QUARTERLY PROGRESS REPORT

November 1, 2020 to January 31, 2021

PROJECT TITLE: Characterization and Management of Per- and Polyfluorinated Alkyl Substances (PFAS) Remediation Residuals

PRINCIPAL INVESTIGATOR: Timothy Townsend

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

CO-PRINCIPAL INVESTIGATOR: John A. Bowden

AFFILIATION: Assistant Professor, University of Florida College of Veterinary Medicine COMPLETION DATE: February 3rd, 2021 PHONE NUMBER: 352-215-9152

PROJECT WEB SITE: https://faculty.eng.ufl.edu/timothy-townsend/characterization-and-management-of-per-and-polyfluorinated-alkyl-substances-pfas-remediation-residuals/

Work accomplished during this reporting period:

During this time period, the research team collected samples of PFAS contaminated soils from two locations. Work has been started on determining the leachability of PFAS from these contaminated residuals using EPA (LEAF) methods 1313 and 1316. These methods will give insight into the leaching characteristics of PFAS of the two soils with respect to liquid/solid ratio and pH. Samples from these leaching assessment tests are collected in triplicates and frozen until extraction and analysis of PFAS can be run. A workflow for analysis of these samples is being designed currently.

Additionally, plans for assessing the leachability of PFAS in solidified liquid wastes are being made. The effect that different bulking agents have on the leachability of liquid wastes will be investigated. Currently bulking materials are being collected such as crushed gypsum drywall, sawdust, and cement fines.

Work planned for the next reporting period:

Leaching testing will be completed on soil samples and the first round of data should be produced. Further leaching tests will be conducted on soil samples depending on these results. Leaching assessments will be run on liquid wastes that have been solidified to pass paint filter test. A TAG kickoff meeting will be planned regarding this project.

Metrics:

Name	Rank	Department	Professor	Institution
Jake Thompson	PhD Student	Environmental Engineering	Dr. Townsend	University of Florida

TAG Meeting: No TAG meetings were held during this period