



PNCWA Sustainability and Biosolids Webinar Series

Title: *Designing for the Future of Solids Management Optimizing Drying and Pyrolysis Treatment Design*

Date: May 14, 2025

Time: 11:00 AM – 12:00 PM

Description: *The presence of PFAS in biosolids has resulted in significant challenges for the municipal wastewater industry, especially for those utilities relying on land application for beneficial use. In addition, the State of California and several municipalities across the country have implemented regulations designed to reduce Short Lived Climate Pollutants (SLCP), including the diversion of organic waste from landfills and to reduce methane emissions. Given the increasing focus on climate change and a circular economy, these practices are likely to expand nationwide. With these challenges comes unique opportunities, creating an exciting period of innovation for solids treatment in our field. This presentation discusses a novel solids management approach at a small water resource recovery facility (WRRF) to address these evolving challenges and offers guidance for utility managers, operation and maintenance (O&M) practitioners, and engineers. Specifically, it provides:*

- *A highlight of the indirect thermal drying and pyrolysis system sizing,*
- *Optimization of solids handling prior to biodrying, and*
- *Key lessons learned during the detailed design process.*

Agenda:

- 11:00 AM -Introduction
- 11:05 AM – Presentation
- 11:45 AM – Q&A Session

Presenter:

Name: Tartaglione, Anthony

Company: Hazen and Sawyer

Position: Principal Consultant

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Bio: Mr. Tartaglione has 25 years of experience in the planning and design for the expansion, rehabilitation and repair, upgrades, and improvements of water resource recovery facilities. He received a BS in Environmental Engineering from Rensselaer Polytechnic Institute and a MS in Chemical Engineering from Colorado State University. His area of expertise is in solids treatment from preliminary treatment through advance thermal treatment including screening, grit removal, thickening, anaerobic digestion, dewatering, thermal drying, and pyrolysis. Anthony provides process mechanical calculations, energy and mass balances, unit process system analysis and selection, specification development, design drawing development, code interpretation, and multidiscipline coordination. He is a contributing author to Water Environmental Federation publications including 1) Design of Water Re- source Recovery Facilities. Manual of Practice No. 8, 6th Ed., Water Environmental Federation Publication, 2017; 2) Energy in Water Resource Recovery Facilities, Manual of Practice No. 32, 2nd Ed., Water Environmental Federation Publication, 2021 and 3) Wastewater Treatment Fundamentals III, 1st Ed., Water Environmental Federation Publication, 2022.