



# Florida Department of Environmental Protection

Southwest District  
13051 N. Telecom Parkway  
Temple Terrace, Florida 33637-0926

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

Best Available Control Technology (BACT) Determination  
Juice Bowl Products, Inc.  
Polk County  
Operation Permit No. 1050127-003-AO

Juice Bowl Products, Inc. has submitted an application dated May 19, 2009 for an after-the-fact construction permit for an 800 HP Hurst Boiler, Series 400, Model S4-X800-150 (Serial No. S4000-150-27) at 2090 Bartow Road, Lakeland, Polk County. The boiler is fired only with natural gas at a maximum heat input rate of 34.3 million BTU per hour (MMBTU/hr.).

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 Requested by Applicant:

Particulate matter and sulfur dioxide emissions are to be controlled by the firing of natural gas.

Date of Receipt of BACT Application: May 19, 2009

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 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.

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

A. A. Linero, P.E. Supervisor, New Source Review Section  
Department of Environmental Protection  
Bureau of Air Regulation  
Twin Towers Office Building  
2600 Blair Stone Road, MS #5505  
Tallahassee, Florida 32399-2400

Recommended by:

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

8/27 /2009

Approved by:

  
Mara Grace Nasca  
District Air Program Administrator  
Southwest District

August 27, 2009