Message

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Sent: 9/28/2017 7:24:55 PM
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Subject: ORD Weekly September 28 2017

Hot issues

Three new FRMs Approved: A core element of ORD's Emissions and Measurements program is designating Federal Reference Methods (FRMs) for measuring criteria pollutants in ambient air. These measurements are used to inform attainment/nonattainment decisions and for a wide range of analyses. Three new FRMs for measuring concentrations of $PM_{2.5}$, PM_{10}, and $PM_{10\text{-}2.5}$ in the ambient air were recently designated.

Superfund: Researchers Seek Remediation Solutions at Abandoned Mine

ORD researchers are installing demonstration test plots at the abandoned Formosa Mine Superfund site near Riddle, OR, as part of EPA's effort to find remediation solutions for toxic residuals at the decommissioned copper and zinc mine. The project will examine the efficacy of an in situ remediation technique to facilitate the restoration of the soil-stabilizing native plant community. Collaborators in the project include the U.S. Department of Agriculture's Coastal Plains Soil, Water, and Plant Research Center; ORD; and EPA Region 10.

Region 5 Flint Enforcement Team Meeting

On September 20 ORD participated in the Region 5 monthly Flint Enforcement Team call. Many activities are on hold in Flint while the City continues to deliberate on its permanent source of drinking water, but there was a discussion of how EPA can help with Flint's upcoming corrosion control study which will use the pipe loop system built by ORD. ORD scientists will be traveling to Flint next week to assist with the installation of four new lead service lines into the pipe loop, provide training to the City and its contractor, and transition operation and maintenance of the loop to the City and its contractor.

PFAS

On October 11 ORD staff will participate in a meeting with the North Carolina Department of Health and Human Services, NIH, CDC, and the New Jersey Department of Environmental Protection to discuss what is known and unknown about the toxicity and exposure potential for per- and polyfluoroalkyl substances (PFAS). This meeting will allow for each group to provide updates on the projects they are working on that will fill the knowledge gaps.

Upcoming Events

Employee Conversation on Scientific Integrity

On September 28, Kevin Teichman, the Acting Scientific Integrity Official, will host the 2017 Employee Conversation on Scientific Integrity. He will summarize the 2016 Annual Report and findings from the 2016 employee survey. He will be joined by Steve Alderton, EPA's Whistleblower Ombudsman.

2017-2018 SBIR Phase I Solicitation Webinar

ORD is hosting an SBIR Phase I solicitation webinar on Sept. 28 at 2 p.m. The solicitation is scheduled to open for proposals in October 2017. The webinar will highlight this year's topics and how to apply for an SBIR contract. The

program purpose is to support eligible small businesses in the development and commercialization of innovative environmental technologies.

Superfund support: Groundwater sampling in Montana
During the week of October 2nd, ORD will conduct groundwater sampling at the East Helena Superfund Site. Groundwater samples will be analyzed for a suite of metals, metals speciation, anions, and stable isotope ratios. The data will be used to evaluate the long-term performance of a pilot groundwater remediation technology used for arsenic contamination at the site and to evaluate co-contaminant behavior of arsenic and selenium in groundwater. This project is a collaborative effort with Region 8 and helps stakeholders understand the factors that govern arsenic and selenium mobility and attenuation in groundwater and methods for groundwater treatment. The East Helena Superfund site is the location of a former lead and zinc smelter which deposited heavy metals, arsenic, and other hazardous chemicals into the soil, surface water, and groundwater of the Helena Valley.

Perchlorate
On October 2, ORD will participate in a second interagency discussion on the draft charge for OW's upcoming peer review of their draft *Proposed Approaches to Inform the Derivation of a Maximum Contaminant Level Goal (MCLG) for Perchlorate in Drinking Water*. A meeting to discuss comments on the draft document will be held at a later date. Representatives from OMB, CEQ, OSTP, HHS, DoD, FDA, SBA, NASA, and DoE are expected to participate.

American Chemistry Council Long-Range Research Initiative Strategic Science Team
On October 3 ORD staff will participate in an American Chemistry Council (ACC) Long-Range Research Initiative Strategic Science Team (LRI SST) meeting on their exposure research activities. ORD will provide an overview of the high-throughput exposure research, with the goal of helping LRI SST members identify LRI projects that have the potential to make the most impact. These projects will contribute to the strategic goals of improving the understanding of consumer exposures and advancing risk-based decision making in product stewardship and TSCA.

OMB Meeting on IRIS. On October 3, ORD is scheduled to provide an update on the IRIS Program to the Office of Management and Budget as a follow up to our organizational briefing last week.

Last week Highlights
ORD/OW Discussion: Nutrient Reduction Prize
ORD and OW met to discuss the Nutrient Reduction Prize Competition. This competition is being developed by an interagency partnership with EPA, USGS, NOAA and USDA in an effort to support management of excess nitrogen in U.S. waters. The goal of the competition will be to identify new treatment solutions that improve nitrogen removal and management in a range of water systems. Specifically, this competition will advance the efficiency and feasibility of affordable nitrogen reduction in water systems adversely impacted by nutrient pollution that are not served by current treatment systems.

