Best Available Control Technology (BACT) Determination

Baptist Medical Center, Prudential Drive Facility
Duval County

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

The applicant has applied for an air construction permit to construct two new steam generating boilers rated at a maximum heat input of 42 million Btu per hour each and one duct burner rated at a maximum heat input of 27.3 million Btu per hour. These emission units require a BACT determination. These emission units are located at Baptist Medical Center, 800 Prudential Drive, Jacksonville, FL. The boilers and duct burner are designated as follows:

Emission Unit(EU) ID No.	Brief Description
015	New Steam Boiler No. 1
016	New Steam Boiler No. 2
017	Duct Burner (Located in Combustion Turbine T-2 Duct

BACT Determination Requested by Applicant:

For the New Steam Boiler Nos. 1 and 2 (EU Nos. 015 and 016) , particulate matter and sulfur dioxide emissions shall be controlled by the firing of natural gas and/or very low sulfur content fuel oil. For the Duct Burner (EU No. 017), particulate matter and sulfur dioxide emissions shall be controlled by the firing of natural gas.

Date of Receipt of BACT Application:

May 30, 2008

BACT Determination by the Department:

For the New Steam Boiler Nos. 1 and 2 (EU Nos. 015 and 016) , particulate matter and sulfur dioxide emissions shall be controlled by the firing of natural gas and/or very low sulfur content fuel oil. The fuel oil shall not exceed 0.05% sulfur content by weight. For the Duct Burner (EU No. 017), particulate matter and sulfur dioxide emissions shall be controlled by the firing of natural gas.

BACT Determination Rationale:

Sulfur in fuel is a primary air pollution concern since most of the fuel sulfur becomes sulfur dioxide.

This determination for small boilers (i.e., less than 100 million Btu/hr firing rate) is more stringent than 40 CFR 60, Subpart Dc, New Source Performance Standards requirements for small boilers firing natural gas and/or low sulfur distillate fuel oil.

Details of the analysis may be obtained by contacting:

Gloria Hunter-Barnes, Environmental Engineer
Environmental Resource Management Department
Environmental Quality Division
117 West Duval Street, Suite 225
Jacksonville, FL 32202

Approved by:

Richard Robinson, P.E., Manager
Air Pollution Source Permitting Section

8/6/08
Date

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