

Course Title: The Science of Water and Wastewater Treatment Polymer Activation

60 minutes of instruction

Course Description: This 60-minute seminar will provide water system managers, operators and engineers a practical understanding of the science behind polymer and polymer activation as well as the techniques used to optimize the use of polymer in plant settings.

Course Outline:

1. The basics of polymer chemistry
 - a. Understanding polymer structure and chemistry
 - b. Role of mixing in hydration and activation
 - c. Modes mixing and energy application
 - d. Impact of operational/situational factors in polymer activation
2. Equipment options and equipment form factors
 - a. Mixer configurations used to optimize activation
 - b. Equipment hardware and components
3. Case Studies:
 - a. Dry polymer activation example
 - b. Liquide polymer application example
 - c. 3rd party study results of various forms of polymer activation in a real plant setting

Presenter Bios:

Haley Goddard

Sales and Business Development Engineer, Cleanwater1

Haley Goddard is a Sales and Business Development Engineer at Cleanwater1 – a process technology company specializing in chemical feed and disinfection. She holds a B.S. degree in Environmental Engineering from the University of Colorado-Boulder and is a licensed civil engineer in Idaho and California. Prior to joining Cleanwater1, Haley worked in consulting as process and project engineer, leading multi-disciplinary teams on water and wastewater infrastructure projects for both municipal and industrial clients. Her experience features the design of desalination reverse osmosis treatment, chemical feed, dewatering, and water conveyance systems. Haley is based out of Boise, Idaho, and serves as a Water Environment Federation delegate and board member for the Pacific Northwest Clean Water Association.

Learning Outcomes:

- Attendees will understand the basic structure and chemistry of water and wastewater treatment polymers
- Attendees will understand how to use the fundamental science of polymer chemistry to properly activate polymer which leads to better treatment efficiencies and costs

Tracking of Attendance:

- When the invitation is sent out, it includes a registration link. This registration link requires them to enter in their contact information. That is captured in an Excel format into a spreadsheet. These spreadsheets are stored on our internal website for future needs to be accessed.