Best Available Control Technology (BACT) Determination
Department of the Navy, Naval Air Station, Jacksonville
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.

Numerous small boilers/hot water heaters fired by natural gas or No. 2 fuel oil are located at the facility, which require a BACT determination. The small boilers/hot water heaters regulated by this BACT have a maximum heat output of greater than or equal to 1 MMBtu per hour and a maximum heat input of 10 MMBtu per hour.

BACT Determination Requested by Applicant:

Particulate matter and sulfur dioxide emissions shall be controlled by the firing of Natural gas or No. 2 (distillate) fuel oil with a maximum sulfur content of 0.05% by weight.

Date of Receipt of BACT Application:

January 30, 2004

BACT Determination by the Department:

Particulate matter emissions and sulfur dioxide emissions shall be controlled by the firing of natural gas or very low sulfur content 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 $100 \cdot 10^6$ Btu/hr firing rate) and is more stringent than Subpart Dc, New Source Performance Standards.

Details of the Analysis May be Obtained by Contacting:

Jerry E. Woosley
Environmental Engineer
Environmental Resource Management Department
Environmental Quality Division
117 West Duval Street, Suite 225
Jacksonville, FL 32202

Approved by:

Richard L. Robinson

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

9/21/04
Date