

Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

April 28, 1988

Mr. Wayne Aronson, Chief Program Support Section U.S. EPA, Region IV 345 Courtland Street, N.E. Atlanta, Georgia 30365

Dear Mr. Aronson:

RE: Central Phosphates, Inc. State Construction Permits Numbers: AC 29-146176, AC 29-146177, AC 29-132155 and AC 29-132157 Federal Permit Number: PSD-FL-119

Enclosed is a copy of the Intent to Issue (Public Notice) for the above metioned site which appeared in the Tampa Tribune. If you have any comments or questions, please contact Pradeep Raval, Tom Rogers or Barry Andrews at the above address or at (904)488-1344.

Sincerely,

M.V. Jones

Margaret V. Janes Planner Bureau of Air Quality Management

CHF/mj

cc: Pradeep Raval
Tom Rogers
Barry Andrews
Bill Thomas, SW Dist.
I. Choronenko, EPCHC

enclosure

Preliminary Determination and Technical Evaluation

Central Phosphates, Inc.
Plant City, Hillsborough County, Florida

Sulfuric Acid Plants

Permit Numbers:

AC 29-146176, Plant A AC 29-146177, Plant B AC 29-132155, Plant C AC 29-132157, Plant D

PSD-FL-119

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

I. Application

A. Applicant

Central Phosphates, Inc.

Post Office Drawer L

Plant City, Florida 33566

B. Project Location

The applicant proposes to install cogeneration capability at their existing facility located in Hillsborough County, Florida. Energy enhancements include increases in the production rates of Sulfuric Acid Plants A and B from 1000 tons per day (TPD) to 1050 TPD (100% acid), and Plants C and D from 1900 TPD to 2400 TPD (100% acid). The project will involve changes in pump sizes, piping, catalyst quantity and installation of a steam turbine. The project will result in a significant increase in emissions of sulfur dioxide (SO₂) and sulfuric acid mist.

The UTM coordinates of this facility are Zone 17, 388 km East and 3116 km North.

C. Sources Reviewed

The sources reviewed in this evaluation will be the sulfuric acid plants A, B, C and D. Central Phosphates applied for

construction permits on March 23, 1987. The application was deemed complete on March 14, 1988.

D. Facility Category

The existing facility is classified in the Standard Industrial Classification (SIC) Code as Group No. 20, Chemical and Allied Products Industry No. 2819 Sulfuric Acid Contact Process. The Source Classification Code (SCC) is 3-01-023-08 (A & B, 98% Conversion) and 3-01-023-04 (C & D, 99.5% Conversion). The facility is listed as a Major Facility Category in Table 500-1 of Chapter 17-2, Florida Administrative Code (FAC).

II. Project Description

Sulfuric acid is an intermediate product in the manufacture of phosphoric acid. The A and B plants, installed in 1965, are single absorption plants while C and D, installed in 1973, are double absorption plants. The proposed project involves increased production rates of A and B from 1000 TPD (100% acid) to 1050 TPD, and of C and D from 1900 TPD to 2400 TPD. Increasing ammonia scrubbing and raising stack height on A and B, will result in both a reduction in SO₂ and acid mist emissions, and reduction in ambient impacts from these two plants. The modification of C and D plants will result in increased emissions of SO₂ and acid mist (see Table 1). NOx emissions will increase (based on 2.1 x 10⁻⁶ lb/cfm) to 8.5 lbs/hr, 37.4 TPY for A and B,

and 14.2 lbs/hr, 62.1 TPY for C and D. However, there is no emission standard for NOx emissions for sulfuric acid plants.

III. Rule Applicability

The proposed project will result in emissions of SO_2 and acid mist and is subject to a preconstruction review in accordance with Chapter 17-2 and 17-4, FAC, and Chapter 403 of the Florida Statutes.

The facility is located in Hillsborough County, an area designated as nonattainment for ozone; in the area of influence of the particulate matter (PM) and SO₂ nonattainment areas; and attainment for carbon monoxide (CO) and nitrogen oxides (NOx), in accordance with Rules 17-2.410 and 17-2.420, FAC.

The facility is within 100 km of a Class 1 Area,
Chassahowitzka National Wilderness Area, in accordance with Rule
17-2.440, FAC.

The project will be a modification to a major facility and is subject to a Prevention of Significant Deterioration (PSD) Review, since it will result in a significant net increase in emissions (Table 500-2, Rule 17-2, FAC), in accordance with Rule 17-2.500(2)(d)4, FAC.

