

BEST AVAILABLE COPY FRE Crystal River 1+2, File

Department of Environmental Protection

Lawton Chiles Governor Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

Virginia B. Wetherell Secretary

October 1, 1996

Mr. Scott Osbourn Senior Environmental Engineer Florida Power Corporation P.O. Box 14042 St. Petersburg, Florida 33733

RECEIVED

UUI 4 1996

BUREAU OF AIR REGULATION

Dear Mr. Osbourn:

Re: Request to Burn Oily Flyash at Crystal River South Plant (DEP ARMS Project Reference # 0170004-005-AO)

On September 10, 1996, the Department received your letter dated September 6, 1996 requesting approval to burn the oily flyash generated by Bartow Unit 1 in Crystal River Units 1 and/or 2. The Department desires to encourage the appropriate disposal of waste material in a manner to reduce overall environmental impact, also taking into account cost-effectiveness. However, it is the responsibility of the FDEP Air Program to assess the impact of any proposed actions on air quality and applicability of FDEP air rules. In light of this, in order to continue processing this application, the Department will need the following additional information pursuant to Rule 62-4.070(1), F.A.C.

This additional information request is in part based upon questions received from Al Linero, FDEP Tallahassee Bureau of Air Regulation (BAR) Air Permitting Supervisor. Since the BAR in Tallahassee will be responsible for all Title V (and subsequent) permitting for power plants, the SWD is concerned that no district permitting actions be taken without BAR's input/approval.

1. Please estimate the maximum impact of burning oily flyash on actual emissions of regulated pollutants (including NOx, SO_2 , SO_3 (acid mist), and PM) and metals from Crystal River Units 1 & 2. In assessing any changes to actual emissions, the analysis of the oily flyash should be compared to that for the Crystal River fuel (i.e. coal) it would replace. In addition to the parameters shown in your enclosure, this should include sulfur content, as well as nickel and vanadium contents. (Note: The TCLP data submitted with your letter

is intended for assessment of leachate potential and may not completely represent the relevant constituents of the material for air emissions purposes. Therefore please submit additional test information (e.g. total analysis) or further justification for the use of the TCLP data.)

- 2. It would be the Department's intent to limit the origin of the material to that generated at Bartow Unit 1 only, and to not permit for the long run for any more material than would be generated at that plant under steady state operating conditions. Please give more specifics as to the initial and long terms rates of oily flyash you wish to be permitted to burn.
- 5. Rule 62-4.050 F.A.C. requires that all applications for a Department permit (except non-Title V source operation permit renewals) must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. As a result, your response to the above requests should be certified by a professional engineer to assert that all of the above issues have been reviewed and to provide the Department with reasonable assurance that the rules will not be contravened.

As a further note, prior to any potential final Department action to approve this request, the Department will require publication of a Notice of Intent to Issue (details to be provided later), in accordance with the provisions of Rule 62-103.150(2)(a)2., F.A.C.

"Notice: Pursuant to the provisions of Section 120.600, F.S. and Subsection 62-12.070(5), F.A.C., if the Department does not receive a response to this request for information within 90 days of the date of this letter, the Department will issue a final order denying your application. You need to respond within 30 days after you receive this letter, responding to as many of the information requests as possible and indicating when a response to any unanswered questions will be submitted. If the response will require longer than 90 days to develop, an application for new construction should be withdrawn and resubmitted when completed information is available. Or for operating permits, you should develop a specific time table for the submission of the requested information for Department review and consideration. Failure to comply with a time table accepted by the Department will be grounds for the Department to issue a Final Order for Denial for lack of timely response. A denial for lack of information or response will be unbiased as to the merits of the application. The applicant can reapply as soon as the requested information is available."

If you have any questions, please call me at (813) 744-6100 extension 118, or Jerry Kissel at extension 107.

Sincerely,

David Zeld

Air Permitting Engineer Southwest District Office

DRZ/

copies to:

Al Linero, FDEP BAR (Tallahassee), Permitting

C. Logan, FDEP BAR (Tallahassee), Title V Section

A. Amram, FDEP SW District, Solid Waste



Department of Environmental Protection

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Lawton Chiles Governor Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

Virginia B. Wetherell Secretary

	PACSIMILE TRANSMISSION SHEET
	DATE 9/18/96
`	
ro:	Charles Logan
	DEPT:
	PHONE: 104 - 922 - 6979
FROM:	DEPT.: DEP, SOUTHWEST DISTRICT PHONE: (813) 744-6100 SUNCOM 542-6100 EXT. 107
OPERATOR:	Jim Hoepner EXT. 102
/	
SUBJECT	
TOTAL NUMI	BER OF PAGES, INCLUDING COVER PAGE:
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ATR PROGRAM FAX NUMBER IS (813) 244-6458 SURGOM 548-6458

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Department of Environmental Protection

BOUTHWEST DISTRICT



September 6, 1996

Mr. Jerry Kissel Florida Department of Environmental Protection Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

Dear Mr. Kissel:

Re: Request to Burn Oily Flyash at Crystal River South Plant

Florida Power Corporation (FPC) operates three oil-fired steam generating units at our Bartow - Plant site. One of these three units, designated as Unit 1, had burned a coal-oil mixture (COM) from 1983 to 1987, necessitating the installation of an electrostatic precipitator (ESP). Since 1987, Unit 1 has exclusively burned residual oil while continuing to operate the ESP. During this period of burning COM and residual oil, flyash collected by the ESP has accummulated onsite. FPC would like to manage the olly flyash, estimated at 13,000 tons, in an environmentally responsible manner.

