



Disinfection Webinar Description

Disinfection is one of the most critical processes in water and wastewater treatment, responsible for preventing the spread of waterborne disease and protecting public health.

This course provides a practical, chemistry-driven understanding of how disinfection works and how to apply it effectively in real-world systems. Participants will learn how disinfectants inactivate pathogens, how water quality impacts performance, and how to optimize dosing and contact time to achieve regulatory compliance.

The training covers chlorine-based disinfection in depth, including chlorination, hypochlorination, and chloramination, along with essential concepts such as breakpoint chlorination, CT calculations, and residual control in distribution systems. Alternative technologies—including ultraviolet (UV) and ozone—are also explored, with a focus on design, operation, and troubleshooting.

Special emphasis is placed on minimizing disinfection byproducts, maintaining system reliability, and solving common operational problems. Drawing from decades of field experience, the course provides practical strategies that operators and engineers can immediately apply to improve performance and reduce risk.