Plants A and B are subject to Source Specific Emission

Limiting Standards in accordance with Rule 17-2.600(2)(a), FAC

(SO₂ - 10 lbs/ton 100% acid, acid mist - 0.3 lb/ton, 100% acid,

and VE - 10% opacity). The applicant has chosen more restrictive

limits of 8 lbs/ton for SO₂ and 0.2 lb/ton for acid mist, to

avoid NSPS (Standards of Performance for New Sources), and

PSD/BACT applicability.

Plants C and D are currently, and will remain subject to 40 CFR 60 Subpart H, Standards of Performance for Sulfuric Acid Plants (SO₂ - 4 lbs/ton 100% acid, acid mist - 0.15% lb/ton, and VE - 10% opacity).

Compliance with the emission limits will be demonstrated in accordance with Rule 17-2.700, FAC and 40 CFR 60 Subpart H, as described in 40 CFR 60, Appendix A.

IV. Source Impact Analysis

A. Emission Limitations

As determined by the attached BACT, the emissions shall not exceed:

						Acid		
Plant	TPD	so ₂			Mist			VE
	acid	lbs/ton	lbs/hr	TPY	lbs/tonl	lbs/hr	TPY2	Opacity
A	1 0 50	8	350	1533	0.2	8.8	38.3	10
В	1050	8	350	1533	0.2	8.8	38.3	10
С	2400	4	400	1752	0.15	15.0	65.7	10
D	2400	4	400	1752	0.15	15.0	65.7	10
			,					

1pound of pollutant per tons of 100% acid produced
2tons per year

B. Ambient Air Analysis

1. Introduction

County, is proposing to install a cogeneration facility. The additional energy needed for this facility will be derived from production rate increases at their four sulfuric acid plants. The A and B sulfuric acid plants will increase production from 1000 tons/day (TPD) of 100 percent sulfuric acid (H₂SO₄) to 1050 TPD, and the C and D plants will increase from 1900 to 2400 TPD. These production increases, in total, will result in emission increases of sulfur dioxide (SO₂) and H₂SO₄ mist.

In conjunction with the production rate increase at the A and B plants, the applicant is proposing to increase the feed rate of ammonia to the scrubber, which will result in a decrease in emissions of SO₂ and H₂SO₄ mist for these plants. Further, the stack heights at these plants will be increased from 78 to 110 feet.

The net emissions changes from the above modifications increase SO₂ by 470 tons per year (TPY) and increase H₂SO₄ mist by 30 TPY. These increases are greater than the PSD-significant thresholds and are, thus, subject to the PSD review requirements contained in Rule 17-2.500 of the Florida Administrative Code. Part of these requirements is an air quality impact analysis for the subject pollutants, which includes:

- o An analysis of existing air quality;
- o A PSD increment analysis (for SO2 and PM only);
- o An Ambient Air Quality Standards (AAQS) analysis;
- o An analysis of impacts on soils, vegetation, visibility, and growth-related air quality impacts; and
- O A Good Engineering Practice (GEP) stack height determination.

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

accordance with EPA guidelines.

Based on these required analyses, the Department has reasonable assurance that the proposed facility, as described in this report 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 brief description of the modeling methodology and results of the required analyses follow. A more complete description is contained in the permit application on file with the Department.

2. Analysis of the Existing Air Quality

Preconstruction ambient air quality monitoring may be required for the pollutants subject to PSD review. In general, one year of quality assured data using an EPA reference monitor, or an equivalent, must be submitted. Sometimes less than one year of data, but not less than four months, may be accepted when Department approval is given.

An exemption to the monitoring requirement can be obtained if the maximum air quality impact resulting from the net emissions increase, as determined through air quality modeling, is less than a pollutant-specific deminimus concentration. In addition, if current monitoring data already exist and these data are representative of the proposed source area, then at the discretion of the Department these data may be used.

The predicted maximum concentration increase for SO_2 , due to the proposed modification, is given in Table 1. The monitoring deminimus level is also listed. The predicted impact for SO_2 is less than the deminimus level, therefore, specific preconstruction monitoring is not required. The applicant has, however, cited recent monitoring results from nearby SO_2 monitors. A background SO_2 concentration of O ug/m³ is estimated from this data.

There is no monitoring deminimus level defined for ${\rm H}_2{\rm SO}_4$ mist. No monitoring was required to be completed.

