May 9, 2018, FRTR Meeting Announcements

Thank you for your interest in the Federal Remediation Technologies Roundtable (FRTR). The last general meeting, held on May 9, 2018, featured presentations on "Lessons Learned from Technical Challenges to Achieving Cleanup Goals." To view the meeting presentations, please visit https://frtr.gov/meetings1.htm. Below are the agency announcements presented at the general meeting.

"FRTR Presents..." Webinar Series

This Spring, FRTR sponsored a two-part webinar series based on the Fall 2017 general meeting topic, "Remediation Technologies for Radionuclides and Heavy Metals in Soil, Ground Water and Sediments." Speakers from the meeting delivered updated versions of their presentations, which were recorded and archived on Clu-In.org at https://clu-in.org/archive/frtrpresents/. Session 1 featured presentations on radionuclides and Session 2 focused on heavy metals. Webinars based on the Spring 2018 meeting will be delivered later this year. When available, information will be posted at https://clu-in.org/training/#upcoming.

U.S. Air Force Announcements

Technology Demonstration-Validation Project News

The AFCEC Broad Agency Announcement or BAA remediation projects invest in technology transfer and enhance traditional restoration efforts across the AFCEC restoration portfolio while having substantial immediate impacts at more challenging sites.

AFCEC BAA e-mail: afcec.czte.baa@us.af.mil

AFCEC BAA web site: http://www.afcec.af.mil/Home/Environment/Technical-Support-

Division/Environmental-Restoration-Technical-Support-Branch/BAA/

Highlights of Recently Completed Projects

- Determining Preferential Pathways for Complex Sites. Demonstration site: Air Force Plant 4, Texas. High resolution hydrostratigraphic and contaminant flux profiling were performed to understand migration pathways and remediation potential. Half-day training session provided to AFCEC. Final report and technology transfer materials are available.
- Concurrent In Situ Cometabolic Biodegradation of 1,4-Dioxane and Chlorinated Ethenes Using Recirculation. Demonstration-validation site: Former McClellan AFB, California. Draft report and technology transfer deliverables will be finalized and made available soon.
- Three-Dimensional Characterization of Preferential Flow Paths by Geophysical and Hydraulic Tomography. Demonstration site: Air Force Plant 4, Texas. Recently completed the validation phase was completed recently. Final deliverables are being prepared. A half-day training session for AFCEC is scheduled for fall 2018.

Highlights of In-Progress Projects

Characterization of Preferential Contaminant Pathways in Fractured Rock. Demonstration site:
 Edwards AFB, California. Initial phase identified potential pathway of interconnected fractures using
 electrical resistivity (ER) tomography. The Phase II demonstration will include tracer tests along this
 pathway. Temporal-spatial tracer movement will be tracked by downhole and surface ER
 tomography and water sampling.

- Natural Source-Zone Depletion of Mixed TCE-BETX DNAPL in Fractured Rock. Demonstration site: Air Force Plant 4, Fort Worth Texas. The Phase I demonstration comprises one year of DNAPL and temperature-profile monitoring to evaluate volatilization and natural depletion. The Phase II demonstration will implement low-temperature heating to enhance depletion.
- Ex-Situ Remediation Technologies for PFAS in Water. The laboratory and design phase of three
 projects evaluating different technologies is nearing completion. The field-scale demonstrationsvalidation phase will target three different Air Force installations.

New Projects (awards pending May-June 2018)

- Field-Scale Demonstration and Validation of Activated Carbon for In Situ Sequestration and Degradation of Chlorinated Organic Contaminants in Groundwater.
- In Situ Remediation for Lead and Polynuclear Aromatic Hydrocarbons (PAHs) in Wetlands While Minimizing Impacts.
- Selecting and Implementing High-Resolution Site Characterization (HRSC) Technologies at Complex Sites.

