

QUARTERLY PROGRESS REPORT

January 31, 2021 to April 30th, 2021

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

PRINCIPAL INVESTIGATOR: Timothy Townsend

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COMPLETION DATE: April 30th, 2021 PHONE NUMBER: 352-215-9152

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

Work accomplished during this reporting period:

The research team has finalized a method for conducting PFAS extraction on leachate produced from LEAF methods 1313 and 1316 on contaminated soil. Leaching tests 1313 and 1316 have been completed for the two AFFF contaminated soils collected. Solid phase extraction (SPE) has begun on the leachates and is completed for half of the samples. Work toward a literature review of thermal destruction of PFAS has continued in this quarter. The first TAG meeting was completed during this quarter.

Additionally, the plans for assessing the leachability of PFAS in solidified liquid wastes have been conducted for four different stabilization materials (bentonite clay, cement fines, sawdust, and biochar). Pant filter test was used to determine the amount of stabilizer to add and TCLP / SPLP were run on stabilized, AFFF contaminated, water samples. Samples are ready to begin SPE.

Work planned for the next reporting period:

SPE will continue to be run on the leached samples collected. Once all samples are extracted, they will be analyzed using LC-MS/MS. Data processing will begin after all samples are extracted. The thermal destruction review will continue to be worked on and refined.

Metrics:

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

TAG Meeting: https://ufl.zoom.us/rec/share/Z5KkxmuA7iRIBfatyxlodbqmLOxfNZ24P1uN1hTBb3-4jRjN3VggeTKj81ccK_A0.VJnBulbE5xNoYhiV