Modeling Methodology

The EPA-approved Industrial Source Complex Short-Term (ISCST) atmospheric dispersion model (version 6) was used by the applicant to predict the impact of the modification on the surrounding ambient air. This model estimates ground-level concentrations of inert gases or small particles emitted into the atmosphere by point, area, or volume type sources. The model incorporates elements for plume rise, transport by the mean wind, and Gaussian dispersion. In addition, the model allows for the separation of sources, building wake downwash, adjustment for calm conditions, and various other input and output features.

Five years of sequential hourly meteorological data were used in the dispersion model. The surface and upper-air observations were National Weather Service (NWS) data collected in Tampa during the period 1973-75, 1978-79. The data set is split because the intervening period of observations were unavailable at the time of this application. Since five years of data were used, the highest, second-high short-term predicted concentrations are compared with the appropriate ambient air quality standards or PSD increments. For the annual averages, the highest predicted yearly average was compared with the standards. The stack and emission characteristics for the sources involved in the proposed modification are given in Table II. A complete listing of all the sources, including background sources, used in the modeling is contained in the application.

The applicant first evaluated the potential increase in ambient ground-level concentrations associated with the net emissions increase and other modification. A polar receptor grid using 36 radials with 7 ranges (.5, 1, 2, 5, 7.5, 10, and 15 kilometers) identified the modeling area. The applicant did not include building wake downwash because stack heights are generally greater than 2.5 times the building heights and the nearest plant property line is over 0.5 kilometers from the sources. The results show that the increases in ambient ground-level concentrations for all averaging times are less than the defined significant impact levels for SO₂. Table 1 lists the results of the significant impact analysis.

The applicant next evaluated compliance with the ambient air quality standards and the PSD increments. All sources of SO_2 within approximately 50 kilometers of Central Phosphates were modeled. Receptors were located only along the plant boundary with some extra receptors north of the north boundary. Receptor spacing of 100 meters was used.

Acid mist emissions from the Central Phosphates facility were also modeled for the day of maximum impact associated with the SO_2 modeling. The same receptor grid used for the AAQS and increments modeling was used.

A more detailed description of the modeling analysis, along with the model output, is contained in the Central Phosphates application. The Department has reviewed the applicant's analysis and found that it conforms with the guidelines established by the EPA and followed by the Department.

4. PSD Increment Analysis

The PSD increments represent the amount that new sources (or modifications) may increase the ambient ground-level concentrations of SO₂ and particulate matter. The purpose of these increment limitations is to maintain, within the allowed increases, the good air quality already existing. Although an area is allowed to increase ambient concentrations up to the

increment, at no time can the increase result in exceedance of the ambient air quality standard.

The Central Phosphates facility is located in a Class II area and is subject to the increments defined for this class. Predicted concentration increase due to all emissions increases occurring after the baseline date (December 27, 1977) will consume PSD increment. In addition, all SO₂ increases associated with construction or modification at major facilities which occurred after January 6, 1975, will also consume increment. The applicant has identified and modeled all significant increment consuming sources at its own and surrounding facilities. The results of this modeling are summarized in Table III.

The Chassahowitzka National Wilderness (Class I) Area is located approximately 68 kilometers to the northwest. Class I areas are more strictly regulated by allowing for a smaller available increment. Because of the small (insignificant) increase in ambient concentration due to the modification in the area surrounding the facility, the Department is reasonably assured that this modification will not cause or contribute to an increment violation at the Class I area.

5. Ambient Air Quality Standards (AAQS) Analysis

Of the pollutants subject to review, only SO₂ has ambient air quality standards with which to compare. In general, the

total ambient air quality impacts are determined by adding the predicted modeled concentrations to an estimated background concentration. In the area of the Central Phosphates facility, the estimated background concentration is 0 ug/m³ since all sources have been explicitly modeled.

Table IV summarizes the estimates of the maximum air quality impacts in the vicinity of the Central Phosphates facility.

Although the predicted concentrations are quite high, emission increases from the proposed modification are not expected to cause or contribute to a violation of the AAQS.

- 6. Additional Impacts Analysis
- a. The maximum ground-level concentration of SO₂ is predicted to be less than the AAQS, including the national secondary standards designed to protect public welfare-related values. As such, no harmful effects on soils and vegetation is expected.
- b. Impact on Visibility in the Class I Area

The increased emissions at the Central Phosphates facility are not expected to affect the visibility in the Chassahowtizka National Wilderness Area.