U.S. Department of Interior (DOI) Announcements

The Federal Mining Dialogue (FMD) has a new chair, Larry Zaragoza, EPA. FMD has reached out to ASTSWMO and other associations to explore possible opportunities to share information on AMLs.

DOI has been looking at improving their cleanup processes under the Contaminated Sites Initiative. Some of the early efforts have included building a comprehensive inventory of contaminated sites on DOI managed lands, a cleanup portal to share information with internal staff. DOI also is preparing guidance on cleanup prioritization.

DOI is exploring which agencies have service centers that the Department might be able to tap into in the future. DOI is looking at options to assist bureaus in managing cleanups that include project management and contracting.

U.S. Environmental Protection Agency (EPA) Announcements

Administrator's Superfund Task Force

Administrator Pruitt's May 2017 memo established the Superfund Task Force to "streamline and improve the Superfund program." The Task Force report was released in July 2017 with 42 recommendations with many sub-tasks.

- Five Overarching Goals
 - Expediting Cleanup and Remediation
 - Re-Invigorating Responsible Party Cleanup and Reuse
 - Encouraging Private Investment
 - Promoting Redevelopment & Community Revitalization
 - Engaging Partners and Stakeholders
- Major Accomplishments to Date
 - Developed Administrator's Emphasis List (AEL) of 21 sites targeted for immediate, intense action (12/17) and updated (4/18)
 - Released new Superfund Task Force Website with accomplishments and public participation opportunities (1/31), https://www.epa.gov/superfund/superfund-task-force

- Published Redevelopment Focus List of Superfund sites to direct interested developers/potential owners to sites with redevelopment potential (1/18)
- Released Superfund Human Exposure Dashboard with status of EPA's site-wide human exposure environmental indicator for each NPL and Superfund Alternative Approach (SAA) site (1/31)
- Published Quarterly Report for First and Second Quarters FY 2018 (1/18 & 5/18)
- Administrator participated in decision-making process for eight sites with planned remedies over \$50M
- Deleted/partially deleted six sites in FY 2017; 10 planned for 2018 with six completed as of 5/1/18
- Issued guidance on disbursement of special account funds to entities performing cleanup work at Superfund sites (3/18)
- Issued memorandum to spur investment and address liability concerns for third parties at Superfund sites (4/18)
- Published two technical documents to further use of in situ remediation technologies (4/18)
- Presented several technical webinars (archives available on Clu-in.org)
- Upcoming Activities
 - Technical Webinars
 - May 21, 2018, 1-2 pm Eastern: *Combined Remedies: Adaptive, Flexible, Attentive Use of the Right Tools*. Details on https://clu-in.org/tio/CombRem 052118/.
 - June 25, 2018, 1-2:30 pm Eastern: In Situ Activated Carbon-Based Technology for Groundwater Remediation: Overview, Best Practices, and Case Studies. Details and registration at https://clu-in.org/tio/AC/.

National Federal Facility Excellence in Site Reuse

The Administrator announced the agency's first annual "National Federal Facility Excellence in Site Reuse" award winners in a news-release that was published on Wednesday, May 2, 2018, followed by personalized, congratulatory emails from the FFRRO Acting Office Director. In addition, several tweets were released. The award was established to recognize the teams that have supported the reuse and restoration of federal facility sites through outstanding efforts. The agency is very pleased with the overwhelming response and quality of nominations received and wants to further highlight the many success stories by showcasing them on the FEDFacts website. The awardees were selected based on reviews and scores from a team of external reviewers and an EPA judging panel. The award was divided into four categories and the awardees are:

- NPL BRAC: Former McClellan Air Force Base, Sacramento County, California
- Non-NPL BRAC: Naval Air Station Glenview, Illinois
- NPL: Joliet Army Ammunition Plant, Illinois
- Non-NPL: Tysons Valley Powder Farm (USACE), Missouri

Federal Facilities RPM Training and Certification

In recognition of issues that have been brought to FFRRO, EPA is looking for opportunities to encourage a higher level of understanding of the Superfund Process at federal facilities. FFRRO is in the process of developing of a Federal Facilities RPM Certification Program. The main objective of the Federal Facility RPM Certification Program is to improve the skill set necessary for project managers from our various agencies to effectively manage federal facilities, strengthen relationships across agencies, and increase understanding of regulations and policies across agencies. The intended participants for the program are EPA federal facility RPMs and project managers from other federal agencies, State government, and

Tribal groups. The next CERCLA Education Center (CEC) Federal Facility RPM courses are being offered in San Francisco on May 15-17 and in Atlanta on June 12-14.

