



KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
904/377-5822 • FAX 377-7158

KA 527-92-04

September 17, 1993

RECEIVED
SEP 21 1993
Division of Air
Resources Management

Mr. John C. Brown, Jr.
Florida Department of
Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Additional Information
Auxiliary Steam Supply Boiler
Piney Point Phosphates
Manatee County, Florida
Permit File AC41-232096, PSD-FL-205

Dear Mr. Brown:

This is in response to your request for additional information dated September 3, 1993 (attached), on the above referenced project.

Based on Pradeep Raval's telephone conversation yesterday with Mr. Charles Logan, the following information is being submitted to resolve the pending items of incompleteness. The responses are in the order of your comments.

1. Piney Point Phosphates (PPP) presently has multiple air permits for an auxiliary steam supply boiler. FDEP would prefer to have only one permit to keep track of for the boiler.

PPP proposes the following wording for a Specific Condition of the new PSD permit, to resolve the matter:

Upon issuance of this construction permit, previous air construction permits AC41-211848 and AC41-226205 shall be null and void. Also, air operation permit A041-156789 shall be null and void upon issuance of an air operation permit for the new boiler.

This proposal accomplishes the following:

- A. PPP will be able to retain a valid back-up construction permit in case the PSD permit is not issued for any reason.
- B. If FDEP does issue the PSD permit, the previous construction permits will automatically be null and void.

- C. PPP will be able to retain a valid back-up operation permit in case an operation permit is not issued for the new boiler for any reason.
- D. If FDEP does issue an operation permit for the new boiler, the previous operation permit will automatically be null and void.

It should be noted that retaining a valid operation permit for an existing source until a proposed replacement source under a construction permit is operational, is consistent with the approach used by the Department in the past.

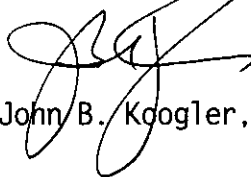
- 2. Enclosed is Page 2 of 12 of the air permit application form, duly signed and sealed, as requested by Mr. Charles Logan.
- 3. The issue concerning renumbered rule references has been resolved in Pradeep Raval's discussions with Mr. Charles Logan and Mr. Preston Lewis.
- 4. The reason for allowable annual operating hours of upto 8760 for the auxiliary steam supply boiler is to continue facility operations, dependent upon a steam supply, during periods of sulfuric acid plant shutdown. The boiler is also utilized during sulfuric acid plant start-up.

It is anticipated that this submittal will enable FDEP to proceed with the issuance of a draft PSD permit.

If you have questions, please do not hesitate to give me call.

Very truly yours,

KOGLER & ASSOCIATES



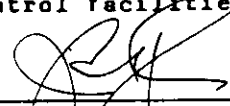
John B. Koogler, Ph.D., P.E.

JBK:par

- c: Ivan Nance, PPP
- Sue Bidwell, PPP
- C. Fogarty
- C. Halladay
- B. Thomas, SW Dist.
- G. Harper, EPA
- D. Remyer, NPS
- R. Baum, Manatee Co.



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 B. Koogler, Ph.D., P.E.
Name (Please Type)

Koogler & Associates, Environmental Services
Company Name (Please Type)

4014 N.W. 13th Street, Gainesville, FL 32609
Mailing Address (Please Type)

Florida Registration No. 12925 Date: 9/17/93 Telephone No. (904) 377-5822

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.

For the increase in the operating hours of the auxiliary boiler from 876 to 8760 hours per year. The source is currently permitted under AC41-211848. The proposed project will operate in compliance with all applicable air regulations.

B. Schedule of project covered in this application (Construction Permit Application Only) (Permitted source)
Start of Construction September 1993 Completion of Construction September 1994

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.)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.
AC41-211848 : Issued 8-17-92 ; Expires 7-14-93, Extension Requested.
A041-156789 : Expires 1-24-94. (Replaced)



Lawton Chiles
Governor

Patty

Florida Department of Environmental Protection

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

Virginia B. Wetherell
Secretary

September 3, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Ivan Nance
Environmental Manager
Piney Point Phosphate, Inc.
13300 US Highway 41 North
Palmetto, Florida 34221-8662

Re: Piney Point Phosphates, Inc.
Application to Construct AC 41-232096 (PSD-FL-205)
Submittal Date: May 28, 1993

Dear Mr. Nance:

The Department has received your July 30, 1993 response letter. Subsequent to our review of the responses, the application remains incomplete. Please respond to the following and send all supporting data:

1) Based on your responses and the events to date the Department is considering the proposed construction of the 196 MMBTU/hour, the 135 MMBTU/hour and the 190 MMBTU/hour heat input boilers as a phased project. Therefore, please submit a complete PSD emissions review project for all of the proposed boilers as a single project; or, surrender the permits for the above unconstructed sources at the existing facility to the Department. If you choose the latter, please resubmit the application reflecting a requirement for a new source, not a modification of a source which does not exist.