Growth-Related Air Quality Impacts

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

d. GEP Stack Height Determination

Good Engineering Practice (GEP) stack height is defined as the greater of: (1) 65 meters or (2) the maximum nearby building height plus 1.5 times the building height or projected width, whichever is less. The stack heights a the modified sources are less than 65 meters. The potential for building wake downwash was addressed by the applicant by stating that the stacks were generally greater than 2.5 times the heights of the nearby structures and that the nearest plant property line is greater than 0.5 kilometers from the stacks. Therefore, the applicant did not include building wake downwash in the modeling.

e. Noncriteria Pollutants

Sulfuric acid (H_2SO_4) mist is a noncriteria pollutant, which means that no ambient air quality standard has been defined for this pollutant. Therefore, there is

no concentration value with which to compare a predicted concentration level. This pollutant is regulated by the application BACT.

For informational purposes, the applicant has estimated the maximum concentration of H_2SO_4 mist resulting from the four H_2SO_4 plants operating at the proposed conditions. The maximum groundlevel concentration, off plant property, is 5.6 ug/m³.

V. Conclusion

Based on the information submitted by Central Phosphates, the Department has reasonable assurance that the increase in production rates of A, B, C, and D sulfuric acid plants as part of the cogeneration project at their existing facility, as described in this evaluation, and subject to the conditions herein, will not cause or contribute to a violation of an ambient air quality standard or PSD increment or any other provisions of Chapter 17-2, FAC.

Best Available Control Technology (BACT) Determination Central Phosphates, Inc.
Hillsborough County

The applicant proposes to install cogeneration cabability at their existing facility in Hillsborough County. The project includes production increases of the A and B Sulphuric Acid plants from 1000 TPD (tons per day) to 1050 TPD, and of C and D Plants from 1900 TPD to 2400 TPD.

The proposed project will result in a reduction in emissions of SO_2 and acid mist from the A and B plants, but a significant increase (Table 17-2.500-2, Florida Administrative Code, FAC) from the C and D plants. The C and D plants are therefore subject to a Prevention of Significant Deterioration (PSD) review in accordance with Rule 17-2.500(2)(d)4, FAC.

The BACT review is part of the PSD review requirements in accordance with Rule 17-2.500(5)(c), FAC.

BACT Determination Requested by the Applicant

The BACT determination requested by the applicant on a pollutant by pollutant basis is given below.

Pollutant

Determination

SO₂ Acid Mist 4 lb/ton 100% H2SO4 produced 0.15 lb/ton 100% H2SO4 produced

Date of Receipt of a BACT application:

March 19, 1987

Review of Group Members:

This determination was based upon comments received from the applicant, EPA Region IV, and the Stationary Source Control Section.

BACT Determination Procedure:

In accordance with Florida Administrative Code Chapter 17-2, Air Pollution, this BACT determination will be based on the maximum degree of reduction of each pollutant emitted which the Department (DER), on a case-by-case basis taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In

addition, the regulations state that in making the BACT determination the Department shall give consideration to:

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

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

BACT Determined by DER:

<u>Pollutant</u>	Emission Limit	
so ₂	4.0 lb/ton of 100%	H ₂ SO ₄ produced
Acid Mist	0. 5 lb/ton of 100%	H ₂ SO₄ produced

BACT Determination Rationale

DER's BACT determination is the same as that proposed by the applicant, determinations completed by other states, and Standards of Performance for Sulfuric Acid Plants, 40 CFR 60 Subpart H, (double absorption process). The process in itself is the control technology for SO₂ and acid mist. The emission limits reflect conversion efficiency around 99.7% of SO₂ to H₂SO₄. High efficiency mist eliminators are considered BACT for acid mist. A review of BACT/LAER Clearinghouse indicates that the double absorption technology, and the use of high efficiency mist eliminators is representative of BACT using the top down approach.

Environmental Impact Analyses.

The impact analyses for the BACT determination is based on 8760 hrs/yr operation for both C and D plants. The ambient air quality standards analysis resulted in the following for SO₂ emissions (Plants A, B C and D):

Averaging Time	Predicted Max. Conc. (ug/m ³)	Florida AAOS (ug/m³)	
Annual	45	60	
24-hour	245	260	
3-hour	817	1300	

Although the predicted maximum concentration for sulfur dioxide approaches the Florida AAQS, the incremental impact due to the proposed modification is insignificant.

Conclusion

The Department has determined that for the increase in production capacity of the C and D Sulfuric Acid Plants the emission limits established herein represent BACT.

