# Department of Environmental Protection

Jeb Bush
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Colleen M. Castille
Secretary

## BEST AVAILABLE CONTROL TECHNOLOGY (BACT) DETERMINATION

United States EnviroFuels, LLC, Port Manatee Ethanol Facility
Construction Permit 0810213-001-AC
Manatee County

The above company has submitted an application for a construction permit for 2 new 1500 HP (62.8 MMBtu/hour heat input rating each) process steam boilers (Emission Units EU 009 and 010). These boilers will be fired on natural gas or virgin No. 2 Fuel Oil with a maximum sulfur content of 0.05 percent by weight.

This BACT Determination is required for this emission unit as set forth in the Florida Administrative Code (F.A.C.) Rule 62-296.406 - *Specific Emission Limiting and Performance Standards: Fossil Fuel Fired Steam Generators with less than 250 million Btu's per hour Heat Input, New and Existing Sources.*

BACT Determination Requested by Applicant: Particulate matter and sulfur dioxide emissions are to be controlled by the firing of only natural gas or virgin No. 2 Fuel Oil with a maximum sulfur content of 0.05 percent by weight.

Date of Receipt of BACT Application: September 6, 2005

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 or virgin No. 2 Fuel Oil with a maximum sulfur content of 0.05 percent 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 Department has performed air dispersion modeling analyses on small natural gas/low sulfur oil 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 or very low sulfur No. 2 oil.

Details of the Air Dispersion Analysis May be Obtained by Contacting:
Department of Environmental Protection, Bureau of Air Regulation
Twin Towers Office Building, 2600 Blair Stone Road
Tallahassee, Florida 32399-2400

| Recommended by/Date: | Approved by/Date: |
|---|---|
| 10/11/05 | 10/11/05 |
| Jason Waters, P.E.<br>SW District Air Permitting Supervisor | Joel A. Smolen<br>Acting SW District Air Administrator |