



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

OCT 28 1986

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REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Richard Breitmoser, P. E.
Division Chief
Research and Environmental Affairs Division
Jacksonville Electric Authority
P. O. Box 53015
233 W. Duval Street
Jacksonville, Florida 32201

RE: St. John's River Power Park PSD-FL-010

Dear Mr. Breitmoser:

This letter is in response to your May 12, 1986, request for coal terminal and blending modifications at the above-referenced facility permitted on March 12, 1982, by EPA Region IV. The Florida Department of Regulation (FDER) published a public notice announcing the proposed coal handling modifications on July 28, 1986. No comments were received and the FDER subsequently recommended that the PSD permit be modified.

In addition to the above, we have reviewed recommendations from The Department of Health, Welfare, and Bio-Environmental Services (City of Jacksonville, Florida) dated July 1, 1986, regarding opacity and control of fugitive emissions from shiploading, and subsequent recommendations from your office dated August 27, 1986, regarding emission limits and testing of non-stack emission points. In response to these recommendations and communications with the FDER, your PSD permit (PSD-FL-010) is hereby modified as follows:

1. The second paragraph of Condition of Approval No. 3 is changed from the existing wording regarding compliance testing of particulate emission points to the following:

"Opacity tests shall be performed for emission points three (3) through nineteen (19) of revised Table 6 for compliance purposes. If the opacity limits are not met for those sources that exhaust through a stack, permit compliance shall be determined on the basis of mass emission rate tests."

2. Table 2 of the final determination is replaced by revised Table 2 (enclosed).
3. Table 6 of the final determination is replaced by revised Table 6 (enclosed).
4. All reference to Table 2 and Table 6 in Conditions of Approval numbers 2, 3, 4, and 5, as contained in the March 12, 1982 PSD permit, shall be construed to pertain to the enclosed revised Tables 2 and 6.

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Please be advised that the modification to your PSD permit herein described shall become a binding part of permit PSD-FL-010. This permit modification shall become effective upon receipt of this letter, unless you notify us of your unacceptance of the conditions contained herein within ten (10) days after receipt of this letter.

If you have any questions regarding this permit modification, please contact Mr. Wayne J. Aronson, Chief, Program Support Section, at (404) 347-4901.

Sincerely yours,

/s/ Lee A. DeHihns, III
Deputy Regional Administrator

Jack E. Ravan
Regional Administrator

Attachments: 2

cc: Mr. Clair H. Fancy
Deputy Bureau Chief
Florida Department of Environmental Regulation

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Table 6. Allowable Emission Limits (Revised; From PSD Permit) (lb/hour; lb/MMBtu)

Emission Unit	SO ₂	NO _x	PM	
			(Revised Original)	Opacity (Percent)
1. Steam Generating Boiler No. 1 (6.144 MMBtu/hr maximum heat input)	4,669; 0.76 (30-day rolling average)	3,686; 0.6	184; 0.03	20
2. Steam Generating Boiler No. 2 (6.144 MMBtu/hr maximum heat input)	4,669; 0.76 (30-day rolling average)	3,686; 0.6	184; 0.03	20
3. Auxiliary boilers (254 MMBtu/hr maximum heat input total)	203; 0.8		25.0; 0.1	20
4. Ship Unloading (2 Grab Buckets)*			1.0	10
5. Feeders to Conveyor A (2 Wet Suppression points)*			0.13	10
6. Conveyor Transfers 1 & 2 (2 points)*			0.57	10
7. Conveyor Transfer 3, 4, 5 & D to D by-pass (4 points)*			2.6	10
8. Conveyor Transfers 6 & 7 (2 points)*			1.0	10
9. Traveling Stacker (3 points)*			0.8	10
10. Bucket Wheel Reclaimer (2 points)*			0.6	10
11. Ship unloading facility coal storage pile			1.6	10
12. Coal handling transfer points ship unloading facility coal pile (8 points)*			1.8	10
13. Rail car unloading (Rotary Dumper)			5	10
14. Coal handling transfer points (6 wet suppression points)			5(each)	10
15. Coal handling transfer points (11 dry collection)			0.1(each)	10
16. Coal storage at plant* (10 acres active)			0.5	10
17. Coal storage at plant* (2 to 13-acre inactive piles)			0.02	10
18. Limestone unloading (rail dumper)			0.1	10
19. Limestone transfer points			0.2(each)	10
20. Cooling towers			67(each tower)	N/A

* Revised emission unit, May 1986.

