



Disinfectants and Disinfection Byproducts

A certificate of attendance will be offered for this webinar

October 27, 2020 from 2:00 to 3:00 pm ET

Optional Q&A session from 3:00 to 3:30 pm ET

Disinfectant Penetration into Biofilm and Sediment

Disinfectant biofilm penetration and its effect on biofilm aerobic activity and viability are still unclear. The use of microelectrodes have contributed to a greater understanding of biological mechanisms in biofilm and sediments. This presentation will provide a summary of EPA's research conducted on disinfectant penetration into biofilm and sediment where the disinfectant concentrations were measured with microelectrodes. Free chlorine and monochloramine penetration will be compared, and the impact of disinfectant penetration on viability of biofilm will be discussed.

Improving Compliance with the Stage 2 Disinfection Byproducts Rule in Oklahoma

EPA's Strategic Plan establishes a breakthrough measure to improve compliance at community water systems by 25% before September 30, 2022. One drinking water rule that's hindering the achievement of this measure is the Stage 2 Disinfection Byproducts Rule. Many water systems, especially those in areas with high natural levels of dissolved organic carbon in their source water, face a short- and long-term compliance dilemma: increase chlorination to prevent microbial contamination of drinking water in the short-term and risk the long-term health impacts of harmful byproducts that form as a result of the disinfection practices. This presentation introduces a pilot project that's currently underway in Oklahoma to assist 31 community water system operators who are facing this dilemma and will include a discussion on diagnostic monitoring approaches and compliance strategies.

Presented by **David G. Wahman, Ph.D., P.E.**

Dave is a research environmental engineer with EPA's Office of Research and Development, Center for Environmental Solutions and Emergency Response where his research focuses on disinfectant chemistry, disinfectant biofilm penetration, and distribution system water quality issues, including nitrification. He is a registered Professional Engineer with over 24 years of experience. Dave has a B.S. in civil engineering from Rose-Hulman Institute of Technology and an M.S.E. in environmental and water resources engineering and a Ph.D. in civil engineering from The University of Texas at Austin. Following graduation, he conducted a postdoctoral fellowship at EPA before accepting a permanent position.

Presented by **José G. Rodriguez and James R. Brown**

José Rodriguez is an environmental engineer with EPA's Region 6 Drinking Water Section. During his more than 35 years with EPA, he also worked in the Drinking Water Enforcement Program and the U.S./Mexico Border Infrastructure Program before returning to the Drinking Water Section in 2013. José has a B.S. in civil engineering from Texas A & I University (now Texas A&M – Kingsville).

Jim Brown manages EPA's Safe Drinking Water Branch in Region 6. During his more than 35 years with EPA, he also worked in the Resource Conservation and Recovery Act program on groundwater monitoring, site characterization methods, and the statistical analysis of water quality data; and in the Office of International Affairs where he co-managed an environmental improvements project in the Ural Mountains region of Russia. Jim has a B.S. in geology with a minor in mathematics from Indiana University and an M.S. in environmental science and engineering from Virginia Tech.

Registration: attendee.gotowebinar.com/register/940506163878541839

Who should attend?

State primacy agencies, Tribes, community planners, technical assistance providers, academia, and water systems interested in issues facing community water systems and solutions to help solve them.

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epa.gov/water-research/small-systems-monthly-webinar-series



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