

Question and discussion points during TAG Meeting 1

1. Will there be any batch leaching samples with PFAS spiked in? (I'm curious about the potential for adsorption or collection of PFAS on biosolids – or the opposite direction)

We are planning to prepare a control sample without biosolids but spiked with PFAS to observe PFAS stability over the experimental period. Natalia ordered a certified stock from Wellington Laboratories (Guelph, ON, Canada) that has 40 PFAS homologues. She will also prepare for her PFAS analysis a laboratory procedural blank to measure and monitor the performance of the laboratory procedures and to assure that PFAS are not originally from the laboratory.

2. Can some of the sampling be done in triplicate? The problem with duplicates is that if one is wrong, you don't know which one is wrong...Plus, it's nice to be able to calculate a standard deviation to understand the variability.

We are planning to prepare in triplicate only biosolids samples because biosolids are the end product ready for the agricultural field applications. Samples after anaerobic digester and dewatering most likely will be in duplicate.

3. Are you going to be sampling plants that generate different classes of biosolids?

Based on yesterday's discussion, we are planning to collect samples from the South District and Central District WWT plants. South WWTP receives leachate from the landfill, Homestead and Keys. Central WWTP is more domestic wastewater but also receive waste from the north of Miami. My understanding is that technology is the same for both plants, but biosolids from the South plant is impacted by the leachate from the landfill.

4. I know the budget is really tight, but the leachate sampling would be really helpful to understand partitioning and transformation of PFAS compounds in the biosolids.

University of Miami last year received a Hinkley funding for the testing of PFAS from landfill leachate. Our focus is more on WWTP biosolids that will be applied in agricultural fields. We will compare biosolids from the south district that receives landfill leachate with biosolids from the Central WWTP, which treats mostly domestic WW. The WW treatment technology is the same for both plants. It was a suggestion yesterday to get biosolids from the West Palm Beach plant that has a different technology for processing biosolids. We will do it if a second-year funding is available.

5. Important points by others: industrial versus domestic-only sources, fertilizer made from biosolids for comparison, target different stabilization methods, summarize what different states are doing for the report intro

Yes, these are very valuable suggestions. Definitely good ideas for the second year which we will outline in the proposal. The discussion was also on fundraising to cover students' tuitions that has increased a lot for the last couple of years.