



# Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347

Lawton Chiles, Governor

813-623-5561

Carol M. Browner, Secretary

October 22, 1991

Mr. Lynn F. Robinson, P.E.  
Manager, Environmental Planning  
Tampa Electric Company  
P.O. Box 111  
Tampa, Florida 33601-0111

Re: Your October 11, 1991 request to amend the operating permits for Gannon Units 1-4 to authorize incineration of petroleum contaminated soil.

Dear Mr. Robinson:

Thank you for giving the Department an opportunity to review the above referenced request. Since Tampa Electric Company did not submit the required permit amendment fees (\$250 for each permit), the Department is unable to formally process your request or render a decision. However, in order to most expeditiously reach your goal, I offer the following comments.

Even if the Department were authorized to formally process your request without the required fees, the Department would be unable to grant an operating permit amendment for the project as proposed in your letter. In order for the Department to grant an operating permit amendment, the applicant must provide reasonable assurance to the Department that there will be no increase in actual emissions. If a proposed project is expected to result in an increase in actual emissions, then a "Modification" permit is required pursuant to Rules 17-2.100 and 17-2.660, F.A.C., 40 CFR 60.2 and 40 CFR 60.14.

Conceptually, the Department agrees that incineration of petroleum contaminated soil in a coal fired utility boiler might be an environmentally sound alternative. Florida Power Corporation is currently exploring options with Mr. Gary A. Maier which might be approveable as operating permit amendments. I suggest that Tampa Electric Company do the same, and include the Hillsborough EPC. Mr. Maier's phone number is 623-5561 ext 408.

Sincerely,

W. C. Thomas, P.E.  
District Air Program Administrator

copy to: Jerry Campbell, P.E., EPCHC



Harry

D. E. R.

October 11, 1991

OCT 15 1991

Richard D. Garrity, Ph.D  
Florida Department of  
Environmental Regulation  
Southwest District  
4520 Oak Fair Boulevard  
Tampa, Florida 33610-7347

SOUTHWEST DISTRICT  
TAMPA

Re: Tampa Electric Company - F. J. Gannon Station  
Request to Modify AO29-125315, AO29-189206, AO29-172179, and AO29-160269  
to Allow Burning of Oily Soil/Coal Mixture

Dear Dr. Garrity:

Pursuant to Ms. Janice Taylor's conversation with Mr. Gary Maier, TEC requests authorization to burn oily soil mixed with coal at F.J. Gannon Station, Boilers 1-4. TEC's rationale for this request is to provide an economical and environmentally sound method of disposal of oily soil on a long term basis.

As a background for you, average data from previous years indicates that TEC may handle or generate up to 1,200 - 55 gallon drums of non-hazardous oily soil during any given year. These oily soils have contained petroleum products, mineral oil, hydraulic oil, or used oil. Presently, after proper waste characterization, oily soils are incinerated, thermally treated, or sent to a secure landfill off-site. TEC would like to incinerate these oily soils more economically on-site by the process described in Attachment A.

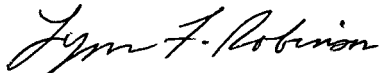
Calculations presented in Attachment B indicate that no significant particulate emissions increase would occur during incineration of the above referenced quantity of soil annually. These calculations assume the following: soil loading is 100 percent ash, fly ash production is 30 percent of ash loading, and electrostatic precipitator efficiency is 99.09 percent. To further provide the Department with reasonable assurance that this process is environmentally sound, TEC will include the maximum soil consumption rate during the annual compliance stack test for each unit.

In summary, the enclosed information should adequately assure the Department that the proposed process can provide an economical and environmentally sound method of disposal for oily soil. Therefore, TEC respectfully requests to amend existing air operation permits for Units 1-4 to incorporate soil burning at Gannon Station on a routine basis.

Richard D. Garrity, D.  
October 11, 1991  
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Your expeditious review of this request is appreciated. Should you have any questions please contact Ms. Taylor or me at (813)-228-4836.

Sincerely,



Lynn F. Robinson, P.E.  
Manager  
Environmental Planning

sn/RR255

Attachments

cc/attach: Mr. J.S. Campbell, EPCHC

**ATTACHMENT A  
PROPOSED SOIL BURNING PROCESS**

Drummed oily soil will be emptied into the rail unloading hopper on days when this equipment is not otherwise being utilized. The soil will then be discharged on the rail conveyor and gradually mixed with the bunkering coal through belt-to-belt transfers.

It is expected that the soil-to-coal ratio will be much less than 1 percent. Since the soil is emptied into the rail unloading hopper through a grating, and is additionally processed by passing through the crusher house with the bunkering coal, no soil pretreatment will be instituted.

The soil/coal mixture will then be fed to one of the cyclone boilers. As per industry standard, cyclone boilers typically produce 30percent flyash and 70percent bottom slag by-product.

	Boiler 1	Boiler 2	Boiler 3	Boiler 4
Incineration				
Temp. F	3000	3000	3000	3000
Residence				
Time sec.	2 - 5	2 - 5	2 - 5	2 - 5

Implementation of this proposed soil burning process will result in disposal costs savings of approximately \$200 per drum.

**ATTACHMENT B**  
**ANNUAL INCREASED PARTICULATE EMISSIONS CALCULATIONS**

Assumptions :        All Soil Ash Generated is PM-10 or Less  
                         Soil Ash Loading is 100 percent  
                         Fly Ash Production is 30 percent of Ash Loading  
                         Electrostatic Precipitator Efficiency is 99.09 percent

Annual Soil Accumulation :  
    Approximately 1200 drums per year at 500 lbs. per drum

Soil to be Incinerated :  
    1200 drums/year X 500 lbs./drum X 1 ton/2000 lbs. = 300 tons/year

Increased Flyash to Precipitator :  
    300 tons/year X 30% = 90 tons/year

Increased Particulate Emissions :  
    90 tons/year X 0.91 % = 0.82 tons/year

0.82 tons/year is less than the defined significant increase for PM-10, which is 15 tons/year.