State University System of Florida Hinkley Center for Solid and Hazardous Waste Management

PROGRESS REPORT 1

March 1, 2023

TITLE: PFAS in biosolids: Partitioning during wastewater treatment and leaching from Florida biosolids

COMPLETION DATE: August 31, 2023 (anticipated)

Due to the late start of the project, it will be necessary to request a 6month no-cost extension for the planned end date.

PRINCIPAL INVESTIGATORS:

- Berrin Tansel, Ph.D., P.E., Professor, Civil and Environmental Engineering Department, Florida International University
- Yelena Katsenovich, Senior Research Scientist, Applied Research Center (ARC), Florida International University
- Natalia Soares Quinete, Assistant Professor, Environmental and Bioanalytical Chemistry, Florida International University

During the first quarter of this project, the following activities have been performed:

The contract was finalized on December 19, 2023. Therefore, the notice to proceed came later than the planned project start date of Sept 1, 2022.

During this initial period, the following activities have been performed:

- 1. The contract has been signed.
- 2. A list of potential TAG members has been compiled. Potential members from industry in the areas of PFAS and biosolids have been contacted to confirm their interest and potential contribution to the project.
- 3. Two undergraduate students who would be working on the project are being interviewed and will be identified.
- 4. Regular weekly progress meetings have been taking place with the co-PIs.
- 5. A project web page has been developed at the following address:

biosolids.fiu.edu

6. Literature review for PFAS is on-going.

- 7. Test plans for leaching experiments, PFAS analyses (expanded for 40 PFAS compounds), and biosolids characterization for (TS, organic content, and protein) were finalized.
- 8. Technical Advisory Group meeting will be via Zoom due to remote participants and will be scheduled for:

March 20, 4 pm-5 pm (EST)

Planned activities for the next 3 months:

- 1. Continue contacting potential TAG members.
- 2. Investigate PFAS related data and information as well as biosolids land application practices and potential runoff and partitioning data for biosolids related organic matter.
- 3. Acquire materials and standards for laboratory studies.
- 4. Continue refining test procedures.
- 5. Initiate preliminary tests and analyses.
- 6. Continue development of database for compiling and organizing the available data for in-depth analyses.

Planned activities for Quarter 2:

- Send invite for the TAG meeting scheduled for March 20, 4 pm-5 pm (EST)
- Finalize testing guidelines and criteria for preliminary analysis.
- Initiate PFAS fate related simulations.
- Develop abstracts for submittal to biosolids conference.

Months	Planned Activities	Status
March	• TAG meeting	Scheduled
	• Weekly project update meetings	Continuing
	Preliminary test	Continuing
April	• Finalize testing and analysis procedures	Continuing
	• Weekly project update meetings	Continuing
May	• Weekly project update meeting	Continuing
	Conduct leaching experiments	• Planned
	 Conduct PFAS analyses for solid and liquid samples 	• Planned