Details of the Analysis May be Obtained by Contacting:

Barry Andrews, P.E., BACT Coordinator Department of Environmental Regulation Bureau of Air Quality Management 2600 Blairstone Road Tallahassee, Florida 32399-2400

Recommended by:

C. H. Fancy, P.E.
Deputy Bureau Chief, BAQM
bepacy bareau entery bight
Date
Approved by:
npproved 21.
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Dale Twachtmann, Secretary
Date

PERMITTEE:
Central Phosphates, Inc.
P. O. Drawer L
Plant City, FL 33566

Permit Number: AC 29-132157
Expiration Date: September 30, 1988
County: Hillsborough
Latitude/Longitude: 28° 09' 59"N
82° 08' 27"W

Project: Sulfuric Acid Plant D

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

For the permitting of the Sulfuric Acid Plant D, with a maximum production capacity of 2400 tons per day 100% acid. Sulfur dioxide and acid mist emissions will be controlled by the existing double absorption process. The project is located at Central Phosphate's existing facility in Hillsborough County, Florida. The UTM coordinates are Zone 17, 388 km East and 3116 km North.

The Standard Industrial Classification (SIC) Code is Group 20, Chemical and Allied Products; Industry No. 2819, Sulfuric Acid Contact Process. The Source Classification Code (SCC) is 3-01-023-04, C and D Plants (99.5% Conversion). Construction will be in accordance with the permit application, plans, documents, and reference materials submitted unless otherwise stated in the General and Specific Conditions.

The PSD number for this permit is PSD-FL-119.

Attachments:

- 1. Central Phosphates application package dated March 19, 1987.
- 2. John Koogler's letter dated April 17, 1987.
- 3. DER's letter of incompleteness dated April 22, 1987.
- 4. Department of Interior's letter dated May 1, 1987.
- 5. DER's letter dated May 15, 1987.
- 6. John Koogler's letter dated January 28, 1988.
- 7. Central Phosphates application package for A and B plants dated March 1, 1988.
- 8. John Koogler's letter dated March 8, 1988.

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.

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;
 - 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.

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 noncompliance 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.

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:

For Sulfuric Acid Plant D

- 1. The Plant D may operate continuously, i.e., 8760 hours/year.
- 2. The maximum production rate shall not exceed 2400 TPD (tons per day) based on 100% H2SO4.

SPECIFIC CONDITIONS:

- 3. Sulfur dioxide (SO₂) emissions shall not exceed:
 - a) 4 lbs/ton of 100% H2SO4 produced
 - b) 400 lbs/hr
 - c) 1752 TPY (tons/yr)
- 4. Sulfuric Acid Mist emissions shall not exceed:
 - a) 0.15 lb/ton, 100% H₂SO₄ produced
 - b) 15 lbs/hr
 - c) 65.7 TPY
- 5. Visible Emissions (VE) shall not exceed 10% opacity.
- 6. Nitrogen oxides (NOx) emissions are estimated to be 62.1 TPY.
- 7. An SO_2 continuous emission monitor shall be installed, calibrated, maintained and operated in accordance with 40 CFR 60, Subpart H.
- 8. The permittee shall comply with all the applicable provisions of Chapter 17-2 and 17-4 of the Florida Administrative Code (FAC) and 40 CFR 60 Subpart H, Standards of Performance for Sulfuric Acid Plants.
- 9. Initial and annual compliance tests shall be conducted in accordance with 40 CFR 60 Subpart H, and Appendix A, to determine emissions of SO_2 , acid mist, and visible emissions.
- 10. The Hillsborough County Environmental Protection Commission (HCEPC) office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the HCEPC office within 45 days of test completion.

The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, the Department and HCEPC must be notified in writing 60 days prior to the expiration of the construction permit and the permittee shall submit a new schedule and request for an extension of the construction permit (Rule 17-2, FAC).

SPECIFIC CONDITIONS:

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results, and the Certificate of Completion, to the HCEPC office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate. (FAC Rules 17-2 and 17-4)

If the construction permit expires prior to the permittee filing an application for a permit to operate, then all activities at the project must cease. (FAC Rule 17-4)

- 11. Any change in the method of operation, raw materials and chemicals processed, equipment, or operating hours pursuant to FAC Rule 17-2.100(118), Modification, shall be submitted for approval to DER's Bureau of Air Quality Management office and HCEPC office.
- 12. When start-up involving more than one acid plant occurs, a second plant will not be started up until the first plant is started and in compliance. The permittee shall take all reasonable precautions to avoid violations of ambient air quality standards during plant start-ups.
- 13. This permit shall replace previous permits issued for Central Phosphate's Acid Plant D.

