Florida Department of Environmental Protection

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

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Governor

Jennifer Carroll
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Secretary

Best Available Control Technology (BACT) Determination Revision
Bayfront Medical Center, Inc.
Pinellas County
Title V Renewal Permit No. 1030095-006-AV

Curtis Bay Energy Southeast, LLC, submitted an application on June 1, 2011, to renew their Title V air operation permit. A transfer of ownership to Bayfront Medical Center, Inc., occurred on March 1, 2012. The existing boiler was permitted to be fired with natural gas and No. 2 fuel oil having a maximum sulfur content of 0.05 percent, by weight, at a maximum heat input rate of 12.6 million BTU per hour (MMBtu/hour). There was a BACT determination for this boiler dated February 13, 2001. The permittee requests to burn ONLY natural gas in this boiler. This revised BACT determination replaces the one dated February 13, 2001.

This BACT determination is required for the source as set forth in Rule 62-296.406, Florida Administrative Code – Emission Standards for Fossil Fuel Fired Steam Generators with Less Than 250 million BTU/hr. Heat Input, New and Existing Sources.

BACT Determination by DEP:

The amount of particulate matter and sulfur dioxide emissions from the boiler shall be limited by the firing of natural gas.

BACT Determination Rationale:

Sulfur in fuel is a primary air pollution concern, since most of the fuel's sulfur becomes sulfur dioxide. Also, particulate matter emissions from fuel burning are related to the sulfur content. The Department performed air dispersion modeling analyses on small natural gas fired boilers typical of those recently permitted in Florida. These analyses show that all standards and increments will be met with the use of natural gas.

Details of the Air Dispersion Analysis May be Obtained by Contacting:

A. A. Linero, P.E. Supervisor
Department of Environmental Protection
Office of Permitting and Compliance

Twin Towers Office Building
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

Recommended by:

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Cindy Zhang-Torres, P.E.
Air Permitting Manager
Southwest District

_____ __, 2012

Approved by:

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Robert C. Wong
District Air Program Administrator
Southwest District

_____ __, 2012