2) Please provide a new application, with seal, and associated documents as requested in comment No. 2 of the FDEP incompleteness letter of June 24, 1993.

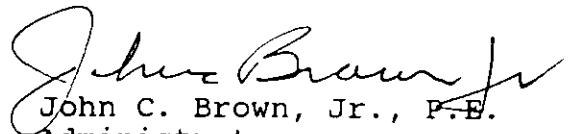
Mr. Ivan Nance
Piney Point Phosphate, Inc.
AC 41-232096 (Incompleteness)
September 3, 1993
Page 2 of 2

3) Please update the application to reflect the proper rule reference numbers per comment No. 3 of the FDEP incompleteness letter of June 24, 1993.

4) It is not clear from your response to comments No. 10 and No. 15 of the FDEP incompleteness letter of June 24, 1993 whether the auxiliary boiler will operate other than during shutdown and startup of the sulfuric acid plant. Please clarify and confirm that it is your intent to operate 8760 hours per year. Your comments seem to contradict the number of hours (8760) referenced.

If you have any questions concerning the above comments please call Charles Logan or myself at (904) 488-1344.

Sincerely;


John C. Brown, Jr., P.E.
Administrator
Air Permitting and Standards

JCB/CSL

cc: Bill Thomas, SWD
Rob Baum, Manatee Co.
John Bunyak, NPS
Jewell Harper, EPA
John Koogler, K&A
Doug Beason, OGC

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. Addressee's Address

2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Ivan Nance
Environmental Manager
Piney Point Phosphate, Inc.
13300 US Highway 41 North
Palmetto, FL 34221-8662

4a. Article Number
P 230 524 404

4b. Service Type

Registered Insured

Certified COD

Express Mail Return Receipt for Merchandise

7. Date of Delivery
9/7/93

5. Signature (Addressee) *Ivan Nance*

6. Signature (Agent) *Dussanne Bedwell*

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ★U.S. GPO: 1992-328-402 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

P 230 524 404



Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to
Mr. Ivan Nance

Street and No.
13300 US Highway 41 North

P.O., State and ZIP Code
Palmetto, FL 34221-8662

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$

Postmark or Date
Trilled

PS Form 3800, June 1991



KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

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KA 527-92-04

July 30, 1993

RECEIVED

AUG 11 1993

Division of Air
Resources Management

Mr. C. H. Fancy
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Submittal of Additional Information
Piney Point Phosphates, Inc.
Auxiliary Boiler
Permit File No. AC41-232096 and PSD-FL-205

Dear Mr. Fancy:

This is in response to your letter dated June 24, 1993, requesting additional information on the above project.

1. Why have you requested modification of a permit (AC41-211848) which has been replaced? [If, as it appears, on 5/28/93, you requested a modification of a permit (AC41-211848) which was inactive on 5/3/93, you should consider withdrawing this application and submit and original application to meet your anticipated steam generating requirements.]

RESPONSE:

It is our understanding that a permittee has authorization to construct a source until the permit expiration date, unless superseded by a subsequent action by the department. Regarding the above referenced project, it is our understanding that the authorization to construct under permit No. AC41-211848 is superseded not by the authorization to construct under permit No. AC41-226205, but by the construction of the source itself, as stated in Specific Condition No. 31 of permit No. AC41-226205. As no construction has commenced under permit No. AC41-226205, the authorization to construct under permit No. AC41-211848 is valid. Therefore, a modification to a valid construction permit is appropriate. Furthermore, the applicant is willing to surrender permit No. AC41-226205 (which has caused some confusion) upon issuance of a permit for the proposed project.

Mr. C. H. Fancy
Florida Department of
Environmental Regulation

July 30, 1993
Page 2

2. The Application to Operate/Construct Air Pollution Sources (FDER Form 17-1.202(1)), was altered after it was signed and sealed. Therefore, a new application and associated documents should be submitted.

