	10	10	
25	10	10	10	10	
26	10	10	10	10	
27	10	10	10	10	
28	10	10	10	10	
29	10	10	10	10	
30	10	10	10	10	

PROCESS EQUIPMENT  
*North Sulfur Pit*

OPERATING MODE  
*Normal*

CONTROL EQUIPMENT

OPERATING MODE

DESCRIBE EMISSION POINT  
*cylindrical stack approx. 1 ft. in diameter*

HEIGHT ABOVE GROUND LEVEL  
*12 ft.*

HEIGHT RELATIVE TO OBSERVER  
Start *12 ft.* End *12 ft.*

DISTANCE FROM OBSERVER  
Start *50 ft.* End *50 ft.*

DIRECTION FROM OBSERVER  
Start *NE* End *NE*

DESCRIBE EMISSIONS  
Start *heat waves and sulfur vapor* End *heat waves and sulfur vapor*

EMISSION COLOR  
Start *brownish yellow* End *brownish yellow*

IF WATER DROPLET PLUME  
Attached  Detached

POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED  
Start *6 inches above stack* End *6 inches above stack*

DESCRIBE PLUME BACKGROUND  
Start *piping supports* End *piping supports*

BACKGROUND COLOR  
Start *dark grey* End *dark grey*

SKY CONDITIONS  
Start *partly cloudy* End *partly cloudy*

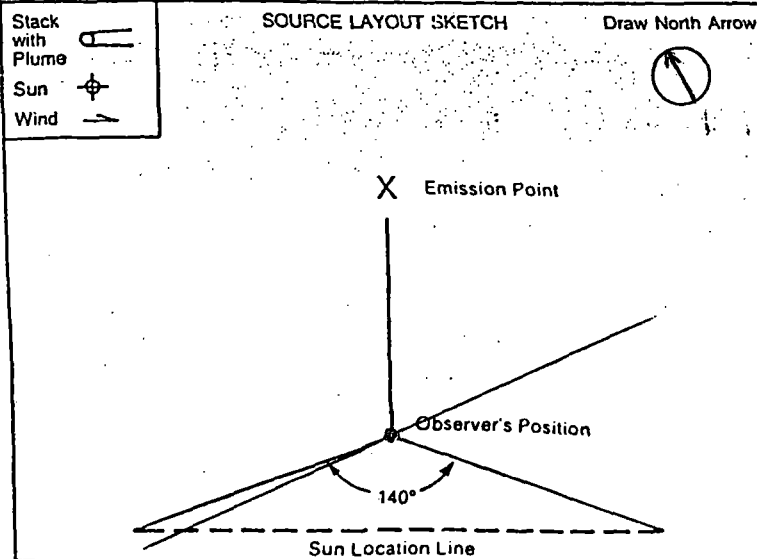
WIND SPEED  
Start *2-6 mph* End *2-6 mph*

WIND DIRECTION  
Start *East* End *East*

AMBIENT TEMP  
Start *93* End *94*

WET BULB TEMP

RH, percent  
*55*



OBSERVER'S NAME (PRINT)  
*Lloyd G. Camp*

OBSERVER'S SIGNATURE  
*Lloyd G. Camp*

DATE  
*6/26/89*

ORGANIZATION  
*Central Phosphates, Inc.*

CERTIFIED BY  
*Eastern Technical Associates*

DATE  
*3/9/89*

ADDITIONAL INFORMATION

CONTINUED ON VEO FORM NUMBER

VISIBLE EMISSION OBSERVATION FORM

No.

