Jacksonville
Where Florida Begins

Best Available Control Technology (BACT) Determination
Shands Jacksonville Medical Center
Duval County

This BACT determination is required for the source as set forth in Rules 62-296.400, Florida Administrative Code (F.A.C.), - 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 permittee has applied for a Construction Permit for two natural gas fired 13.4 MMBtu per hour heat input, steam generating boilers. Distillate No. 2 fuel oil is used during periods of natural gas curtailment or gas supply emergencies for no more than 400 hours per year per applicant's request. Distillate No. 2 fuel oil may be fired for up to 48 hours per calendar year for periodic testing purposes.

BACT Determination Requested by Applicant:

Particulate matter emissions and sulfur dioxide emissions shall be controlled by the firing of natural gas or low sulfur content Distillate No. 2 fuel oil. The sulfur content of the fuel oil shall not exceed 0.05% by weight.

Date of Receipt of BACT Application:

June 3, 2011

BACT Determination by the Department:

Particulate matter emissions and sulfur dioxide emissions shall be controlled by the firing of natural gas or low sulfur content Distillate No. 2 fuel oil. The sulfur content of the fuel oil shall not exceed 0.05% by weight.

BACT Determination Rationale:

Sulfur in fuel is a primary air pollution concern since most of the fuel sulfur becomes sulfur dioxide. Particulate Matter emissions are also related to the sulfur content of the fuel oil.

This determination is consistent with other recent BACT Determinations for small boilers (i.e., less than 100 MMBtu/hr firing rate) and is more stringent than 40CFR60 Subpart Dc, New Source Performance Standards.

Any questions may be directed to the project engineer, C. Blane Johnson, at (904) 255-7199.

Richard Robinson 7/6/11

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

S:\PERMITN\Construction Permit (CP)\Final\0310142-006bact-AC.doc