

## BEST AVAILABLE CONTROL TECHNOLOGY (BACT) DETERMINATION

Cellynne Holdings, Haines City Plant  
Construction Permit 1050380-001-AC  
Polk County

The above company has submitted an application for a construction permit for a new Thermogenics 600 HP (25.11 MMBtu/hour heat input rating) Thermocoil process steam boiler (Emission Unit EU 001). This boilers will be fired on natural gas only.

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 with propane (LPG) used as the backup fuel in the case of natural gas curtailments.

Date of Receipt of BACT Application: March 30, 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.

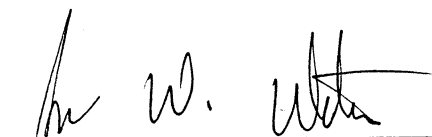
### BACT Determination Rationale:

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 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:

Department of Environmental Protection, Bureau of Air Regulation  
Twin Towers Office Building, 2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Recommended by/Date:

  
07/05/05  
Jason Waters, P.E.  
SW District Air Permitting Supervisor

Approved by/Date:

  
07/05/05  
Joel A. Smolen  
Acting SW District Air Administrator