

QUARTERLY PROGRESS REPORT

June 1, 2015 to August 31, 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://www.essie.ufl.edu/users/townsend/research>

Work accomplished during this reporting period:

Completion of Laboratory Testing

LEAF testing on the three candidate waste streams: wood and tire ash, waste to energy ash, and coal combustion air pollution control residue has been completed. The data was tabulated and plotted for incorporation into the final leaching report.

Review of Recently Released EPA Tools Related to Beneficial Use

Two recently released EPA tools related to beneficial use were reviewed so that they could be incorporated into the final report. These tools include a recent EPA report entitled *Leaching Test Relationships, Laboratory to Field Comparisons and Recommendations for Leaching Evaluation using the Leaching Environmental Assessment Framework* which provides guidance on the use of the LEAF methods. Additionally the US EPA recently released an update to the *Industrial Waste Evaluation Model (IWEM)* which now incorporates several beneficial use scenarios.

Information Dissemination Activities:

A TAG meeting was held June 30th on campus at the University of Florida. Select results from the LEAF testing on the waste materials was presented along with a description of the utility of the test methods. Hands-on stations demonstrating a number of leaching tests or laboratory procedures have also been prepared for participants at the TAG meeting. The research team also prepared a series of mock LEAF test results so that the TAG attendees could work through applications of the LEAF methods individually, results of their evaluations were used to foster an open discussion.

The researchers are currently drafting the final project report. This report will include all of the data from the LEAF testing, summaries of the LEAF methods, descriptions of the applications and utility of these methods, identified data gaps, and a summary of related literature produced by the EPA and others. Upon completion of this report the material will be posted on the Center website and set to the project TAG.

Work planned for the next reporting period:

Complete final report and disseminate to project TAG for review, following review of the project report the investors will draft a final copy of the document, submit to the center, and post all required deliverables on project website.

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
Monroy Sarmiento, Linda	PhD student	Environmental Engineering	Townsend	University of Florida
Hofmeister, Michael	ME student	Environmental Engineering	Townsend	University of Florida
Evandro Da Silva	PhD student	Environmental Engineering	Ma	University of Florida
Ky Gress	PhD student	Environmental Engineering	Ma	University of Florida