Best Available Control Technology (BACT) Determination
United States Navy
Naval Station-Mayport
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 a Synthetic Minor Permit (Construction Permit) for a naval station. Three boilers are located at the facility (Boiler No. 1, Boiler No. 2, and Boiler No. 3, located in building 1241) which require a BACT determination. The boilers are each rated at a maximum heat input of 42.00 MMBtu per hour fired with natural gas. No. 2 (distillate) fuel oil may be used as an alternate fuel.

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 0.5% by weight.

Date of Receipt of BACT Application:

August 19, 1999

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 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 * 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
Associate Pollution Control Engineer
Regulatory and Environmental Services Department
Air & Water Quality Division
117 West Duval Street, Suite 225
Jacksonville, FL 32202

Approved by:

Richard Robinson, P.E., Manager	**October 20, 1999**
Air Pollution Source Permitting Section	**Date**