	Issued thisday of 19	_ ′
	STATE OF FLORIDA DEPARTMENT	
	OF ENVIRONMENTAL REGULATION	
,	Dale Twachtmann, Secretary	_

PERMITTEE: Central Phosphates, Inc. P. O. Drawer L Plant City, FL 33566 Permit Number: AC 29-132155
Expiration Date: September 30, 1988
County: Hillsborough
Latitude/Longitude: 28° 09' 59"N
82° 08' 27"W

Project: Sulfuric Acid Plant C

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 drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the permitting of the Sulfuric Acid Plant C, with a maximum production capacity of 2400 tons per day 100% acid. Sulfur dioxide and acid mist emissions will be controlled by the existing double absorption process. The project is located at Central Phosphate's existing facility in Hillsborough County, Florida. The UTM coordinates are Zone 17, 388 km East and 3116 km North.

The Standard Industrial Classification (SIC) Code is Group 20, Chemical and Allied Products; Industry No. 2819, Sulfuric Acid Contact Process. The Source Classification Code (SCC) is 3-01-023-04, C and D Plants (99.5% Conversion). Construction will be in accordance with the permit application, plans, documents, and reference materials submitted unless otherwise stated in the General and Specific Conditions.

The PSD number for this permit is PSD-FL-119.

Attachments:

- 1. Central Phosphates application package dated March 19, 1987.
- 2. John Koogler's letter dated April 17, 1987.
- 3. DER's letter of incompleteness dated April 22, 1987.
- 4. Department of Interior's letter dated May 1, 1987.
- 5. DER's letter dated May 15, 1987.
- 6. John Koogler's letter dated January 28, 1988.
- 7. Central Phosphates application package for A and B plants dated March 1, 1988.
- 8. John Koogler's letter dated March 8, 1988.

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.

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.

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 noncompliance 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 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.

GENERAL CONDITIONS:

- The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration 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 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:

For Sulfuric Acid Plant C

- 1. The Plant C may operate continuously, i.e., 8760 hours/year.
- 2. The maximum production rate shall not exceed 2400 TPD (tons per day) based on 100% H₂SO₄.

SPECIFIC CONDITIONS:

- 3. Sulfur dioxide (SO₂) emissions shall not exceed:
 - a) 4 lbs/ton of 100% H2SO4 produced
 - b) 400 lbs/hr
 - c) 1752 TPY (tons/yr)
- 4. Sulfuric Acid Mist emissions shall not exceed:
 - a) 0.15 lb/ton, 100% H₂SO₄ produced
 - b) 15 lbs/hr
 - c) 65.7 TPY
- 5. Visible Emissions (VE) shall not exceed 10% opacity.
- 6. Nitrogen oxides (NOx) emissions are estimated to be 62.1 TPY.
- 7. An SO_2 continuous emission monitor shall be installed, calibrated, maintained and operated in accordance with 40 CFR 60, Subpart H.
- 8. The permittee shall comply with all the applicable provisions of Chapter 17-2 and 17-4 of the Florida Administrative Code (FAC) and 40 CFR 60 Subpart H, Standards of Performance for Sulfuric Acid Plants.
- 9. Initial and annual compliance tests shall be conducted in accordance with 40 CFR 60 Subpart H, and Appendix A, to determine emissions of SO_2 , acid mist, and visible emissions.
- 10. The Hillsborough County Environmental Protection Commission (HCEPC) office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the HCEPC office within 45 days of test completion.

The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, the Department and HCEPC must be notified in writing 60 days prior to the expiration of the construction permit and the permittee shall submit a new schedule and request for an extension of the construction permit (Rule 17-2, FAC).

SPECIFIC CONDITIONS:

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results, and the Certificate of Completion, to the HCEPC office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate. (FAC Rules 17-2 and 17-4)

If the construction permit expires prior to the permittee filing an application for a permit to operate, then all activities at the project must cease. (FAC Rule 17-4)

- 11. Any change in the method of operation, raw materials and chemicals processed, equipment, or operating hours pursuant to FAC Rule 17-2.100(118), Modification, shall be submitted for approval to DER's Bureau of Air Quality Management office and HCEPC office.
- 12. When start-up involving more than one acid plant occurs, a second plant will not be started up until the first plant is started and in compliance. The permittee shall take all reasonable precautions to avoid violations of ambient air quality standards during plant start-ups.
- 13. This permit shall replace previous permits issued for Central Phosphate's Acid Plant C.

