BACT Determination for No. 4 Steam Boiler

Best Available Control Technology (BACT) Determination
Griffin Industries, Inc.
Bradford County

The applicant has submitted a construction permit application for the construction of a small steam boiler (Boiler No. 4). The boiler will fire No. 2 fuel oil, natural gas, on-specification used oil and processed grease.

This BACT determination is required for the source as set forth in Rules 62-204.400(7), F.A.C., - Specific Emission Limiting and Performance Standards and 62-296.406, F.A.C., - Fossil Fuel Steam Generators with less than 250 Million Btu per hour Heat Input, New and Existing Sources.

BACT Determination Requested by Applicant:

When firing No. 2 fuel oil and on-specification used oil, the particulate matter and sulfur dioxide emissions are to be controlled by limiting the sulfur content of the fuel to no more than 0.05 %, by weight.

Date of Receipt of BACT Application: January 13, 2010

BACT Determination by (DEP Northeast District):

The amount of particulate matter and sulfur dioxide emissions from the boilers shall be limited by the firing of natural gas, low sulfur content No. 2 fuel oil and on-specification used oil. The sulfur content of the No. 2 fuel oil and on-specification used 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. Also, particulate matter emissions from fuel burning are related to the sulfur content. The BACT for the boilers is

> When firing natural gas, No. 2 fuel oil and on-specification used oil, the particulate matter and sulfur dioxide emissions are to be controlled by limiting the sulfur content of the fuel to no more than 0.05 %, by weight.

This decision is consistent with previous BACT determinations for similar units.

Details of the Analysis May be Obtained by Contacting:

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Florida Department of Environmental Protection
Northeast District Office
Air Resources Section
7825 Baymeadows Way, Suite B200
Jacksonville, FL-32256-7590

Recommended by:

Jerry Woosley
Air Permitting Program

June 14, 2010
Date

Approved by:

Christopher L. Kirts, P.E.
District Air Program Administrator

June 14, 2010
Date