HEADLINES

SERDP DOD • EPA • DOE

ESTCP

SPRING 2017

DoD's Environmental Research Programs

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ANNOUNCEMENTS

SERDP and ESTCP Continue Webinar Series - View Schedule

ESTCP Solicits Installation Energy Proposals for FY 2018 Funding - More

CALENDAR

April 6: SERDP and ESTCP Webinar - 1,4-Dioxane Impacts and Innovative Cleanup Technologies at DoD Contaminated Sites

April 6: FY 2018 ESTCP Installation Energy and Water Pre-Proposals due

April 20: SERDP and ESTCP Webinar – Solutions for Installations' Participation in Energy Markets

May 4: SERDP and ESTCP Webinar - Novel Coatings Systems for Use as High Performance Chemical Resistant Powder Topcoats

June 14: June 2017 SAB Meeting

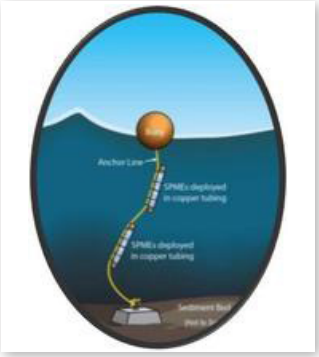
REGISTRATION OPEN FOR 2017 SERDP AND ESTCP SYMPOSIUM!

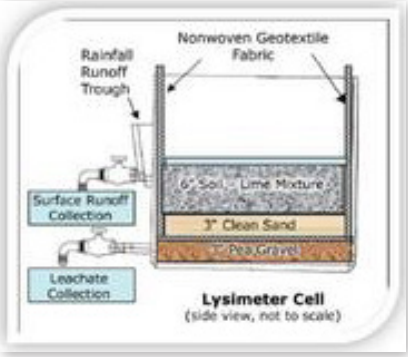
2017 SERDP ESTCP SYMPOSIUM Enhancing DoD's Mission Effectiveness

Registration is now open for the 2017 SERDP and ESTCP Symposium! The 2017 Symposium will highlight SERDP and ESTCP's recent efforts to enhance mission capabilities, reduce costs in times of increasing fiscal constraints, and improve environmental and energy performance. The Symposium brings together environmental and energy researchers and technology developers with the defense user and regulatory communities to showcase cutting edge environmental technologies and ideas. The 2017 Symposium will offer 16 technical sessions, a number of short courses, more than 450 technical poster presentations, and exhibitors from funding and partnering organizations. There will be a variety of networking opportunities for the more than 1,000 attendees from the military services; academic and research institutions; private sector technology and environmental firms; and Federal, state, and local regulatory and policy-making organizations. MORE

UPCOMING WEBINARS ON MUNITIONS CONSTITUENTS IN THE TERRESTRIAL AND UNDERWATER ENVIRONMENTS

The Department of Defense's (DoD's) testing and training ranges are a critical asset for the military. Maintaining these ranges is essential for mission-readiness, development, and testing new weapons systems. Unfortunately, testing and training introduces munitions constituents and heavy metals to surface soils. If these chemicals are transported to soil and groundwater, active ranges become affected. Due to the unique challenges presented by munitions constituents, SERDP and ESTCP have invested in research to identify and evaluate sources, characterize fate and transport, address contaminant migration to groundwater sources, improve technological monitoring, and assess potential ecological impacts. MORE





RELATED EVENTS

May 22-25: Battelle's Fourth International Symposium on Bioremediation and Sustainable Environmental Technologies (Miami, FL)

June 6-8: Prevent, Seek & Destroy Corrosion: US Air Force Corrosion Conference (Dayton, OH)

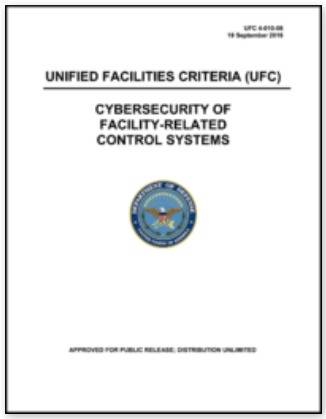
August 6-11: ESA Conference 2017 (Portland, OR)

August 15-17: Energy Exchange 2017 (Tampa, FL)

December 11-15: AGU Fall Meeting 2017 (New Orleans, LA)

