**Title:** Developing a Guidance Manual for reducing greenhouse gas emission, odors, and nonmethane hydrocarbons from landfills.

**Principle Investigators:** Tarek Abichou FAMU-FSU College of Engineering Jeff Chanton, Florida State University

## Update:

- Project contract was finalized only in December 2007. A TAG Group was selected and a website was established for the project.
- A one year no-cost extension was requested because of the delay of the start of the contract and to extended out of the country assignment of Dr. Abichou
- The TAG group met via a conference call in July 2008

Based on the literature review, the following are the activities that the guidance manual will address:

## **Design-Related BMPs for LFG Collection Components**

Use of Horizontal Collectors Use of Surface Collectors Tighter Spacing of Vertical LFG Wells Mixed Horizontal/Vertical Well Systems Connection of LCRS Layer to LFG Collection System Deep Multi-Depth Vertical Wells Maximize Borehole and Well Diameters Enhanced Seals on LFG Wells/Boreholes Dewatering of Gas Wells

## Enhanced Monitoring, Modeling, and Testing BMPs

Enhanced Surface Emissions Monitoring----Improved Modeling and Testing for LFG Design Designing for Closure and Post Closure

## Landfill Cover Systems

Designing Covers for LFG Collection---Biocovers Biofilters

Project Website: http://www.eng.fsu.edu/~abichou/guidance