Region 5 and Neighboring States' Visit
to US EPA Cincinnati Facility
February 2, 2018

Andrew W. Breidenbach Environmental Research Center (AWBERC)
26 W. Martin Luther King Drive
Cincinnati, OH 45268

DRAFT AGENDA (January 24, 2018)

8:00 am **Registration in Front Lobby off of the Main Circle Drive**
US EPA representatives will meet you in the lobby for registration, where you will receive your name tag and meeting materials, and lunch money will be collected.
Lisa Matthews, Senior Advisor and State Liaison, US EPA (EPA) Office of Research and Development (ORD)

Meeting will be held in AWBERC Facility, Conference Rooms 130/138

8:15 am **Welcome and Introductions**
- *Chris Robbins, Acting Deputy Assistant Administrator for Management, EPA ORD*
- *Craig Butler, Director, Ohio EPA*
- *Ken Wagner, Senior Advisor to the Administrator for Regional and State Affairs, EPA*
- *Ed Chu, Acting Deputy Regional Administrator, EPA Region 5*

8:30 am **US EPA Cincinnati Science and Technical Capabilities Overview**
Jennifer Orme-Zavaleta, Principal Deputy Assistant Administrator for Science, EPA ORD

8:50 am **States' Perspectives/Topics of Interest**
States present will informally talk about some of the big problems/issues they are facing as well as any related science needs.
- Illinois EPA (invited)
- Indiana DEM
- Kentucky DEP
- Michigan DEQ
- Ohio EPA
- Pennsylvania DEP
- West Virginia DEP
- Wisconsin DNR

10:00 am **Break**

10:15 am **Drinking Water** (Pb and also Mn, Sr and brominated DBPs)
- State perspective (Bruno Pigott, Indiana DEM)
  States will tee up issues for the topic sessions, and if possible, give examples from their state's experiences.
- EPA research (Tom Speth)
- Roundtable discussion

11:00 am **Algal Blooms**
- State perspective (Craig Butler, Ohio EPA)
- EPA research (Nick Dugan)
- Roundtable discussion

11:30 am **Innovations in Microbial Water Quality: Recreational waters case study**
- State perspective (Matthew Diebel and Bill Phelps, Wisconsin DNR)
- EPA research (Kevin Oshima)
- Roundtable discussion

12:00 pm **Working Lunch**
Order in from Panera, self-pay

12:30 pm **Diagnosing and Understanding Elevated Temperature "Hot" Landfills**
- State perspective (Craig Butler, Ohio EPA)
- EPA research (Thabet Tolaymat)
- Roundtable discussion

1:00 pm **Facility Tour**

1:00 **Transit**

1:05 **Recreational Waters Laboratory**
- Coliphage
- Rapid molecular methods for general fecal indicator bacteria
- Microbial source tracking

1:25 **BioSuite**
- Legionella research

1:35 **Transit**

1:40 **Drinking Water Pilot Plant**
- Drinking water disinfection
- Lead and Copper Rule, pipe loop and home plumbing systems
- Demo of EPANET modeling system

2:00 **Transit**

2:05 **Advanced Materials and Solids Analysis Resource Core (AMSARC) Lab**
- Lead service line corrosion control research (Flint, MI)
- Lead pipe scale analysis
- Patented lead tap sampling device

2:30 pm **Break**

Return to AWBERC Facility, Conference Rooms 130/138

2:45 pm **PFAS**
- State perspective (Kathy Shirey and Kirby Shane, Michigan DEQ)
- EPA research on analytical methods, toxicity & treatment technologies (Chris Impellitteri)
- Roundtable discussion

3:30 pm **Recap today's discussion and next steps**
Jennifer Orme-Zavaleta and Chris Robbins, EPA ORD

4:00 pm **Adjourn**

Cincinnati Facility
EPA's laboratory in Cincinnati is a major federal facility that includes a large ORD presence. Scientists in Cincinnati conduct a wide range of environmental and public health research. ORD activities have significant impacts on the Greater Cincinnati region—which includes southwest Ohio, northern Kentucky and southeastern Indiana—by advancing science, positively impacting the economy, and contributing to the local community.

Recreational Waters Laboratory
This tour stop will showcase ORD research in support of microbial recreational water quality criteria. This work includes efforts to develop the science needed to support potential criteria using coliphage (viruses that infect E. coli) as an improved indicator for human viruses, advances in rapid qPCR-based methods for general fecal indicator bacteria, and the development of fecal source tracking methods that can identify sources of fecal contamination. (National Exposure Research Laboratory and National Risk Management Research Laboratory)

BioSuite
ORD's BioSuite is a Biosafety Level 2 plus laboratory equipped with enhanced controls to allow research on pathogenic organisms and their surrogates. The tour stop will provide an overview of the safety features that are necessary to conduct research with infectious organisms, as well as highlight the current research that ORD's National Homeland Security Research Center is conducting on Legionella to better protect public health.

Drinking Water Pilot Plant
EPA's state-of-the-art drinking water pilot plant represents a scaled-down version of a conventional water treatment plant. The pilot plant is designed to reflect conditions of a full-scale system for the purpose of studying the impact of drinking water treatment changes, effectiveness for the removal of contaminants, and the addition of new unit processes and practices. Pilot testing research can optimize water quality treatment variables and avoid implementation of strategies that may not work for unforeseen reasons. This tour stop will feature research on biological and conventional drinking water treatment and small, pilot-scale drinking water treatment apparatus; lead service line studies as relevant in Flint, MI; and a demo of EPANet, a distribution system modeling tool.

Advanced Materials and Solids Analysis Resource Core (AMSARC) Laboratory
The AMSARC laboratory is the foundation for the Agency's solids and surfaces analysis capabilities. The stop will feature state-of-the-art analytical equipment that supports various EPA projects, including water quality research, corrosion control, green chemistry, bacteria and nanomaterials characterization, arsenic removal from drinking water, and many others. This tour stop will feature advanced instrumentation for research related to corrosion of lead service lines in Flint, MI. Images and corroded pipe cross-sections will be on display. National Risk Management Research Laboratory scientists will also discuss recently patented lead tap sampling device.