Best Available Control Technology Determination

Live Oak Heat & Power, LLC
Live Oak Heat & Power, LLC, a property developed by Blue Earth, Inc.
Suwannee County
20.92 MMBtu/Hr Natural Gas Fired Boiler

This BACT Determination is required for the source as set forth in Rule 62-296.406, F.A.C. - Fossil Fuel Steam Generators with less than 250 MMBtu per Hour Heat Input, New and Existing Sources.

The applicant has applied for construction permit for a new, 20.92 MMBtu/hr boiler. The boiler will be fired with natural gas only.. The boiler is authorized to operate as a back-up unit, only when the 12,864 HP, 4-stroke lean burn spark engine is non-operational.

BACT Determination Requested by the Applicant

Particulate matter (PM) and Sulfur Dioxide (SO_2) emissions shall be controlled by the use of natural gas..

Date of Receipt of BACT Application

October 7, 2013

BACT Determination by the Department

PM and SO_2 emissions shall be controlled by the use of natural gas..

BACT Determination Rationale

Sulfur in fuel is a primary air pollution concern since most of the fuel sulfur becomes SO_2. PM emissions from fuel burning are related to the sulfur content of the fuel. The firing of natural gas shall be BACT for the boiler.

This determination is consistent with other recent BACT Determinations for small boilers (i.e. less than 100 MMBtu per hour heat input) and is as stringent as 40 CFR 60, Subpart Dc, New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units requirements.

Details of the analysis may be obtained by contacting:

Rita Felton-Smith, Air Permitting Engineer
Department of Environmental Protection
Northeast District Office
Waste and Air Resource Management Program
8800 Baymeadows Way West, Suite 100
Jacksonville, FL 32256

Recommended by:

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