RESPONSE:

Concerning the items altered on the permit application form, updated pages 1 and 2 of the application form are provided, as suggested by FDEP, in Attachment 1.

3. The application should be updated to reflect the new reference numbers for the Florida Administrative Code rules for air pollution.

RESPONSE:

As DARM and the FDEP Information Center were out of copies of several of the pertinent renumbered air rules at the time of preparation of the permit application and at the time of submittal of the application, DARM staff had indicated that the old (17-2) citations would be acceptable in the interim period, possibly until the end of 1993. However, if necessary for the review of this application, the applicant will provide a revised permit application with new rule numbers.

4. Has construction of either the 190 MMBtu/hr or 135 MMBtu/hr boiler begun?

RESPONSE:

Construction has not begun on either boiler. Please note that the boiler with a heat input capacity of 135 MMBtu per hour will not need to be constructed if FDEP issues a permit for the proposed project.

5. Is the 96.2 MMBtu/hr (A041-156789) boiler operational and has it operated since AC41-226205 was approved? What are the actual emissions (all pollutants) during the last two years?

RESPONSE:

The information available is included in the last section of the application package submitted to FDEP. Calculations of actual emissions are provided in EMISSION CALCULATION section of the application package.



6. Was the 96.2 MMBtu/hr boiler operated since AC41-211848 was approved?

RESPONSE:

The existing auxiliary boiler has not been operated since August 1992.

7. Have you considered the possibility of natural gas (NG) as the primary fuel? Is NG available to the site? Can the unit burn NG? If so, provide the projected cost to burn NG as the primary fuel.

RESPONSE:

Natural gas is not available at this site. Installation of a natural gas pipeline would be cost prohibitive.

8. Expand the BACT to include the environmental effects, energy impact and economic analysis for the control technologies when burning oil and NG (if applicable). A table summarizing the top-down BACT impact analysis results should be included. A table summarizing the reduction on SO₂ and NO_x for various control technologies should be provided.

RESPONSE:

As indicated above, natural gas is not available at this site. A table summarizing the emission potential for SO₂ and NO_x given various control technologies is provided in Attachment 2.

9. What are costs/ton of SO₂ when burning new NO. 2 fuel oil containing a maximum sulfur content of 0.05%, 0.2% and 0.3% by weight at a maximum fuel consumption rate of 96.2 MMBtu/hr, 135 MMBtu/hr and 190 MMBtu/hr? Provide costs for 876, 2,600 and 8760 operating hours.

RESPONSE:

It is our understanding that a BACT cost analysis is required only for the proposed project, not for the previously permitted projects. Based on recent fuel availability information, PPP proposes to utilize a low sulfur content (0.05%) diesel fuel as BACT for sulfur dioxide. The estimated emissions are 9.6 pounds per hour (1.2 g/s), and 42 tons per year. A table summarizing the fuels considered is provided in Attachment 2.

10. Will the auxiliary boiler be operated when the sulfuric acid plant is being operated? What other sources of SO₂ and NOX will be operated at the phosphate facility while the auxiliary boiler is being operated?

RESPONSE:

In accordance with previous permits, the auxiliary boiler can be operated during sulfuric acid plant start-ups and shut-downs. This permit provision is independent of other sources at the phosphate facility. Therefore, only the sulfuric acid plant and the auxiliary boiler have been considered in the permit application for the proposed project.

11. The modeling performed to determine the maximum annual average impacts due to SO₂ and NOx emissions from the boiler is incomplete. All scenarios (i.e., 96 MMBtu/hr to 190 MMBtu/hr boiler, 96 MMBtu/hr boiler to 135 MMBtu/hr boiler, 135 MMBtu/hr boiler to 190 MMBtu/hr boiler) should be considered and screened to determine the worst case scenario. Actual hours of operation for each scenario should be used and input into the modeling.

RESPONSE:

It is our understanding that an ambient air impact analysis is required only for the proposed project, not for the previously permitted projects. In accordance with discussions with FDEP staff, the ambient air quality modeling to determine the maximum annual average impacts due to SO₂ and NOx emissions associated with the proposed project has been revised and is provided in the Appendix. It should be noted that additional modeling for the 3-hour and 24-hour periods was not required as the maximum predicted impacts from the proposed project were not significant for those periods.

