



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

## Notice of Final Permit Amendment

In the Matter of an  
Application for Permit Amendment

DEP File No. PSD-FL-010(B)

Mr. Richard Breitmoser, P.E.  
Environmental Health & Safety Group  
St. Johns River Power Park  
11201 New Berlin Road  
Jacksonville, Florida 32226

Enclosed is a letter that amends Permit Number PSD-FL-010(B). This letter amends the specific conditions related to sulfur dioxide (SO<sub>2</sub>) emissions and fuel use in the subject Final Determination (dated March 12, 1982) pursuant to 40 CFR 52.21-Prevention of Significant Deterioration (PSD permit). This permit amendment is issued pursuant to Section 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 14 (fourteen) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

*C. H. Fancy, P.E.* 10/11 for  
C. H. Fancy, P.E., Chief  
Bureau of Air Regulation

## CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT AMENDMENT (including the FINAL permit amendment) was sent by certified mail (\*) and copies were mailed by U.S. mail before the close of business on 10-14-96 to the person(s) listed:

Mr. Richard Breitmoser\*

Mr. Brian Beals, EPA  
Mr. John Bunyak, NPS  
Mr. Hamilton Owen, DEP  
Mr. Chris Kirts, NED  
Mr. Jim Manning, RESD  
Mr. Ken Kosky, MKBN

Clerk Stamp

## FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

*Lumi Jones* 10-14-96  
(clerk) (date)



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October 11, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Richard Breitmoser, P.E.  
Vice President  
Environmental Health and Safety Group  
St. Johns River Power Park  
11201 New Berlin Road  
Jacksonville, Florida 32226

Dear Mr. Breitmoser:

Re: Permit Amendment - Petroleum Coke Cofiring  
Jacksonville Electric Authority, St. Johns River Power Park  
PSD-FL-010(B); Duval County

The Department hereby amends the specific conditions related to sulfur dioxide (SO<sub>2</sub>) emissions and fuel use in the subject Final Determination (dated March 12, 1982) pursuant to 40 CFR 52.21 - Prevention of Significant Deterioration (PSD Permit). The PSD Permit, previously amended on March 30, 1995 is amended as follows:

Condition 2.A. (new)

- i. When blends of petroleum coke and coal with a sulfur content of up to or equal to 2 percent are fired in Units 1 or 2, the SO<sub>2</sub> emissions shall not exceed 0.55 pound per million British thermal units (lb/MMBtu) and a minimum of 76 percent reduction shall be achieved in the flue gas desulfurization system.
- ii. When co-firing petroleum coke with coals having a sulfur content between 2.00 and 3.63 percent, the emission limitation shall be based on the following formula:

$$\text{SO}_2 \text{ emission limit (lb/MMBtu)} = (0.2 \times C/100) + 4$$

where: C = percent of coal co-fired on a heat input basis.

Please note that C is on a heat input basis and not weight input basis, so appropriate conversions should be used.

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iii. When coals with a sulfur content greater than 3.63 percent are co-fired with petroleum coke, the SO<sub>2</sub> emissions shall not exceed the following formula:

$$\text{SO}_2 \text{ (lb/MMBtu)} = (0.1653 \times C \times S - 0.4 \times [C + 40]) \times 1/100$$

where: C = percent of coal co-fired on a heat input basis  
S = weight percent sulfur in the coal

iv. The maximum SO<sub>2</sub> emission rate when firing petroleum coke and coal shall not exceed 0.676 lb/MMBtu.

v. Compliance with the SO<sub>2</sub> emissions limit shall be based on a 30-day rolling average for those days when petroleum coke is fired. Any use of petroleum coke during a 24-hour period shall be considered 1 day of the 30-day rolling average. The 30-day rolling average shall be calculated according to the New Source Performance Standards (NSPS) codified in 40 CFR 60 Subpart Da, except as noted above.

Condition 2.B. (new)

The petroleum coke-coal blends shall be limited to a maximum of 20 percent petroleum coke, by weight. The maximum weight of the petroleum coke burned shall not exceed 100,000 lb/hr. The maximum sulfur content of the petroleum coke-coal blend shall not exceed 4.00 percent, by weight.

Condition 3. A. (new)

The applicant shall maintain and submit to the Department on an annual basis for a period of five years from the date the unit is initially co-fired with petroleum coke, information demonstrating in accordance with 40 CFR 52.21(b)(21)(v) and 40 CFR 52.21(b)(33) that the operational changes did not result in emissions increases of nitrogen oxides and particulate matter.

Condition 3. B. (new)

The applicant shall maintain and submit to the Department on a semiannual basis for a period of two years from the date the unit is initially co-fired with petroleum coke, and then on an annual basis (if the first two years of data show no significant increase in carbon monoxide emissions) for an additional three years, information demonstrating that the operational changes did not

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result in a significant emissions increase of carbon monoxide. The carbon monoxide emissions shall be based on test results using EPA Method 10. Additionally, quarterly continuous emission monitoring data for carbon monoxide emissions shall be submitted to the Department for a period of two years to show the range of emissions experienced during each quarter.

Condition 3. C. (new)

The applicant shall maintain and submit to the Department on a semiannual basis for a period of two years from the date the unit is initially co-fired with petroleum coke, information demonstrating that the operational changes did not result in significant emissions increases of sulfuric acid mist. The sulfuric acid mist emissions shall be based on test results using EPA Method 8.

A copy of this amendment letter shall be attached to and shall become a part of Permit PSD-FL-010.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



Howard L. Rhodes, Director  
Division Air Resources Management