CYBERSECURITY AND ITS IMPACT ON INSTALLATION ENERGY MANAGEMENT

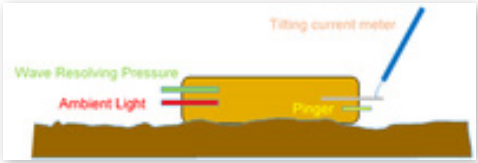
As the Department of Defense's (DoD's) facilities incorporate more networked systems as part of a transition to smart buildings, threat and vulnerability to cyber-attacks has increased making cybersecurity a critical requirement. Managing cybersecurity risk is a complex task that warrants the involvement of the entire organization. Cybersecurity risk management is a subset of the overall risk management process for all DoD acquisitions, which includes cost, performance, and schedule risk associated with the execution of all programs of record, and all other acquisitions of DoD. The risk assessment process extends to the logistics support of fielded equipment and the need to maintain the integrity of supply sources. ESTCP is working to address this problem by investing in efforts with objectives to mitigate the risk of cyber-attacks, thus allowing DoD operations to continue uninterrupted. MORE

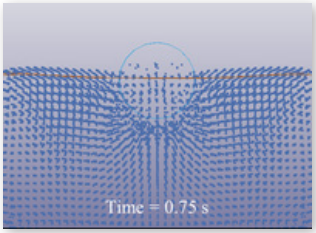

UNIFIED FACILITIES CRITERIA (UFC)

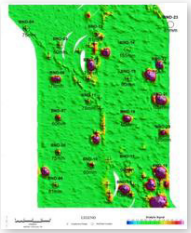
CYBERSECURITY OF FACILITY-RELATED CONTROL SYSTEMS

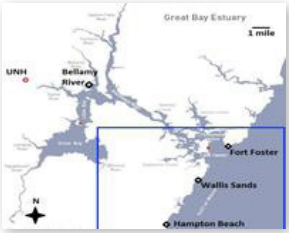
NEW SERDP UNDERWATER MUNITIONS MOBILITY PROJECTS

Five new FY 2017 Munitions Response projects related to underwater munitions mobility were approved last fall by the SERDP Scientific Advisory Board and are in the initial stages of their work. Three of these new projects will involve measurements of munitions mobility in various settings, one will focus on a computational model to predict the onset of mobility, and one will develop probabilistic representations of environmental conditions for sites of potential contamination. These projects are all designed to provide inputs or supporting data for the Underwater Munitions Expert System for Remediation Guidance being developed at the Johns Hopkins University Applied Physics Laboratory. MORE









STRATEGIC ENVIRONMENTAL RESEARCH AND DEVELOPMENT PROGRAM (SERDP)
ENVIRONMENTAL SECURITY TECHNOLOGY CERTIFICATION PROGRAM (ESTCP)

(571) 372-6565
www.SERDP-ESTCP.org
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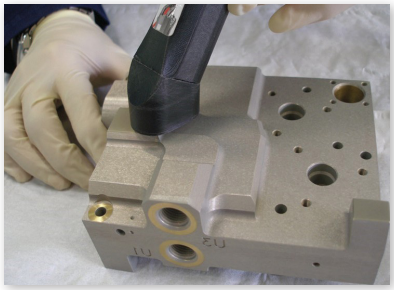
MANY BENEFITS OF UNDERSTANDING SOURCE-SINK DYNAMICS

At-risk species are those that are vulnerable to becoming listed as endangered or threatened under the Endangered Species Act. Populations are often spatially structured and understanding the effects of spatial structures such as sources and sinks can be critical for successfully managing at-risk species. SERDP is funding an effort attempting to understand the spatial structures of at-risk species populations. This project is studying the effects of sources and sinks within a bird population to determine growth or decline in the species. The project results have been beneficial to DoD natural resource managers because they indicate that sinks can be beneficial in systems with rapid population decline. DoD managers are using these insights to avoid the false assumption that sinks are always detrimental to populations. This insight allows the managers to weigh case-specific factors such as population size and volatility, rate of decline, inter-population movement, landscape configuration, and density dependence to make targeted and adaptive management decisions. MORE

CADMIUM-FREE ALTERNATIVES FOR BRUSH PLATING REPAIR OPERATIONS

Cadmium (Cd) has been widely used in the aerospace industry and the DoD due to its excellent corrosion resistance, adhesion, and lubricity characteristics. Cadmium brush electroplating is used to repair worn and corroded parts, in many cases while the components are still installed on the aircraft. However, Cd is a toxic metal and human carcinogen, and is heavily regulated in the United States and the European Union. ESTCP is funding an effort to demonstrate two commercial off-the-shelf technologies that may be able to replace cadmium brush plating. The Dalistick® Station is a mobile electroplating system that enables selective electrochemical treatments without generating any leakage of electrolytes during the plating process. The Zinidal Aero Zinc-Nickel Solution provides sacrificial corrosion protection to steels, and does not require the hydrogen embrittlement relief baking when plating on high strength steels. MORE