Federal Agency Hazardous Waste Compliance Docket

Update #33 was published in the Federal Register on May 8, 2018. This update included five additions, two deletions, and one correction.

Intergovernmental Data Quality Task Force (IDQTF)

An IDQTF workgroup is developing a UFP QAPP template for munitions investigation and cleanup. Draft worksheets were recently sent out for review and received many comments. A more formal review will occur in a few months followed by a field test.

U.S. Geological Survey (USGS) Announcements

The USGS Agency Announcements can be found in the links below for the three USGS mission areas represented at the FRTR:

USGS Energy Resources Program Newsletter

https://mailchi.mp/usgs/erp-newsletter-spring2018?e=3ee62ffae9

USGS GeoHealth Newsletter

https://www2.usgs.gov/envirohealth/geohealth

USGS Water Mission Area News

https://www.usgs.gov/science/mission-areas/water-resources?qt-

mission areas I2 landing page ta=7#qt-mission areas I2 landing page ta

U.S. Navy Announcements

PFAS Update

The Navy has implemented a proactive strategy over the past year to address potential drinking water exposure for PFAS on off-base private wells. We are currently initiating basewide PA/SIs on installations with potential PFAS. In order to also help address the PFAS issue, the Navy actively participates on the ITRC PFAS team and helped finalize ITRC fact sheets. The Navy is also helping to develop the ITRC PFAS Technical/ Regulatory guidance. More information on the Navy's comprehensive strategy can be found on the Assistant Secretary of the Navy's website at http://www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

2018 Department of the Navy (DON) Environmental Restoration Program Manual (NERP Manual)

The NERP Manual has been finalized and is available on the NAVFAC Environmental Restoration and BRAC (ERB) website at htt://www.navfac.navy.mil/go/erb. It is a comprehensive policy and guidance tool for RPMs and other professionals working to support DON Environmental Restoration. The manual reflects current policy and guidance and provides additional information in areas such as emerging contaminants, munitions response, vapor intrusion, and radiological cleanup.

Open Environmental Restoration Resources (OER2) Webinars

Since the May 9 FRTR Meeting, NAVFAC has held two new OER2 Webinars. All presentations are recorded, and past webinars are available for download at http://www.navfac.navy.mil/go/erb

<u>Munitions Response Program Update and Lessons Learned</u> - Presented on: April 25, 2018. This topic presented updates in the form of case studies and lessons learned from completed and ongoing projects around NAVFAC including Adak, Vieques, Mare Island, San Diego, Pearl Harbor, and Guam. The session included an update on the Defense Advanced Geophysical Classification Accreditation Program (DAGCAP) and discussion of using the vertical conceptual site model (VCSM) on munitions projects.

Rehabilitation and Maintenance of Pump and Treat Systems - Presented: January 31st, 2018. Synopsis: One of the common themes that emerged from the Phase 1 Portfolio Optimization Review of Navy's IRP Sites is that the Navy has pump and treat system infrastructure that needs to be maintained and rehabilitated for continued protection of downgradient resources. This webinar provided an overview of key design aspects and maintenance practices needed to achieve optimal performance for extraction and injection wells.

