

Department of Environmental Protection

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

Virginia B. Wetherell Secretary

September 5, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Farzie Shelton, Ch.E. Environmental Coordinator City of Lakeland Department of Water and Electric Utilities 501 East Lemon Street Lakeland, Florida 33801-5050

Dear Ms. Shelton:

Re: Amendment of PSD-FL-008 City of Lakeland, C.D. McIntosh Unit No. 3

Attached is one copy of the Amendment of the Conditions of Approval related to sulfur dioxide emissions in the subject Final Determination (dated December 27, 1978) pursuant to 40CFR 52.21 - Prevention of Significant Deterioration (PSD Permit). Accompanying the Amendment is our Final Determination based on comments received following the Public Notice of August 2, 1995.

We agree that changing the Nitrogen Oxide (NO_X) emission limitation from 0.7 pounds per million Btu heat input ($1b/10^6$ Btu) averaged over 3 hours to 0.6 $1b/10^6$ Btu averaged over 30 days probably would have represented a relaxation of the present condition and would have contravened NSPS Subpart D requirements. We concur that adding a second NO_X limitation would result in additional but unnecessary documentation. In our opinion, the issue will be adequately addressed by the future development by EPA of NO_X limits applicable to Group 2 dry bottom wall-fired Units pursuant to Title IV, "Acid Rain" of the 1990 Clean Air Act Amendments. Accordingly, Condition 4.A. will remain per the Final Determination referenced above.

The changes in the PSD permit do not conflict with the maximum sulfur dioxide air emissions limits given in Section 3.7.1 of the State of Florida Conditions of Certification (PA 74-06) applicable to Unit No. 3. However we will update the Certification shortly to reflect the sulfur dioxide reduction requirements as well as the correct particulate emission limits from the PSD Permit.

Ms. Farzie Shelton September 5, 1995 Page two

If you have any questions please call me or Mr. A. A. Linero, P.E., at (904)488-1344.

Sincerely,

Chief

Bureau of Air Regulation

CHF/aal/l

Enclosure

cc: B. Thomas, SWD

J. Harper, EPA
J. Bunyak, NPS
R. Harwood, PCESD
K. Kosky, KBN
H. Oven, DEP

A. Morrison, HGSS



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Virginia B. Wetherell Secretary

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Ms. Farzie Shelton, Ch.E.
Environmental Coordinator
City of Lakeland
Department of Water and Electric Utilities
501 East Lemon Street
Lakeland, Florida 33801-5050

Dear Ms. Shelton:

Re: Amendment of PSD-FL-008 Final Determination City of Lakeland, C.D. McIntosh Unit No. 3

The Department hereby amends the Conditions of Approval related to sulfur dioxide (SO₂) emissions in the subject Final Determination (dated December 27, 1978) pursuant to 40 CFR 52.21 - Prevention of Significant Deterioration (PSD Permit). The PSD Permit is amended as follows:

Condition 2.B.

From:

A flue gas desulfurization system will be installed to treat all exhaust gases and will operate at a minimum SO_2 removal efficiency of 85 percent whenever coal is burned.

To:

A flue gas desulfurization system will be installed to treat exhaust gases and will operate such that whenever coal is burned, sulfur dioxide in gases discharged to the atmosphere from the boiler shall not exceed 1.2 pounds per million Btu heat input and 10 percent of the potential combustion concentration (90 percent reduction), or 35 percent of the potential combustion concentration (65 percent reduction), when emissions are less than 0.75 pounds per million Btu heat input. Compliance with the sulfur dioxide emission limitation and percent reduction requirement shall be determined on a 30-day rolling average.

Ms. Farzie Shelton September 5, 1995 Page Two

Condition 6. Continuous Monitoring Requirements

From:

Continuous monitors shall be installed and operated in accordance with 40 CFR 60.45 and 60.13. In addition, a continuous SO2 monitor shall be installed prior to the flue gas desulfurization system for the purposes of calculating SO_2 removal efficiencies.

To:

Continuous monitors shall be installed and operated in accordance with 40 CFR 60.45 and 60.13. In addition, an ASTM- certified automatic coal sampler shall be installed which produces a representative daily sample for analysis of sulfur, moisture, heating value and ash. The coal analysis data shall be used in conjunction with emission factors and the continuous monitoring data to calculate SO₂ reduction.

A copy of this amendment letter shall be attached to and shall become a part of Permit PSD-FL-008.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell, Secretary

Ms. Farzie Shelton September 5, 1995 Page Three

CERTIFICATE OF SERVICE

This is to certify that this PERMIT AMENDMENT and all copies were mailed to the listed persons before the close of business on

> FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to Chapter 120.52(9), Florida Statutes, with the designated Deputy Clerk, receipt of which is hereby acknowledged.

cc: B. Thomas, SWD

R. Harwood, PCESD

J. Harper, EPA J. Bunyak, NPS

H. Oven, PPS

K. Kosky, KBN

A. Morrison, HGSS

Final Determination

City of Lakeland
Department of Water and Electric Utilities
C. D. McIntosh Power Plant Unit No. 3
Lakeland, Florida
Polk County

Electric Utility Steam Generating Unit Coal/Municipal Refuse/Oil - Fired Boiler 364 MW

Permit No. PSD-FL-008A

Department of Environmental Protection Division of Air Resources Management Bureau of Air Regulation

September 5, 1995

Final Determination

On July 11, 1995 a proposed Permit Amendment, Intent to Issue, Public Notice of Intent to Issue, and Technical Evaluation and Preliminary Determination applicable to the existing C. D. McIntosh Power Plant Unit No. 3 were sent to The City of Lakeland, EPA Region IV, the Southwest Florida DEP District, Polk County, and the National Park Service. The Permit Amendment was to change sulfur dioxide (SO₂) and nitrogen oxides (NO_X) removal requirements and limitations.

The Public Notice was published by the City of Lakeland on August 2, 1995 in the The Ledger, a newspaper of general circulation in Polk County, Florida.

A communication was received from EPA based on a draft package submitted to them for prior review. They indicated no adverse comments at the time. No comments were received during the 30-day review and comment period except from the City of Lakeland by letter dated July 25, 1995.

The City contends that a change in their present NO_X emission limit from 0.7 pounds per million Btu heat input (lb/10⁶ Btu) on a 3-hour basis to 0.6 lb/10⁶ on a 30-day basis would constitute a relaxation of the existing limit and contravene the applicable NSPS Subpart D. Furthermore, the City contends that if the second limit were made an additional requirement, it would result in additional but unnecessary documentation.

The Department has determined that the long-term mean of NO_X emissions will probably be lower with the existing limit than the proposed one. Additionally, the issue will be adequately addressed by the future development by EPA of NO_X limits applicable to Group 2 dry bottom wall-fired unit pursuant to Title IV, "Acid Rain" of the 1990 Clean Air Act Amendments.

Accordingly, the Technical Evaluation and Preliminary Determination dated July 11, 1995 is incorporated into this Final Determination with the exception of the portions related to NO_X emission limits.

The Final Determination of the Department is to amend PSD Permit No. PSD-FL-008 as described in the public information package with the exception of the amendment of the ${\rm NO_X}$ emission limit indicated above.