COMPANY NAME  
*Central Phosphates, Inc.*

STREET ADDRESS  
*State route 39 and County Line Road;*  
*8 miles north of Plant City*

CITY  
*Plant City*

STATE  
*FL*

ZIP  
*33566*

PHONE (KEY CONTACT)  
*(813) 782-1591*

SOURCE ID NUMBER

OBSERVATION DATE		START TIME			END TIME
<i>6/26/89</i>		<i>1315</i>			<i>1345</i>
SEC	0	15	30	45	COMMENTS
MIN					
1	0	0	0	0	
2	0	0	0	0	
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4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
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23	0	0	0	0	
24	0	0	0	0	
25	0	0	0	0	
26	0	0	0	0	
27	0	0	0	0	
28	0	0	0	0	
29	0	0	0	0	
30	0	0	0	0	

PROCESS EQUIPMENT  
*Sulfur Storage Tank*

OPERATING MODE  
*Normal*

CONTROL EQUIPMENT

OPERATING MODE

DESCRIBE EMISSION POINT  
*6ft. cylindrical stack approx. 18 inches in diameter on sulfur tank*

HEIGHT ABOVE GROUND LEVEL  
*60 ft.*

HEIGHT RELATIVE TO OBSERVER  
Start *10 ft.* End *10 ft.*

DISTANCE FROM OBSERVER  
Start *100 ft.* End *100 ft.*

DIRECTION FROM OBSERVER  
Start *North* End *North*

DESCRIBE EMISSIONS  
Start *heat waves* End *heat waves*

EMISSION COLOR  
Start *N/A* End *N/A*

IF WATER DROPLET PLUME  
Attached  Detached

POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED  
Start *1 ft. from stack* End *1 ft. from stack*

DESCRIBE PLUME BACKGROUND  
Start *Light Fixture* End *Light Fixture*

BACKGROUND COLOR  
Start *dark* End *dark*

SKY CONDITIONS  
Start *partly cloudy* End *partly cloudy*

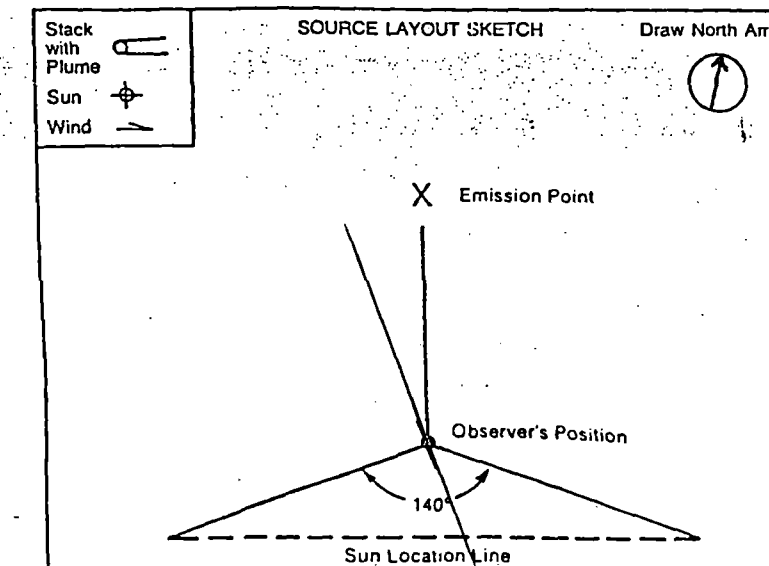
WIND SPEED  
Start *2-6 mph* End *2-6 mph*