The modeling results for the annual period indicate that the proposed project will result in a significant impact only for nitrogen oxides, not for sulfur dioxide. The maximum predicted annual NOx impact including significant nearby sources is 10.6 micrograms per cubic meter, or about ten percent of the ambient air quality standard. The maximum predicted NOx Class II PSD increment consumption including significant nearby sources is 3.0 micrograms per cubic meter, or about six percent of the allowable increment.

12. Explain why the FDER Form 17-1.202 (1) for AC41-232096 does not reflect your request to modify the maximum heat input rate.



RESPONSE:

The permit application has been submitted for a modification of the operating hours previously permitted for the boiler (under permit No. AC41-211848), not for an increase in the heat input rate.

13. How much will the ash be increased and how will it be disposed of? Will additional waste water be generated and how will it disposed of?

RESPONSE:

There is no need for ash disposal for the proposed fuels. Waste water goes to a non-process water pond.

14. Sections VI and VII of FDER Form 17-1.202 (1) should be properly and adequately completed. When the attached report is referenced, indicate the section, page and paragraph of the report.

RESPONSE:

An updated permit application form with the requested information is presented in Attachment 1.

15. What is the intended use for this facility - base load, cycling, peaking, etc.?

RESPONSE:

The auxiliary boiler is intended to supply steam during sulfuric acid plant start-up and shutdown.

16. What is the intended schedule for starting construction, completing construction and compliance testing?

RESPONSE:

The following dates are proposed at this time: Start construction around September 1993; Complete construction around September 1994; Compliance testing around December 1994.



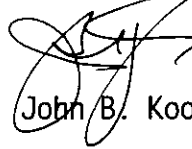
Mr. C. H. Fancy
Florida Department of
Environmental Regulation

July 30, 1993
Page 6

If you have questions, please do not hesitate to give me call.

Very truly yours,

KOOGLER & ASSOCIATES



John B. Koogler, Ph.D., P.E.

JBK:par
Enc

c: Sue Bidwell, PPP

C. Fogem
C. Halladay
B. Thomas, SW Dist
G. Harper, EPA
R. Baum, Mematico Co.



ATTACHMENT 1
UPDATED PERMIT APPLICATION FORM
(FOUR ORIGINALS)



ATTACHMENT 2

BACT SUMMARY TABLE
FOR SULFUR DIOXIDE AND NITROGEN OXIDES

PINEY POINT PHOSPHATES, INC.
MANATEE COUNTY, FLORIDA

CONTROL TECHNOLOGY	EMISSION LIMIT	COST	QUALIFY AS BACT
0.5% S Oil	SO ₂ @ 95.8 lbs/hr	60c/gal	NO
0.05% S Oil	SO ₂ @ 9.6 lbs/hr	60c/gal	YES
SCR	NO _x , Not Applicable	NA	NO
SNCR	NO _x , Not Applicable	NA	NO
Induced FGR	NO _x , 30% Reduction	\$ 4,625/ton	YES
Forced FGR	NO _x , 40% Reduction	\$18,600/ton	NO
Low-Nox Burner	NO _x , Factory Equipped	NA	YES

NOTE:

SCR - Selective Catalytic Reduction
 SNCR - Selective Non-Catalytic Reduction
 IFGR - Induced Flue Gas Recirculation
 FFGR - Forced Flue Gas Recirculation





Florida Department of Environmental Regulation

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

DER Form # _____
Form Title _____
Effective Date _____
DER Application No. _____

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Auxiliary Boiler [] New [x] Existing

APPLICATION TYPE: [x] Construction [] Operation [x] Modification

COMPANY NAME: Piney Point Phosphates, Inc. COUNTY: Manatee

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) Auxiliary Boiler

SOURCE LOCATION: Street 13300 US Highway 41 North City Palmetto

UTM: East (17) 348.5 km North 3057.3 km

Latitude 27 ° 37 ' 58 "N Longitude 82 ° 32 ' 08 "W

APPLICANT NAME AND TITLE: Ivan Nance, Environmental Manager

APPLICANT ADDRESS: 13300 US Hwy 41 N. Palmetto, Florida 34221-8662

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Piney Point Phosphates, Inc.

