



**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

APPLICANT

Lakeland Electric
501 East Lemon Street
Lakeland, Florida 33801

C.D. McIntosh Jr. Power Plant
Facility ID No. 1050004

PROJECT

Project No. 1050004-032-AC
Application for Minor Source Air Construction Permit
Restrictions on use of high sulfur fuels in Unit 1 and Unit 3

COUNTY

Polk County, Florida

PERMITTING AUTHORITY

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

June 27, 2012

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Chapters 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of the permit.

Facility Description and Location

Lakeland Electric's C.D. McIntosh Jr. Power Plant is an existing power plant, which is categorized under Standard Industrial Classification Code No. 4911. The existing C.D. McIntosh Jr. Power Plant is located in Polk County at 3030 East Lake Parker Drive in Lakeland, Florida. The UTM coordinates of the existing facility are Zone 17, 409.0 km East and 3106.2 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- The facility is a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

This project restricts the sulfur content of fuel oil for Unit 1, and prohibits the use of petroleum coke in Unit 3 in the future.

Processing Schedule

6/22/12 Received the application for a minor source air pollution construction permit.

2. PSD APPLICABILITY

As provided in the application, this project involves limiting the sulfur content of fuels to each affected unit and does not result in any emission increases. These restrictions, limiting sulfur content of fuel oil in Unit 1, a gas and oil fired boiler, and prohibiting petroleum coke firing in Unit 3, a solid fuel and fuel oil fired boiler, and are taken by the applicant to reduce regional haze pollutants. These restrictions become effective upon EPA's acceptance of the Florida Regional Haze State Implementation Plan. There are no other changes requested, nor are there any

increases in emissions or operating capacity authorized. As such, a PSD review is not applicable.

3. DEPARTMENT REVIEW

The applicant has requested restrictions on the use of high sulfur content fuels for Unit 1 and Unit 3 which are Best Available Retrofit Technology (BART) affected units. These restrictions will reduce pollutants that can contribute to regional haze. Based on this request, Condition 8C of Permit AO53-15970 for Unit 1 has been revised as shown in the draft permit. This permit also supersedes Permit PSD-FL-008(B) which had authorized the co-firing of petroleum coke in Unit 3 and, therefore, now prohibits this fuel type as shown in the draft permit.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Martin Costello, P.E., is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Office of Permitting and Compliance at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.