

# **Best Available Control Technology (BACT) Determination**

## **St. Vincent's Medical Center Duval County**

The applicant has submitted a Synthetic Non-Title V operation permit application that includes Boiler No.1, Boiler No. 2, and Boiler No. 3. The boilers, each rated at  $25 \times 10^6$  Btu per hour, are fired primarily with natural gas. No. 2 Fuel Oil is a secondary fuel for emergencies or natural gas curtailment.

This BACT Determination is required for the facility as set forth in Rules 62-296.400, Florida Administrative Code (FAC), - Specific Emission Limiting and Performance Standards and 62-296.406, FAC - Fossil Fuel Steam Generators with less than 250 Million Btu per hour Heat Input, New and Existing Sources.

### **BACT Determination Requested by Applicant:**

Particulate matter and sulfur dioxide emissions are to be controlled by the firing of natural gas.

### **Date of Receipt of BACT Application:**

July 1, 2015

### **BACT Determination by the Department:**

Particulate matter and sulfur dioxide emissions from the boilers shall be limited by the firing of natural gas as the primary fuel.

No. 2 Fuel Oil shall be fired as an emergency fuel and during periods of natural gas curtailment.

The maximum sulfur content of the No. 2 Fuel Oil as fired shall not exceed 0.05 percent, by weight.

### **BACT Determination Rationale:**

Sulfur in the fuel is a primary air pollution concern since most of the fuel sulfur becomes sulfur dioxide. Also, particulate matter emissions from fuel burning are related to the sulfur content. The firing of natural gas shall be BACT for the boilers.

This decision is consistent with previous BACT Determinations for similar units.

### **Details of the Analysis may be obtained by contacting:**

Darrel J. Hall, Environmental Specialist  
Regulatory Compliance Department  
Environmental Quality Division  
Ed Ball Building, 214 North Hogan Street, Suite 500  
Jacksonville, FL 32202

St. Vincent's Medical Center  
BACT Determination  
Page 2

Approved by:

A handwritten signature in blue ink, appearing to read "Robert Steven Pace", is written over a horizontal line.

Robert Steven Pace, P.E., Manager  
Air Quality Branch

August 13, 2015  
Date