I certify that the statements made in this application for a construction 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

Signed: Ivan Nance

Ivan Nance, Environmental Manager
Name and Title (Please Type)

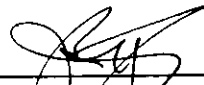
Date: 3/9/83 Telephone No. (813) 722-4555

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

1 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 B. Koogler, Ph.D., P.E.
Name (Please Type)

Koogler & Associates; Environmental Services
Company Name (Please Type)

4014 N.W. 13th Street, Gainesville, FL 32609
Mailing Address (Please Type)

Florida Registration No. 12925 Date: 7/29/93 Telephone No. (904) 377-5822

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.

For the increase in the operating hours of the auxiliary boiler from 876 to 8760 hours per year. The source is currently permitted under AC41-211848. The proposed project will operate in compliance with all applicable air regulations.

B. Schedule of project covered in this application (Construction Permit Application Only) (Permitted source)
Start of Construction September 1993 Completion of Construction September 1994

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.)

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

AC41-211848 : Issued 8-17-92 ; Expires 7-14-93, Extension Requested.
A041-156789 : Expires 1-24-94. (Replaced)

E. Requested permitted equipment operating time: hrs/day 24; days/wk 7; wks/yr 52;
if power plant, hrs/yr _____; if seasonal, describe: 8760 hrs/yr

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? NA
b. If yes, has "Lowest Achievable Emission Rate" been applied? NA
c. If yes, list non-attainment pollutants. _____ NA
2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. YES¹
3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. YES¹
4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? YES¹
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? _____ NA
b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted. NA

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

¹ See attached report.

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		
Water			150,000	

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

- Total Process Input Rate (lbs/hr): 150,000 water
- Product Weight (lbs/hr): 150,000 steam

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

Name of Contaminant	Emission ¹		Allowed Emission Rate per Rule 17-2	Allowable Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	hr	
PM	2.7	11.8	17-2.660	2.7	2.7	11.8	
SO ₂	9.6	42.0	17-2.660	9.6	9.6	42.0	
NO _x	38.0	166.4	17-2.660	38.0	38.0	166.4	
CO	6.7	29.5	--	--	6.7	29.5	
VOC	0.3	1.2	--	--	0.3	1.2	

¹See Section V, Item 2.

²Reference 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).

³Calculated from operating rate and applicable standard.

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

D. Control Devices: (See Section V, Item 4) NA

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
NO. 2 Fuel Oil	1349.0 gph	1349 gph	190

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: 0.05 Percent Ash: 0.02
 Density: 7.3 lbs/gal Typical Percent Nitrogen: _____
 Heat Capacity: 19,300 BTU/lb 140,000 BTU/gal
 Other Fuel Contaminants (which may cause air pollution): None

F. If applicable, indicate the percent of fuel used for space heating. NA

Annual Average _____ Maximum _____

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

None

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

Stack Height: 29.0 ft. Stack Diameter: (Rect.) 4.5 ft x 10 ft.
 Gas Flow Rate: 130,000 ACFM 82,000 DSCFM Gas Exit Temperature: 310 °F.
 Water Vapor Content: 8 % Velocity: 48 FPS

SECTION IV: INCINERATOR INFORMATION

NA

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) ³	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

See attached report.

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)]
See page 4 of 12.
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. See Emission Calculation Section of Report.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
See Emission Calculation Section of Report.
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.) Not applicable.
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). Not applicable.
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. Not necessary.
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).
See Page 3 of Report.
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.
See Page 5 of Report.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation. \$7500

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. Not applicable.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

See attached report.

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

Yes No See page 4 of 12 of application form.

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

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

Yes No See Section 4 of Report.

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

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

See Section 4 of Report.

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any). None.

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 See page 6 of 12 of application form.

- 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). See Section 4 of the Report.

1.

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

¹Explain method of determining efficiency.

²Energy 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:¹
 - d. Capital Cost:
 - e. Useful Life:
 - f. Operating Cost:
 - g. Energy:²
 - 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:¹
 - d. Capital Costs:
 - e. Useful Life:
 - f. Operating Cost:
 - g. Energy:²
 - 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: See Additional Information submitted 7/93.

- 1. Control Device:
- 2. Efficiency:¹
- 3. Capital Cost:
- 4. Useful Life:
- 5. Operating Cost:
- 6. Energy:²
- 7. Maintenance Cost:
- 8. Manufacturer:
- 9. Other locations where employed on similar processes:
- a. (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant	Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant	Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why. See Additional Information submitted 7/93.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

See attached report.

