Appendix E. - Best Available Control Technology (BACT) Determination

BEST AVAILABLE CONTROL TECHNOLOGY (BACT) DETERMINATION

The Minute Maid Company, Auburndale Plant
Construction Permit 1050366-001-AC
Polk County

The above company has submitted an application for a construction permit for three (3) new 800 HP (34.53 MMBtu/hour heat input rating) York Shipley Model 596-SPH-800-N process steam boilers (Emission Units EU 001, 002 and 003). These boilers will be fired on natural gas only.

This BACT Determination is required for the emission units as set forth in the Florida Administrative Code (F.A.C.) Rule 62-296.400 - *Specific Emission Limiting and Performance Standards* and Rule 62-296.406 - *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: November 13, 2002

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 as the primary fuel, with propane (LPG) as the backup fuel during periods of natural gas curtailment.

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/LPG 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 propane (LPG).

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:	
Eric Peterson, P.E. SW District Air Engineer	1/14/2003	for Gerald Kissel, P.E. SW District Air Administrator	1/14/2003