Numerous flyash management options have been evaluated, including reuse as pavement or concrete additives, metals extraction, and fill dirt, but none have proved both cost-effective and environmentally acceptable. Considering economics and environmental impact, FPC prefers burning the oily flyash to these other options. Specifically, the unburned carbon content (referred to as loss on ignition or LOI in the attached analyses) can be recovered as energy, while the residual following combustion can be used in the production of an aggregate building material.

This letter serves to request Department approval to burn the oily flyash generated by Bartow Unit 1 in Crystal River Unit 1 and/or 2 (AIRS ID 0170004001 and 0170004002). The material to be burned is nonhazardous and compatible with the Crystal River coal supply. FPC proposes to burn the flyash at a blend of no more than two percent of the total feed. Copies of the laboratory analyses of the flyash material are attached.

laboratory analyses of the flyash material are attached.

R what basis Might lift you should have any questions or require additional information, please do not hesitate to contact me at (813) 866-5158.

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Sincerely,

Scott H. Osbourn

Senior Environmental Engineer

Enclosure

ENVIRONMENTAL SERVICES DEPARTMENT • H2G
GENERAL OFFICE: 3201 Thirty-fourth Street South • P.O. Box 14042 • St. Petersburg • Florida 83788 • (813) 886-5151;

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Progress Environmental Laboratories

Nº 10448

Tampa, Florida 33619 (813) 247-2805 FAX: (813) 248-1537 Client: Florida Buer Corp Due Date(TAT): Project Mgr. Ed Snelling Fax Reports to:(Project: Bill to: 19607-145 Project #: PO #: Sampler's Initials: Date Time PEL Lab # # of Bttls Remarks Station ID west mound # 1 7-16 7-16 East mound \$ 2 Relinquished By: Received By: Project Notes Date Time 7-16-96 1400 Red Sander with no coc Relinquished By: Date Received By: Time Relinquished By: Received By: Date Time @ FL Power Crystal River to Received By: Relinquished By: Date Time



PEL Lab #

Client ID

Progress Environmental Laboratories

4420 Pandola Point Road Temps, Florida 33619 (813) 247-2805 FAX; (813) 248-1537

- CERTIFICATE OF ANALYSIS -(HRS #E84207 and FDER CompQap #900306G)

Florida Power Corporation

3201 34th Street South

P.O. Box 14042

St. Petersburg, FL 33733

Attn: Ed Snelling

Report Date: 7/24/96 Page :

1 of

Collection Information:

Sample Date: 7/16/96 : 9507-00145-1 Sample Time: 0:00 : West mound# 1 Sampled By : Client

Project ID Sample Quality: : FPC Location

: Solid Matrix Loss on Ignition performed at EFC Coal Lab.

Parameter	Method	ND = Less than MDL Results Units MDL		
				· · · · · · · · · · · · · · · · · · ·
TCUP RCRA Metals	BPA 6010	•	4	
TCLP Silver	EPA 6010	an	mg/1	0.02
TCLP Arsenic	EPA 6010	ND	mg/l	0.06
TCLP Barium	BPA 6010	0.11	mg/1	0.01
TCLP Cadmium	EPA 6010	ND	mg/1	0.01
TCLP Chromium	EPA 6010	ND	mg/l	0.0173
TCLP Lead	EPA 6010	ИП	mg/l	0.03
TCLP Selenium	EPA 6010	0.10	mg/1	0.03
TCLP Mercury	EPA 7470	ND	mg/1	0.002
Loss on Ignition	ASTM C-25	23.80	.	0.50

If they are burning why do

If they are burning why do

we care about leaching characterics.

We care about chemical characterics.

Ought to know about chemical air emissions.

Ought to potential air emissions.

as they relate to potential air emissions.

A Florida Progress Company

₩ 03-96 SAT 02:58 AM

P. 84

Progress Environmental Laboratories

- CERTIFICATE OF ANALYSIS -(HRS #E84207 and FDER CompQap #900306G)

To: Florida Power Corporation

32.01 34th Street South

P.O. Box 14042

PEL Lab # Client ID

Project ID

Location

St. Petersburg, FL 33733

Attn: Ed Snelling

Collection Information:

Report Date: 7/24/95

Page: 2 of 2

Sample Date: 7/16/96 Sample Time: 0:00 Eampled By : Client

Sample Quality:

: FPC : Solid Matrix

Loss on ignition performed at BFC Coal Lab.

: 9607-00145-2

: East mound# 2

Parameter	Method	Results	ND - Lees than MDL Units MDL	
TCLP RCRA Metals	EPA 6010			
TCLP Silver	EPA 6010	ИФ	mg/l	0.03
TCLP Arsenic	EPA 6010	ND	mg/l	0.06
TCLP Barium	BPA 6010	0,21	mg/l	0.01
TCLP Cadmium	EPA 6010	ИD	mg/l	0.01
TCLP Chromium	EPA 6010	ND	mg/l	0.0173
TCUP Lead '	EPA 6010	ND	mg/1	0.03
TCLP Selenium	EPA 6010	0.05	mg/1	0.03
TCLP Mercury	EPA 7470	ND	mg/l	0.002
Loss on Ignition	ASTM C-25	9.62		0.50

Respectfully submitted,

Charles R. Ingram, Quality Assurance Officer.