PERMITTEE

Lakeland Electric
501 East Lemon Street
Lakeland, Florida 33801-5079

PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department)
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

PROJECT

Air Permit No. 1050004-038-AC
Minor Air Construction Permit
C.D. McIntosh, Jr. Power Plant

This is the final air construction permit, which authorizes the upgrade of the existing wet flue gas desulfurization (FGD) system on fossil fuel-fired steam generator Unit 3, emission unit 006, at the C. D. McIntosh, Jr. Power Plant, to improve sulfur dioxide emissions control efficiency to comply with the applicable Mercury and Air Toxics Standards (MATS) in Title 40, Code of Federal Regulations, Part 63, Subpart UUUUU - National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units. The MATS compliance date is April 16, 2015.

NOTICE AND PUBLICATION

The Department distributed a draft minor air construction permit package on November 21, 2014. The applicant published the Public Notice in The Ledger on November 28, 2014. The Department received the proof of publication on December 2, 2014.

COMMENTS

No comments on the Draft Permit were received from the EPA Region 4 Office.

Sierra Club Comments

Four comments were received from the Sierra Club via a letter dated December 12, 2014. Each of these comments are summarized below, along with the Department's response.

Comment 1: The Department must modify the Draft Permit because modeling shows McIntosh's SO_2 emissions exceed the 1-hour SO_2 National Ambient Air Quality Standard (NAAQS), and Lakeland Electric has not provided reasonable assurances that its project will not interfere with the attainment and maintenance of the 1-hour SO_2 NAAQS, and the same assurance for the operation of McIntosh.

Department Response: The project at the McIntosh facility, which is the only action under review by the Department, will result in actual reductions of SO_2 emissions. Currently, actual SO_2 control efficiency for the coal-fired boiler is 73%. This permit authorizes changes that will increase the control efficiency to 95% or better. This increase in scrubber control efficiency should result in SO_2 emission reductions between 2,000 and 4,000 tons per year (TPY) depending upon the boiler utilization rate in any given year. As such, the Department has reasonable assurance this project, a pollution reduction project, will not interfere with attainment and maintenance of the 1-hour SO_2 NAAQS. Rather, the project will substantially reduce emissions and improve air quality in the area.

Modeling is not required for this permitting action, which is approving a pollution reduction project. Nor does the Department believe that modeling is necessary for this pollution reduction project. In addition, the Department has actual air quality data from the Department's Sikes SO_2 Monitoring site (AQS # 12-105-6005) which,

according to the Sierra Club, is in the zone of concern approximately 10.85 miles from the McIntosh facility (lat. +27.939444, long. -82.000278). Monitoring of SO_2 began at this site on September 20, 2013. Since then, there has been over a year of SO_2 monitoring data collected. While three years of data is required before an actual design value at the 99th percentile can be calculated, using the SO_2 data that is available for this year to date, the 99th percentile value is 29 parts per billion (ppb), which is well below the NAAQS of 75 ppb.

Comment 2: Consistent with its own rules, the Department should modify the Draft Permit to include: (a) a modeling-based SO_2 emissions limit that is calculated to meet the 1-hour standard, (b) a requirement to continuously operate SO_2 controls, and (c) other conditions as necessary to assure compliance with the public health protections of the NAAQS.

Department Response: The purpose of this permitting action is to authorize a project that will provide actual pollutant reductions. As stated above, SO_2 emissions are estimated to decline by between 2,000 and 4,000 TPY depending upon boiler utilization. There are no emissions increases resulting from this minor air construction permit project. Modeling is neither required nor necessary.

Comment 3: Before retrofitting Unit 3, Lakeland Electric and Orlando Utilities Commission, Unit 3's co-owner, should complete a retrofit-or-retire analysis to identify the most cost-effective path forward given market trends favoring retirement of units that primarily burn coal.

Department Response: This is outside the Department's authority for this minor air construction permit.

Comment 4: Sierra Club respectfully requests that the Department hold a public hearing.

Department Response: Other than the comments received from the Sierra Club, the Department only received minor comments from the applicant (see below). This permit authorizes upgrades to the wet flue gas desulfurization system on fossil fuel-fired steam generator Unit 3 at C.D. McIntosh, Jr. Power Plant, which is a minor air construction permitting action by the Department. The Department's rules only require an opportunity for a public meeting [hearing] for Title V (major source) air operating permits and major stationary source air construction permits (including major modifications). Since the permit is needed to begin work on air pollution control equipment necessary to comply with the federal MATS rule and it will improve overall air quality, the Department will not hold a public meeting.

Applicant Comments

The applicant provided a minor comment by e-mail on December 4, 2014. The applicant requested additional text to clarify that the MATS rule allows several options for demonstrating compliance with the hydrochloric acid and particulate matter emissions standards. The following minor clarification has been made in the final permit. The changes are highlighted in yellow with additions indicated by double underline and deletions indicated by ~~strikethrough~~.

Permit Condition No. 2: At the end, just above the permitting note, text is changed as follows:

The applicant (Lakeland Electric) has elected to meet the SO_2 emission limit of 0.20 lb/MMBtu on a 30-day rolling average with compliance demonstrated by a SO_2 continuous emission monitoring system (CEMS). The applicant has also elected to meet the PM emission limit of 0.030 lb/MMBtu with compliance shown by a PM CEMS, a continuous parametric monitoring system (CPMS) or quarterly stack testing. Note that the MATS rule allows alternatives to these methods for demonstrating compliance.

CONCLUSION

The final action of the Department is to issue the final air construction permit No. 1050004-038-AC, with the minor changes, corrections and clarifications as described above.