

PFAS in Biosolids: Stop the Guessing, Keep the Schedule, Get Defensible Results

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Abstract

PFAS biosolids testing has a special talent: it can turn a normal week into chaos. One set of results lands, everyone asks “So... are we in trouble?”, the land applier wants answers, leadership wants a plan, and operators still have a plant to run. Many utilities have already tested PFAS once. The real challenge is doing it again in a way that is repeatable, defensible, and useful for decisions.

This session is designed for operations personnel, residuals program leads, and pretreatment partners who are tired of vague guidance and want a practical playbook. The full system is addressed from influent and sidestreams through dewatering and cake, with a focus on what can be controlled now while expectations continue to evolve.

A clear explanation is provided for why biosolids PFAS results can swing more than people expect, without turning into a chemistry lecture. Plant realities that drive variability are described, including changing influent sources, sidestream contributions, polymer and dewatering effects, and the simple fact that solids are heterogeneous. When solids are sampled and handled like water, the outcome is often data that is difficult to defend, compare, or explain.

A “do it once, do it right” approach to sampling and coordination is then outlined to prevent common failures. Topics include representativeness in solids sampling, field handling steps that reduce contamination risk, which chain-of-custody and field note details matter for the laboratory, and how delays and forced dilution are triggered. In plain language, dilution is explained as more than a lab inconvenience, because it can raise reporting limits to the point that results stop answering the questions stakeholders are asking.

The session then shifts to decision support. Common ways biosolids PFAS results are being used in practice are summarized, including tiered response strategies, restrictions, additional lines of evidence, and source control approaches. Example “what happens next” pathways are included that support transparency while helping land application scheduling avoid unnecessary stalls. Practical coordination points are highlighted so residuals teams, pretreatment staff, consultants, and labs stay aligned on scope, turnaround, and deliverables.

The session closes with communication tools that can be reused. Attendees leave with wording that explains what results show, what they do not show, and what actions occur next and when. A short checklist is provided to support consistent sampling events, reduce reruns, and keep biosolids programs moving.