PERMITTEE: Central Phosphates, Inc. Permit Number: AC 29-132155 Expiration Date: September 30, 1988

Issued thisday of 19	
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION	
Dale Twachtmann, Secretary	

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ GOVERNOR DALE TWACHTMANN SECRETARY

PERMITTEE: Central Phosphates, Inc. P. O. Drawer L Plant City, FL 33566

Permit Number: AC 29-146177 Expiration Date: September 30, 1988

County: Hillsborough

28° 09' 59"N Latitude/Longitude:

82° 08' 27"W

Project: Sulfuric Acid Plant B

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

For the permitting of the Sulfuric Acid Plant B, with a maximum production capacity of 1050 tons per day 100% acid. dioxide and acid mist emissions will be controlled by an ammonia scrubber. The project is located at Central Phosphate's existing facility in Hillsborough County, Florida. The UTM coordinates are Zone 17, 388 km East and 3116 km North.

The Standard Industrial Classification (SIC) Code is Group 20, Chemical and Allied Products; Industry No. 2819, Sulfuric Acid Contact Process. The Source Classification Code 3 - 01 - 023 - 08, Α and В Plants (98% Conversion).

Construction will be in accordance with the permit application, documents, and reference materials submitted unless otherwise stated in the General and Specific Conditions.

Attachments:

- 1. Central Phosphates application package dated March 19, 1987.
- 2. John Koogler's letter dated April 17, 1987.
- 3. DER's letter of incompleteness dated April 22, 1987.
- 4. Department of Interior's letter dated May 1, 1987.
- 5. DER's letter dated May 15, 1987.
- 6. John Koogler's letter dated January 28, 1988.
- 7. Central Phosphates application package for A and B plants dated March 1, 1988.
- 8. John Koogler's letter dated March 8, 1988.

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.

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;
 - 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.

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 noncompliance 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)
 - () 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.

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:

For Sulfuric Acid Plant B

- 1. The Plant B may operate continuously, i.e., 8760 hours/year.
- 2. The maximum production rate shall not exceed 1050 TPD (tons per day) based on 100% H₂SO₄.

SPECIFIC CONDITIONS:

3. Sulfur dioxide (SO₂) emissions shall not exceed:

- a) 8 lbs/ton of 100% H2SO4 produced
- b) 350 lbs/hr
- c) 1533 TPY (tons/yr)
- 4. Sulfuric Acid Mist emissions shall not exceed:
 - a) 0.2 lb/ton, 100% H2SO4 produced
 - b) 8.8 lbs/hr
 - c) 38.3 TPY
- 5. Visible Emissions (VE) shall not exceed 10% opacity.
- 6. Nitrogen oxides (NOx) emissions are estimated to be 37.4 TPY based on a factor of 2.1 x 10^{-6} lb/dscf.
- 7. SO_2 and acid mist emissions shall be controlled by an ammonia scrubber.
- 8. The permittee shall comply with all the applicable provisions of Chapter 17-2 and 17-4 of the Florida Administrative Code (FAC).
- 9. A CEM shall be used to monitor SO_2 , in accordance with Rule 17-2.710, FAC. Initial and annual compliance tests shall be conducted using:
 - a) EPA Method 8, for SO2 and acid mist
 - b) EPA Method 9, for visible emissions
- 10. The Hillsborough County Environmental Protection Commission (HCEPC) office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the HCEPC office within 45 days of test completion.

The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, the Department and HCEPC must be notified in writing 60 days prior to the expiration of the construction permit and the permittee shall submit a new schedule and request for an extension of the construction permit (Rule 17-2, FAC).

SPECIFIC CONDITIONS:

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results, and the Certificate of Completion, to the HCEPC office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate. (FAC Rules 17-2 and 17-4)

If the construction permit expires prior to the permittee filing an application for a permit to operate, then all activities at the project must cease. (FAC Rule 17-4)

- 11. Any change in the method of operation, raw materials and chemicals processed, equipment, or operating hours pursuant to FAC Rule 17-2.100(118), Modification, shall be submitted for approval to DER's Bureau of Air Quality Management office and HCEPC office.
- 12. When start-up involving more than a acid plant occurs, a second plant will not be started up until the first plant is started and in compliance. The permittee shall take all reasonable precautions to avoid violations of ambient air quality standards during plant start-ups.
- 13. This permit shall replace previous permits issued for Central Phosphate's Acid Plant B.

PERMITTEE: Central Phosphates, Inc.

