EPA's Office of Research and Development and Office of Water invite you to a **free webinar**

Harmful Algal Blooms: Treatment, Risk Communications Toolbox, and Management Plans

A certificate for one continuing education contact hour will be offered for this webinar

Tuesday, June 27, 2017
2:00 to 3:00 pm EST*

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

Cyanotoxin Risk Management for Drinking Water Systems

Harmful algal blooms (HABs) and cyanotoxins are a growing concern worldwide. HABs producing cyanotoxins can pose a risk to public health through multiple routes of exposures including drinking water. Proactive planning can prepare public water systems to manage risks from these events. EPA has developed multiple tools to facilitate proactive planning including the support document Recommendations for Public Water Systems to Manage Cyanotoxins in Drinking Water, the Cyanotoxin Management Plan Template and Example Plans. These tools provide information for preparing for a bloom and mitigating the effects of a bloom including monitoring, treatment, and communication activities–including a fillable template to facilitate the risk plan development process. EPA has also developed multiple other sources of information and tools that can be used to support the development of a cyanotoxin risk management plan.

Presented by Hannah Holsinger – EPA's Office of Water (OW). Hannah is a physical scientist and current cyanotoxin team member for the drinking water program within EPA's Office of Water, Office of Ground Water and Drinking Water (OGWDW). In addition to her cyanotoxin work in OGWDW, she works on the microbial Contaminant Candidate List, and has previously worked on the Endocrine Disruptor Screening Program and the *Legionella* support document on treatment technologies for premise plumbing. Hannah has a B.S. in Biological Sciences with a second major in Food Science and Technology from Virginia Tech; and a Master of Public Health, focusing on environmental health, from the University of Kentucky.

Cyanobacteria Treatment Options - Focus on Permanganate and Powdered Activated Carbon

This presentation will begin with a brief overview of drinking water treatment options for cyanobacteria and their toxins. The treatment discussion will focus on the impacts of permanganate addition to suspensions of toxin-producing Microcystis aeruginosa, followed by powdered activated carbon (PAC) addition. Results will be presented that show changes in toxin concentrations, chlorophyll-a concentrations and cell membrane integrity.

Presented by Nick Dugan – *EPA's Office of Research and Development (ORD).* Nick is an environmental engineer with EPA's Office of Research and Development, National Risk Management Research Laboratory in Cincinnati, Ohio, where he specializes in drinking water treatment. In addition to his work with cyanobacteria and cyanobacterial toxins, he has performed treatment studies to evaluate the control of cryptosporidium, nitrate, perchlorate, pesticides, and disinfection byproduct precursors. Nick has a M.S. in Environmental Engineering and a B.S. in Civil and Environmental Engineering from the University of Cincinnati, and a B.A. in Economics from Carleton College.

Registration: https://attendee.gotowebinar.com/register/5095106479939257346

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.

Looking for more webinars?

This webinar is part of EPA's monthly series: *Challenges and Treatment Solutions for Small Drinking Water Systems*. A webinar will be held each month in 2017.

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