Munitions Response Quality Assurance Spreadsheet (August 2017)

The NAVFAC Munitions Response (MR) Quality Assessment Spreadsheet is a tool that Remedial Project Managers can use to assess the quality of their unexploded ordnance (UXO) contractor's MR actions and to help to ensure that contractual requirements are met. The information includes a series of questions to ask throughout the performance of a project to help improve quality for both traditional MR projects and advanced geophysical classification (AGC) projects. It is available at www.navfac.navy.mil/go/erb

2018 Remediation Innovative Technology Seminars (RITS)

RITS is open to Navy RPMs and their contractors and regulatory partners working on Navy projects. www.navfac.navy.mil/go/erb

Six topics will be covered during the two-day seminar:

- Applying Environmental Sequence Stratigraphy to Unlock the Clues Beneath Your Site and Improve the Conceptual Site Model
- Plume Persistence: Evaluating the Role of Matrix Diffusion
- PFAS Remediation: Technologies, Guidance, and Application
- Vapor Intrusion Update: Tools, Technologies and Trends
- Sustainable Long-Term Management Strategies at Landfill Sites
- Assessing and Managing Sediment Sites with Fish Consumption Risk

RITS dates/locations:

- May 16-17: Jacksonville, FL
- May 21-22: Washington, DC
- May 23-24: Norfolk, VA
- June 4-5: San Diego, CA
- June 6-7: Silverdale, WA
- June 12-13: Honolulu, HI

Nuclear Regulatory Commission (NRC) Announcements

Waste Management 2019 Symposia Topical Session for Oral Presentations and Papers

Session # 7.13: Modeling Applications and Risk/Dose Analysis in Environmental Remediation

Lead Organizer: Boby Eid/U.S. NRC

This "topic" is soliciting abstracts for presentations on all aspects of modeling or calculations used for environmental applications, including flow and transport modeling to support remedy evaluation and design, risk assessment to support site decisions, dose analysis, and monitoring integration. Aspects to be discussed include data analysis and integration, uncertainty analyses and decision support, and the use of simulations to study physical and biogeochemical phenomena to support site decisions and engineering design. Abstracts are also invited on risk and dose analysis <u>for actual cases using models or</u> calculations for cleanup activities and waste management.

The Waste Management 2019 Symposia will be held in Phoenix, Arizona, March 3-7, 2019. The deadline for submission of abstracts is August 10, 2018; the deadline for submission of full paper is November 2, 2018.

Point of Contact: Boby Eid (boby.abu-eid@nrc.gov)

NRC Formal Training Course on Geochemistry Modeling

<u>Note to Federal Agencies:</u> There are only five seats reserved for all Federal Agencies staff other than NRC (First come first serve, showing the need for training, and nomination from the specific federal agency). The course will be hands-on training and free of charge; trainees will be responsible for paying their own transportation, per diem, and accommodation, if needed.

This lecture-based course provides training associated with the use of the *PHREEQC3 Geochemical modeling Code* developed by the USGS. This code may be used to model the transport of radionuclides and related compounds in surface and subsurface soil and groundwater. This modeling may be used when evaluating the transport of radionuclides and materials associated with license reviews of uranium recovery facilities, and reactor and materials decommissioning activities, and licensing and operation of low-level waste management facilities.

The goal of this training course is to provide the student with a working knowledge of the *PHREEQC3* – *Geochemical Modeling Code* developed by the USGS. This code may be used to model the transport of radionuclides and related compounds in surface and subsurface soil and groundwater. This modeling code is useful when evaluating the transport of radionuclides and materials associated when performing license reviews of uranium recovery facilities, and reactor and materials decommissioning activities, and licensing and operation of low-level waste management facilities.

The training will be held August 28-30, 2018 from 8:00 am – 4:15 pm in the Professional Development

Center Computer Lab room 02-A08 at NRC HQ.
Course Designation: H430 Course ID: 193144

Length: 24.00 Source: NRC Professional Development Center

Credit Hours: 24.00 Contact Hours: 21.00

Point of Contact: Robert Prince (robert.prince@nrc.gov) or Boby Eid (boby.abu-eid@nrc.gov)