Permit Number: AC 29-146177 Expiration Date: September 30, 1988

Issued this ____day of _____,

19__.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ GOVERNOR DALE TWACHTMANN SECRETARY

PERMITTEE: Central Phosphates, Inc. P. O. Drawer L Plant City, FL 33566 Permit Number: AC 29-146176 Expiration Date: September 30, 1988 County: Hillsborough

Latitude/Longitude: 28° 09' 59"N 82° 08' 27"W

Project: Sulfuric Acid Plant A

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 drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the permitting of the Sulfuric Acid Plant A, with a maximum production capacity of 1050 tons per day 100% acid. Sulfur dioxide and acid mist emissions will be controlled by an ammonia scrubber. The project is located at Central Phosphate's existing facility in Hillsborough County, Florida. The UTM coordinates are Zone 17, 388 km East and 3116 km North.

The Standard Industrial Classification (SIC) Code is Group 20, Chemical and Allied Products; Industry No. 2819, Sulfuric Acid Contact Process. The Source Classification Code (SCC) is 3-01-023-08, A and B Plants (98% Conversion).

Construction will be in accordance with the permit application, plans, documents, and reference materials submitted unless otherwise stated in the General and Specific Conditions.

Attachments:

- 1. Central Phosphates application package dated March 19, 1987.
- 2. John Koogler's letter dated April 17, 1987.
- 3. DER's letter of incompleteness dated April 22, 1987.
- 4. Department of Interior's letter dated May 1, 1987.
- 5. DER's letter dated May 15, 1987.
- 6. John Koogler's letter dated January 28, 1988.
- 7. Central Phosphates application package for A and B plants dated March 1, 1988.
- 8. John Koogler's letter dated March 8, 1988.

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.

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;
 - 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.

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 noncompliance 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)
 - () 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.

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:

For Sulfuric Acid Plant A

- 1. The Plant A may operate continuously, i.e., 8760 hours/year.
- 2. The maximum production rate shall not exceed 1050 TPD (tons per day) based on 100% H₂SO₄.

SPECIFIC CONDITIONS:

- 3. Sulfur dioxide (SO₂) emissions shall not exceed:
 - a) 8 lbs/ton of 100% H2SO4 produced
 - b) 350 lbs/hr
 - c) 1533 TPY (tons/yr)
- 4. Sulfuric Acid Mist emissions shall not exceed:
 - a) 0.2 lb/ton, 100% H₂SO₄ produced
 - b) 8.8 lbs/hr
 - c) 38.3 TPY
- 5. Visible Emissions (VE) shall not exceed 10% opacity.
- 6. Nitrogen oxides (NOx) emissions are estimated to be 37.4 TPY based on a factor of 2.1 x 10^{-6} lb/dscf.
- 7. SO₂ and acid mist emissions shall be controlled by an ammonia scrubber.
- 8. The permittee shall comply with all the applicable provisions of Chapter 17-2 and 17-4 of the Florida Administrative Code (FAC).
- 9. A CEM shall be used to monitor SO₂, in accordance with Rule 17-2.710, FAC. Initial and annual compliance tests shall be conducted using:
 - a) EPA Method 8, for SO2 and acid mist
 - b) EPA Method 9, for visible emissions
- 10. The Hillsborough County Environmental Protection Commission (HCEPC) office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the HCEPC office within 45 days of test completion.

The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, the Department and HCEPC must be notified in writing 60 days prior to the expiration of the construction permit and the permittee shall submit a new schedule and request for an extension of the construction permit (Rule 17-2, FAC).

SPECIFIC CONDITIONS:

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results, and the Certificate of Completion, to the HCEPC office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate. (FAC Rules 17-2 and 17-4)

If the construction permit expires prior to the permittee filing an application for a permit to operate, then all activities at the project must cease. (FAC Rule 17-4)

- 11. Any change in the method of operation, raw materials and chemicals processed, equipment, or operating hours pursuant to FAC Rule 17-2.100(118), Modification, shall be submitted for approval to DER's Bureau of Air Quality Management office and HCEPC office.
- 12. When start-up involving more than one acid plant occurs, a second plant will not be started up until the first plant is started and in compliance. The permittee shall take all reasonable precautions to avoid violations of ambient air quality standards during plant start-ups.
- 13. This permit shall replace previous permits issued for Central Phosphate's Acid Plant A.

PERMITTEE: Central Phosphates, Inc.

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Permit Number: AC 29-146176 Expiration Date: September 30, 1988

Issued this ____day of ____,
19___.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary

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