NAVFAC Naval Facilities Engineering Command

Technology Transfer Update

This e-mail is supported by NAVFAC's Alternative Restoration Technology Team (ARTT) to provide links to Technology Transfer (T2) tools and the latest information on policies, guidance, and training related to innovative technologies. The T2 topics highlighted in this issue will help support the ARTT's chartered goals of promoting the use of innovative technologies, removing barriers to implementing new technologies, and reducing cleanup costs, while remaining protective of the environment and human health.

Issue 138 February 2, 2016

NAVFAC Open Environmental Restoration Resource (OER2) Webinar Series - Call for 2016 Abstracts

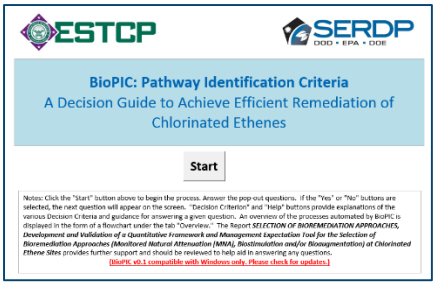
The OER2 Webinar Series is looking for presenters for upcoming webinars! This is a bi-monthly webinar series designed to reach out to the broad community of environmental professionals and to promote innovation and share lessons learned among the environmental restoration community. If you are interested, please send the following information to EXWC_T2@navy.mil:

- Title:
- Presenter(s):
- Abstract:

Presentations should be final and ready to present. Participation in the webinar is voluntary. Examples of past presentations include:

- Historical Radiological Assessments: The What, Why and How for Navy Remedial Project Managers
- Environmental Background Analysis and Case Study of Apra Harbor Sediments, Naval Base Guam
- Managing the Navy's Complex Groundwater Sites: Alternative Endpoints and Approaches
- NAVFAC Perfluorinated Compounds Guidance: Your Questions, Our Answers

ESTCP Tool for the Selection of Bioremediation Approaches at Chlorinated Solvent Sites



ESTCP has developed an easy-to-use tool called BioPIC to facilitate bioremediation decision-making based on site-specific physical and biogeochemical characteristics. This research project determined the relationship between biogeochemical parameters and degradation rates for known degradation pathways of chlorinated ethenes (primarily PCE, TCE, and daughter products). Data from 90+ sites was used to establish correlations between the naturally attained rate constant and the abundance of specific parameters. Associations were then established for parameters such as *Dehalococcoides* (Dhc) densities, reductase densities, dissolved oxygen, oxidation-reduction potential, magnetic susceptibility, Fe(II), Mn(II), methane, ethane, total organic carbon, and others. These associations were used to develop a quantitative framework and decision logic for the screening tool. Based on site-specific conditions, the tool will provide screening considerations to determine if monitored natural attenuation (MNA), biostimulation, biologically mediated abiotic reductive dechlorination, or bioaugmentation is the most appropriate remedial approach.

See the BioPIC tool and additional information at: https://www.serdp-estcp.org/Program-Areas/Environmental-Restoration/Contaminated-Groundwater/Persistent-Contamination/ER-201129

SERDP and ESTCP Webinar Series: Classification of Underwater Munitions

SERDP and ESTCP are conducting free webinars to promote the transfer of innovative, cost-effective and sustainable solutions. An upcoming webinar on February 25 will feature two speakers highlighting Department of Defense (DoD) efforts on the classification of underwater munitions. Dr. Aubrey España and Dr. Tim Marston from the University of Washington will discuss the interdisciplinary nature of detecting, classifying and remediating munitions found at underwater sites with a focus on the acquisition of raw acoustic sonar data, current models that simulate it, and the processing tools that are used to reduce the raw data to "data products." In addition, the speakers will talk about using these data products to train and test classification algorithms, how to estimate the performance of these algorithms, and recent efforts to use model results to optimize sonar performance.

Topic: Recent Advances in the Classification of Underwater Munitions near a Water-Sediment Boundary
Presenters: Dr. Aubrey España and Dr. Tim Marston, University of Washington
Date: February 25, 2016
Time: 9:00 AM PST | 12:00 PM EST
Please register at: https://serdp-estcp.org/Tools-and-Training/Webinar-Series

For questions or more information, please contact EXWC_T2@navy.mil or visit our Web page at: https://www.navfac.navy.mil/go/erb