WIND DIRECTION  
Start *East* End *East*

AMBIENT TEMP  
Start *92* End *93*

WET BULB TEMP

RH, percent  
*59*



OBSERVER'S NAME (PRINT)  
*Lloyd G. Camp*

OBSERVER'S SIGNATURE  
*Lloyd G. Camp*

DATE  
*6/26/89*

ORGANIZATION  
*Central Phosphates, Inc.*

CERTIFIED BY  
*Eastern Technical Associates*

DATE  
*3/9/89*

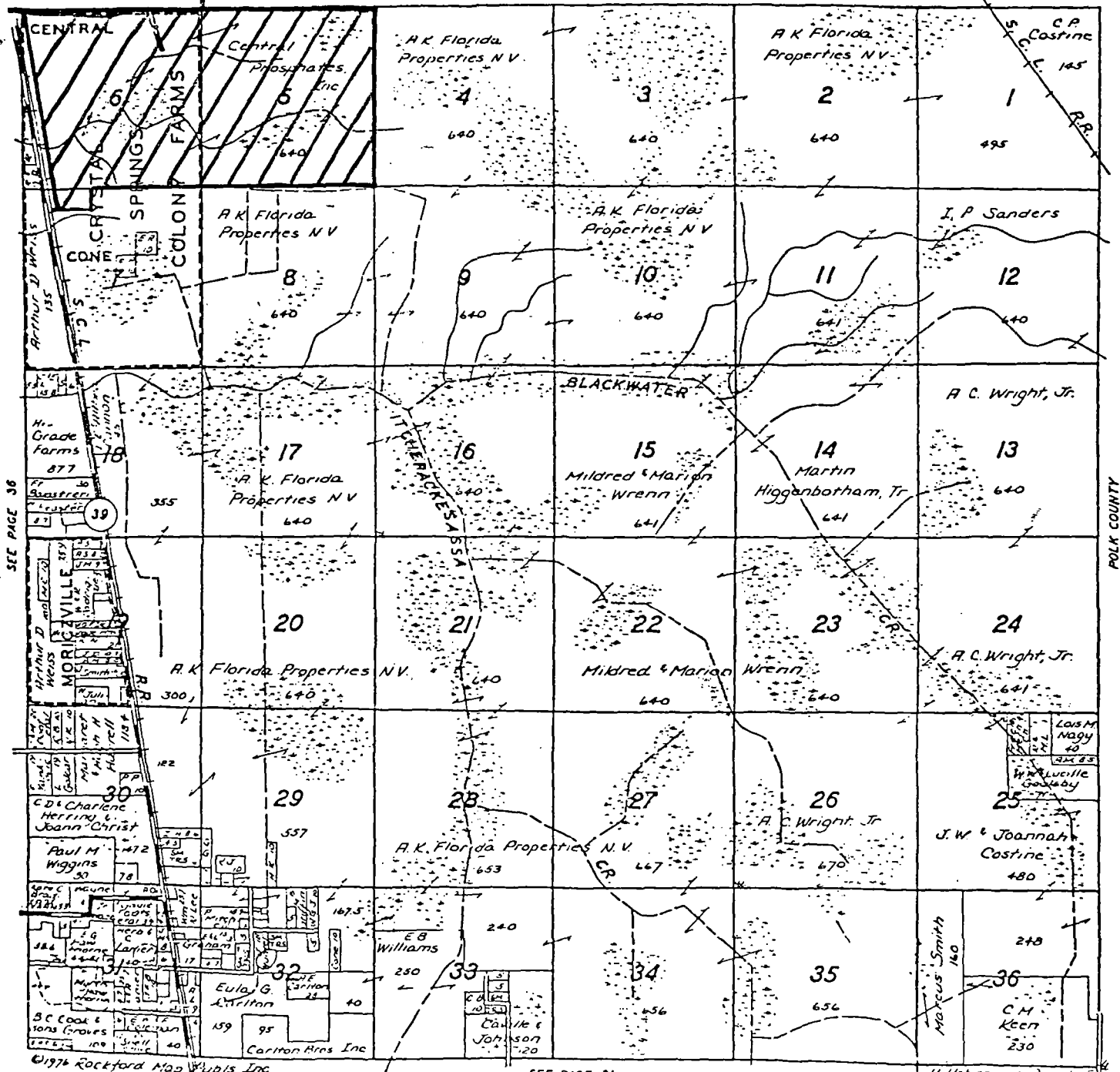
CONTINUED ON VEO FORM NUMBER

ADDITIONAL INFORMATION

# T. 27 S.-R. 22 E.

PASCO COUNTY

POLK COUNTY



SEE PAGE 36

POLK COUNTY

SEE PAGE 31

Hillsborough County, Fla.

