Best Available Control Technology (BACT) Determination

United States Navy
Navy Public Works Center - Jacksonville
Duval County

The applicant has submitted a construction permit application for three (3) 300 HP boilers. The application is for the modification of the air pollution source permit AC16-253654 issued October 13, 1994 for two (2) 350 HP boilers. The boilers are fired primarily with natural gas. No. 2 fuel oil is a secondary fuel for emergencies or natural gas curtailment.

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.

BACT Determination Requested by Applicant:

Particulate matter and sulfur dioxide emissions shall be controlled by the firing of natural gas.

Date of Receipt of BACT Application:

January 5, 1996

BACT Determination by the Department:

The amount of particulate matter and sulfur dioxide emissions from the boilers shall be limited by the firing of natural gas as the primary fuel.

No. 2 fuel oil shall be fired as an emergency fuel and during periods of natural gas curtailment.

The maximum sulfur content of No. 2 fuel oil as fired shall not exceed 0.05 percent, by weight.

The firing of no. 2 fuel oil as fired shall not exceed a maximum of 400 hours per calendar year.

BACT Determination Rationale:

Sulfur in fuel is a primary air pollution concern since most of the fuel sulfur becomes sulfur dioxide. Also particulate matter emissions from fuel burning are related to the sulfur content. The firing of natural gas shall be BACT for the boilers.

This decision is consistent with previous BACT Determinations for similar units and with 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units.

Details of the Analysis May be Obtained by Contacting:

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Air & Water Quality Division
421 W. Church Street, Suite 422
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Approved by:

Richard L. Robinson, P.E.
Pollution Control Engineer

January 18, 1996

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