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Table 2. Fugitive Emissions and Control Summary (Revised: From PSD Permit)

Process	Type	Amount	Factor	Control	Technique	Emissions (Tons/Sec)				
1 Ship Unloading*	2 Grab Buckets	2,200 Tons/hr	0.0016 lb/Ton*	70.0%	Suppression, Enclosure	0.13				
2 Feeders to Conveyor A*	2 Points	2,200 Tons/hr	0.00039 lb/Ton	85.0%	Suppression, Enclosure	0.02				
3 Conveyor Transfer, 1 and 2*	2 Points	2,200 Tons/hr	0.00087 lb/Ton**	85.0%	Suppression Enclosure	0.07				
4 Conveyor Transfer 3, 4, 5 and D to D by-pass*	4 Points	2,200 Tons/hr	0.00118 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.33				
5 Conveyor Transfer 6 and 7*	2 Points	2,000 Tons/hr	0.00106 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.13				
6 Traveling Stacker*	3 Points:	2,200 Tons/hr	0.00031 lb/Ton	75.0%	Enclosure, Conditioned Material	0.02				
	1 Point						0.00039 lb/Ton	75.0%	Enclosure, Conditioned Material	0.03
	1 Point						0.00017 lb/Ton	0.0%		0.05
7 Bucket Wheel Reclaimer*	2 Points	2,000 Tons/hr	0.00063 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.08				
8 Ship-Unloading Facility Coal Surge Pile	Active	30 Acres	13 lb/Acre/day ^a	(90%) ^a	Wetting Agent	0.20				
9 Coal Handling Transfer Points Ship Unloading Facility Coal Pile*	8 Points	2,200 Tons/Hr.	0.00041 lbs/Ton**	75.0%	Enclosure, Conditioned Material	0.23				
10 Rail Car Unloading	Rotary Dumper	10,000 Tons/Day	0.4 lb/Ton ^a	(97%) ^b	Wet Suppression	0.63				
11 Coal Handling Transfer Points	2 Points	10,000 Tons/Day	0.2 lb/Ton ^c	(99.9%) ^b	Dry Collection	0.02				
12 Coal Handling Transfer Points	2 Points	1,300 Tons/Day	0.2 lb/Ton ^c	(99.9%) ^b	Dry Collection	0.01				
13 Coal Handling Transfer Points	6 Points	1,300 Tons/Day	0.2 lb/Ton ^c	(97%) ^b	Wet Suppression	0.42				
14 Coal Handling Transfer Points	7 Points	5,000 Tons/Day	0.2 lb/Ton ^c	(99.9%) ^b	Dry Collection	0.04				
15 Coal Storage At Plant*	Active	10 Acres	13 lb/Acre/day ^a	(90%) ^a	Wetting Agent	0.07				
16 Coal Storage At Plant*	2 Inactive Piles	13 Acres	3.5 lb/Acre/day ^a	(99%) ^a	Wetting Agent	0.002				
17 Limestone Unloading	Rail Dumper	750 Tons/Day	0.4 lb/ton ^a	(97%) ^b	Wet Suppression	0.05				
18 Limestone Transfer	1 Point	750 Tons/Day	0.2 lb/Ton ^a	(99.9%) ^b	Dry Collection	0.001				
19 Cooling Towers	Drift	2 x 243,500 gal/min	51,450 ppm solids (maximum) (40% < 50 microns diameter)	99.998%	Drift Elimination	12.66				
20 Solid Waste Disposal Area	Active	10 Acres	13 lb/Acre/day ^a	(90%) ^a	Wetting Agent	0.07				

* Revised process or emissions, May 1986.
 - Weighted average based on 1,500 and 700 STPH ship unloaders.
 ** Average of emission factors for individual sources.

a. Pedco, 1977.
 b. Stoughton, 1980.
 c. EPA, 1979.