CENTRAL PHOSPHATES, INC.  
SITE LOCATION MAP



**CF Industries, Inc.**

Plant City Phosphate Complex

June 28, 1989

Mr. Sheplak  
Hillsborough County Environmental  
Protection Commission  
1410 North 21st Street  
Tampa, Florida 33605

SUBJECT: Permit Renewal Application -  
A&B Storage Building

Dear Mr. Sheplak:

Enclosed are the following items:

1. Five (5) sets of the application for renewal of the A&B Storage Building Permit
2. A check in the amount of \$720 to cover the County fees for this renewal, and to cover the County fees for permit application for Sulfur Storage and Handling that was sent to DER in Tallahassee (see attached reference letter).
3. A check in the amount of \$1,500.00 to cover the cost of State renewal application fee for A&B Storage Building

The disbursement of the checks and permit and renewal applications was a result of your telephone conversation with Jim Martin on June 26, 1989.

If any additional information is required, please contact Jim Martin at 813/782-1591.

Sincerely,

J.E. Parsons  
General Manager

JEP/CJM/lh  
Enclosures

cc: With Enclosures  
P.R. Roberts/T.A. Edwards  
C.J. Martin/Env. File  
J.J. Mulqueen  
Reference Letter to DER-Tallahassee

DER SW District 8-1-89 R



P.O. Drawer L

CENTRAL PHOSPHATES, INC., Subsidiary of  
CF Industries, Inc.

Plant City, Florida 33566

VENDOR INVOICE		VOUCHER NUMBER	INVOICE GROSS AMOUNT	CASH DISCOUNT	INVOICE NET AMOUNT
DATE	NUMBER				
6/24/89	062789	061854	200.00	.00	200.00
NOTE: This check covers the cost of State permit application fee for Construction Permit Application for an Existing Sulfur Storage and Handling Facility (see attached letters for reference)					
6/28/89	034365	106452	200.00	.00	200.00
CHECK DATE	CHECK NUMBER	VENDOR NUMBER	CHECK GROSS AMOUNT	CASH DISCOUNT	CHECK NET AMOUNT

CENTRAL PHOSPHATES, INC., Subsidiary of  
CF Industries, Inc.

Plant City, Florida 33566

VENDOR INVOICE		VOUCHER	INVOICE	CASH	INVOICE
DATE	NUMBER	NUMBER	GROSS AMOUNT	DISCOUNT	NET AMOUNT
6/24/89	062789	061854	200.00	.00	200.00
NOTE: This check covers the cost of State permit application fee for Construction Permit Application for an Existing Sulfur Storage and Handling Facility (see attached letters for reference).					
6/28/89	034365	106452	200.00	.00	200.00
CHECK DATE	CHECK NUMBER	VENDOR NUMBER	CHECK GROSS AMOUNT	CASH DISCOUNT	CHECK NET AMOUNT

CENTRAL PHOSPHATES, INC., Subsidiary of

70-2222  
0719



**CF Industries, Inc.**

P.O. Drawer L  
Plant City, Florida 33566

034365

034305

PAY TO THE ORDER OF

OPERATING ACCOUNT

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FL 32399

DATE
6/28/89

AMOUNT
\$ *****200.00

*James E. Parsons*  
AUTHORIZED SIGNATURE

HARRIS BANK GLENCOE  
GLENCOE, ILLINOIS

AUTHORIZED SIGNATURE

The disbursement of the checks and permit and renewal applications was a result of your telephone conversation with Jim Martin on June 26, 1989.

If any additional information is required, please contact Jim Martin at 813/782-1591.

Sincerely,

*J.E. Parsons*

J.E. Parsons  
General Manager

JEP/CJM/lh  
Enclosures

cc: With Enclosures  
P.R. Roberts/T.A. Edwards  
C.J. Martin/Env. File  
J.J. Mulqueen

LABEL 107, MARCH 1983