A. Company Monitored Data NA

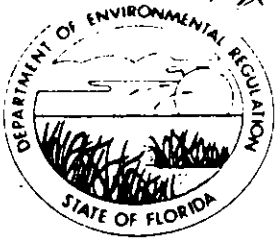
1. _____ no. sites _____ TSP _____ () SO₂* _____ Wind spd/dir

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).



Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

June 24, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Ivan Nance
Environmental Manager
Piney Point Phosphates, Inc.
13300 US Highway 41 North
Palmetto, Florida 34221-8662

Re: Piney Point Phosphates, Inc.
Application to Construct AC41-232096 (PSD-FL-205)
Submittal Date: May 28, 1993

Dear Mr. Nance:

Your application for an air permit to construct the above source has been reviewed and found to be incomplete. To review, chronologically, the recent events affecting this facility: On May 3, 1993, AC41-226205 for a new 135 MMBtu/hr boiler to operate 2,600 hours/year was approved by the FDER Southwest District Office. AC41-226205 states that it replaced AC41-211848 and AO41-156789. AC41-211848 is for a new 190 MMBtu/hr boiler to operate 876 hours/year. AO41-156789 is for a 96.2 MMBtu/hr boiler, which appears to still exist at the site, to operate 876 hours/year. On May 28, 1993, you requested that AC41-211848 be modified for a new 190 MMBtu/hr boiler to operate 8,760 hours/year. At a minimum, we need the following information:

- 1) Why have you requested modification of a permit (AC41-211848) which has been replaced? [If, as it appears, on 5/28/93, you requested a modification of a permit (AC41-211848) which was inactive as of 5/3/93, you should consider withdrawing this application and submit an original application to meet your anticipated steam generating requirements.]
- 2) The Application to Operate/Construct Air Pollution Sources (FDER Form 17-1.202(1)), was altered after it was signed and sealed. Therefore, a new application and associated documents should be submitted.
- 3) The application should be updated to reflect the new reference numbers for the Florida Administrative Code rules for air pollution.
- 4) Has construction of either the 190 MMBtu/hr or 135 MMBtu/hr boiler begun?

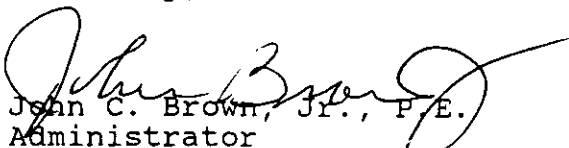
- 5) Is the 96.2 MMBtu/hr (AO41-156789) boiler operational and has it been operated since AC41-226205 was approved? What are the actual emissions (all pollutants) during the last two years.
- 6) Was the 96.2 MMBtu/hr boiler operated since AC41-211848 was approved?
- 7) Have you considered the possibility of natural gas (NG) as the primary fuel? Is NG available to the site? Can the unit burn NG? If so, provide the projected cost to burn NG as the primary fuel.
- 8) Expand the BACT to include the environmental effects, energy impact and economic analysis for the control technologies when burning oil and NG (if applicable). A table summarizing the top-down BACT impact analysis results should be included. A table summarizing the reduction in SO₂ and NO_x for various control technologies should be provided.
- 9) What are costs/ton of SO₂ when burning new No. 2 fuel oil containing a maximum sulfur content of 0.05%, 0.2% and 0.3% by weight at a maximum fuel consumption rate of 96.2 MMBtu/hr, 135 MMBtu/hr and 190 MMBtu/hr? Provide costs for 876, 2,600 and 8,760 operating hours.
- 10) Will the auxiliary boiler be operated when the sulfuric acid plant is being operated? What other sources of SO₂ and NO_x will be operated at the phosphate facility while the auxiliary boiler is being operated?
- 11) The modeling performed to determine the maximum annual average impacts due to SO₂ and NO_x emissions from the boiler is incomplete. All scenarios (i.e., 96 MMBtu/hr boiler to 190 MMBtu/hr boiler, 96 MMBtu/hr boiler to 135 MMBtu/hr boiler, 135 MMBtu/hr boiler to 190 MMBtu/hr boiler) should be considered and screened to determine the worst case scenario. Actual hours of operation for each scenario should be used and input into the modeling.
- 12) Explain why the FDER Form 17-1.202(1) for AC41-232096 does not reflect your request to modify the maximum heat input rate.
- 13) How much will the ash be increased and how will it be disposed of? Will additional waste water be generated and how will it be disposed of?
- 14) Sections VI and VII of FDER Form 17-1.202(1) should be properly and adequately completed. When the attached report is referenced, indicate the section, page and paragraph of the report.

