QUARTERLY PROGRESS REPORT

December 1, 2014 to February 28, 2015

PROJECT TITLE: Application of New Leaching Protocols for Assessing Beneficial Use of Solid Wastes in Florida

PRINCIPAL INVESTIGATOR(S): Timothy G. Townsend

AFFILIATION: Professor, University of Florida Department of Environmental Engineering Sciences

CO-PRINCIPAL INVESTIGATOR(S): Lena Q. Ma

AFFILIATION: Professor, University of Florida Department of Soil and Water Science

COMPLETION DATE: September 1, 2015

PHONE NUMBER: (352) 392-0846

PROJECT WEB SITE: http://pages.ees.ufl.edu/townsend/research/hc14/

Work accomplished during this reporting period:

Development of Guidance Document

As a final deliverable for the project a guidance document will be produced by the investigators that concisely provides information on how to appropriately utilize LEAF in beneficial use decision making. As part of that document each of the LEAF methods will be explained in detail along with appropriate uses for each of the test methods and potential differences from previously used tests. Differences between LEAF and existing test methods were evaluated in the first quarter of the project. During this reporting period the data generated on differences in test methods was incorporated into the guidance document along with information on each of the LEAF methods.

Identification of Candidate Waste Streams for Testing

One of the stated objectives of this Hinkley Center project was to identify waste streams that had been previously evaluated for beneficial use in Florida and examine how LEAF testing could have impacted the results; three waste streams were identified for testing using the LEAF methods. A literature review was conducted to compile the available data related to previous beneficial use options for these materials. The three selected waste streams are: wood and tire ash produced at the ridge generating station in Polk County, recovered screened material, and waste to energy ash.

Perform Testing on Candidate Waste Materials

Leach testing on one of the selected waste materials (waste to energy ash) has begun to be conducted. Communication with generators of the other two wastes is on-going. An appropriate sampling plan and collection methodology is being developed by the investigators.

Work planned for the next reporting period:

Sampling and leach testing of the three candidate waste materials is expected to continue in the third quarter. Additionally, further work on the guidance document is on-going; during the third quarter video

tutorials will be shot on each of the LEAF methods to be included in the guidance materials provided to the center at the end of the project.

Metrics:

1. List graduate student or postdoctoral researchers funded by THIS Hinkley Center project

Name	Rank	Department	Professor	Institution
Roessler, Justin	PhD student	Environmental Engineering	Townsend	University of Florida
Hofmeister, Michael	ME student	Environmental Engineering	Townsend	University of Florida
Monroy, Linda	PhD Student	Environmental Engineering	Townsend	University of Florida
Evandro Da Silva	PhD student/ ME student	Environmental Engineering	Ма	University of Florida