

Best Available Control Technology (BACT) Determination

**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 an air construction permit to construct a steam generating boiler rated at a maximum heat input of 16.33 million Btu per hour. The boiler requires a BACT determination. This boiler is located at the Naval Station, Mayport, Old Mayport Rd., Jacksonville, FL. The boiler is designated as follows:

<u>Emission Unit ID No.</u>	<u>Brief Description</u>
035	Cleaver Brooks Boiler No. 1

BACT Determination Requested by Applicant:

Particulate matter and sulfur dioxide emissions shall be controlled by the firing of natural gas and/or very low sulfur content fuel oil.

Date of Receipt of BACT Application:

July 18, 2005

BACT Determination by the Department:

Particulate matter emissions 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.

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:

Jerry E. Woosley, 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**

7/22/05

Date