Mr. Ivan Nance
Piney Point Phosphates, Inc.
AC41-232096 (Incompleteness)
Page 3 of 3

- 15) What is the intended use for this facility - base load, cycling, peaking, etc.?
- 16) What is the intended schedule for starting construction, completing construction and compliance testing?

In your response to the above questions, provide all calculations, state and justify all assumptions, identify the sources of any emission factors and provide copies of references where the emission factors or other information were obtained from sources other than AP-42. If you have any questions, call Charles Logan at (904) 488-1344. We have tried to call you several times, however, no one answers the telephone number listed on your permit application.

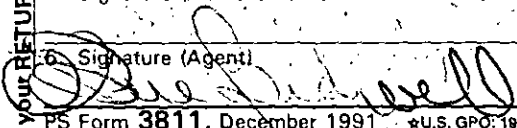
Sincerely,


John C. Brown, Jr., P.E.
Administrator
Air Permitting and Standards

JCB/CL/plm

cc: Bill Williams, SWD
Rob Baum, Manatee Co.
Ron Bunyak, NPS
Jewell Harper, EPA
John Koogler, K&A

Is your RETURN ADDRESS completed on the reverse side?

SENDER: • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. Ivan Nance 13300 US Hwy 41 N Palmetto, FL 34221-8662		4a. Article Number P230523751	
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
		7. Date of Delivery 4/28/93	
5. Signature (Addressee)		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent) 			
PS Form 3811, December 1991 U.S. GPO: 1992-323-402 DOMESTIC RETURN RECEIPT			

Thank you for using Return Receipt Service.

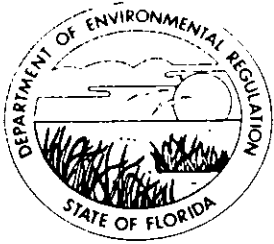
P 230 523 751



Receipt for Certified Mail
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, June 1991

Sent to	
I. Nance	
Street and No. 13300 US Hwy 41 N	
P.O., State and ZIP Code Palmetto, FL 34221-8662	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2000

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

June 4, 1993

Ms. Jewell A. Harper, Chief
Air Enforcement Branch
U.S. EPA, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30308

Dear Ms. Harper:

RE: Piney Point Phosphates, Inc.
Manatee County, PSD-FL-205
Increase in Operation Hours of Auxiliary Boiler

The Department has received the above referenced PSD application package. Please review this package and forward your comments to the Department's Bureau of Air Regulation by June 22, 1993. The Bureau's FAX number is (904)922-6979.

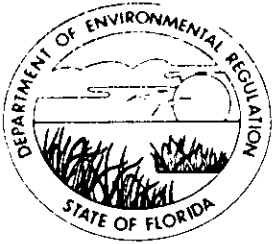
If you have any questions, please contact Charles Logan or Katherine Zhang at (904)488-1344 or write to me at the above address.

Sincerely,

Patricia G. Adams
for C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/pa

Enclosures



Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

June 4, 1993

Mr. John Bunyak, Chief
Policy, Planning and Permit Review Branch
National Park Service-Air Quality Division
P. O. Box 25287
Denver, CO 80225

Dear Mr. Bunyak:

RE: Piney Point Phosphates, Inc.
Manatee County, PSD-FL-205
Increase in Operation Hours of Auxiliary Boiler

The Department has received the above referenced PSD application package. Please review this package and forward your comments to the Department's Bureau of Air Regulation by June 22, 1993. The Bureau's FAX number is (904)922-6979.

If you have any questions, please contact Charles Logan or Katherine Zhang at (904)488-1344 or write to me at the above address.

Sincerely,

Patricia G. Adams

for *Patricia G. Adams*
C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/pa

Enclosures

MEMORANDUM

TO: Patty Adams

FROM: Pradeep Raval

DATE: June 2, 1993

SUBJECT: Application for a PSD Construction Permit
Piney Point Phosphates, Inc.
Manatee County, Florida

Per your request, enclosed are three copies of the subject application package. If you have any questions, please do not hesitate to contact me.

RECEIVED

JUN 04 1993

Division of Air
Resources Management

