

**Bio-Reactive Landfill Cover Systems**  
**A research Project Funded**  
**by**  
**Florida Center for Solid and Hazardous Waste Management**

**Progress Report 1**

**by**  
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**PROJECT STATUS**

**Task 1 – Landfill Gas Generation Data Collection**

The first step of the project consisted of an extensive literature review to define the range of landfill gas generation for the different types of landfills. Literature considered included technical journals and industry publications and Representatives from U.S. Environmental Protection Agency.

In addition to the range of landfill gas generation, it will be very beneficial to the project to focus on location where continuous collection of gas generation data is available such as daily or weekly values. This effort is still underway. Continuous data of gas generation is not readily available and might not be feasible at this time.

**Task 2 – Column Experiments**

Pipes fittings and caps to build the column have been purchased. Compost and compost-soil mixtures were collected from Tallahassee. Methane tank was purchased and will be fed through the bottom of the columns at fluxes consistent with the flux values collected in Task 1. Gas sampling ports were drilled along the column walls. The sampling ports were fitted with Swagelok NPT adaptors. Gas samples will be analyzed using Gas Chromatography. A gas analyzer was purchased for this purpose.