Nutrient Sensor Action Challenge
On September 20, ORD received 11 submissions for Stage 1 of the Nutrient Sensor Action Challenge. Interdisciplinary teams from 9 states and 5 EPA regions submitted plans for using low-cost nutrient sensors in state and local nutrient pollution management decisions. Up to 5 winning applications will be selected for Stage 1 prizes. Winners will each receive $10,000. In addition, the winners will be recognized and be invited to participate in webinars and workshops which will provide information and guidance for participating in Stage 2, launching in Spring of 2018.

Video About EPA's Water Security Test Bed Receives R&D Award at WEFTEC
ORD's Water Security Test Bed (WSTB) video has won the Research & Development (R&D) category of the Interactive Knowledge Exchange (IKE) at the 2017 WEFTEC. WEFTEC, a conference and tradeshow for water technology, is recognized as the largest annual water quality technical conference and exhibition. The WSTB, constructed in 2013 and located at Idaho National Laboratory (INL), replicates a section of a typical municipal drinking water piping system. It enables EPA to support the water sector's priority need to test in full scale any treatment technology or tool to inform response and recovery. This video highlights the growing and strategic use of video by the Homeland Security Research Program as one means of translating our research to various audiences.

Underground Transport Restoration (UTR) Project Wraps up with Huge Impacts
The final quarterly project meeting for the Underground Transport Restoration (UTR) Project was held this week in RTP. EPA staff participated in the meeting to highlight the accomplishments in developed capabilities for sampling, decontamination, and waste management challenges associated with an anthrax spore release in underground transport systems. This meeting concludes the four-year, joint project between EPA and the Department of Homeland Security dedicated to developing capabilities to support the rapid return to service of subway systems after a biological agent incident. Presentations by EPA, Argonne National Labs, Sandia National Labs, Lawrence Livermore National Lab, and MIT Lincoln Labs discussed capabilities developed through lab testing, model development and field testing sponsored by the UTR project. These efforts included close coordination with the Bay Area Rapid Transit (BART) and New York City Metropolitan Transportation Authority (NYC MTA) to understand remediation challenges after the release of anthrax spores in a subway system, developing sampling and decontamination capabilities, and devising plans to aid the rapid return to service of the systems. Several of these lab-developed capabilities were transitioned to field-proven methods during the CMAD-led decontamination of a subway rail car and the remediation of a mock subway station and tunnel at Ft. AP Hill, VA a year ago. The results from this project will help prepare our urban centers for rapidly returning their transportation systems to operation following a biological release.

Atmospheric Water Generator CRADA
ORD is working with OGC to finalize a Cooperative Research and Development Agreement (CRADA) with a company to facilitate the potential use of atmospheric water generators (AWGs) to expand the availability of water during interruptions of service such as water shortages or water contamination events. The CRADA will focus on assessing the quality of the water generated and any potential health risks that it might pose. In addition, the CRADA will aim to identify scenarios where AWGs could be viable water sources.

Webinar presentation to New Jersey Water Monitoring Council
On September 20 ORD presented a webinar, "EPA Current Research on Cyanotoxins in Fish Tissue," to the New Jersey Water Monitoring Council (NJWMC) during their meeting on Fish and Shellfish Tissue Monitoring. The NJWMC is a statewide partnership that addresses the biological, chemical, physical, and ecosystem aspects of water monitoring, including surface and ground waters, freshwater, estuarine, and marine environments in New Jersey. Members include representatives of the NJ Department of Environmental Quality, NJ Department of Health, NJ Sea Grant Consortium, NJ Water Supply Authority, Delaware Basin Commission, EPA Region 2, USGS, the Interstate Environmental Commission, NOAA, universities, and local watershed associations.

Sharing Technology and Methods with States
The Region 4 Science and Technology Liaison and the Director of the Site Characterization and Monitoring Technical Support Center recently coordinated assistance to provide state scientists in New Jersey, Oregon, and Delaware with information on how to use EPA's updated ProUCL software. ProUCL provides statistical methods and graphing tools to address environmental sampling and statistical issues at Superfund sites.

Small Systems Monthly Webinar Series to highlight the DeRISK National Small Systems Research Center work. On September 26, the webinar attracted approximately 700 attendees. Scott Summers and Chad Seidel from the University of Colorado Boulder highlighted a decision support methodology developed by the DeRISK Center to address decision making challenges by deciding what criteria are most important to stakeholders and providing an easy way to compare technology alternatives to each other with respect to each criterion.

Baltimore Urban Waters Partnership Meeting
On September 27, ORD and Region 3 along with members of the Village Blue project team, attended the Baltimore Urban Waters Partnership Meeting at the USGS Science Center in Baltimore, MD, to present EPA's work to visualize and interpret real-time sensor and weather data. Local stakeholders, including Blue Water Baltimore, the National Aquarium and the City of Baltimore attended the meeting.