

TECHNOLOGY TRANSFER (T2) UPDATE

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NAVFAC Fact Sheet on Using REMChlor-MD to Assess the Impact of Matrix Diffusion on Chlorinated Solvent Sites

The restoration of groundwater at chlorinated solvent sites poses a significant challenge due to matrix diffusion. Matrix diffusion is the process by which contaminants in groundwater initially migrate from areas of higher concentration in high-permeability zones (e.g., sands and gravels) into low-permeability media (e.g., clayey sands, silts, and clays). When the groundwater plume concentrations in the high-permeability zones are reduced, this diffusion process can occur in reverse ("back-diffusion") and serve as a secondary source long after the primary contaminant source has been removed or controlled. This fact sheet reviews the use of the REMChlor-MD model to simulate the fate and transport of chlorinated solvents in groundwater, while taking into account the complex effects of matrix diffusion. REMChlor-MD model results are also discussed from two Navy chlorinated solvent sites.

Please check out the fact sheet on the NAVFAC ERB website: Complex Groundwater Sites (navy.mil)

Complex Groundwater Sites (navy.mll) Federal Remediation Technologies Roundtable (FRTR) Spring 2024 Meeting

The upcoming Spring 2024 Meeting of the FRTR will be held both in-person and online on Tuesday, May 21, 2024 with a focus on "Artificial Intelligence (AI) and Machine Learning (ML) to Optimize Site Remediation." The meeting will highlight site-specific case studies where AI/ML has enhanced remedies, optimized performance monitoring, and reduced needs for extensive sampling. Hunter Klein of NAVFAC EXWC will be presenting on "AI and ML Approaches to Predict Potential Future Environmental Violations," along with eight other speakers from Federal agencies and private consultants providing information on best practices for applying AI/ML concepts at cleanup sites.

To register for the in-person meeting or for online participation, please visit the link below: https://www.frtr.gov/meetings1.cfm

Department of Defense (DoD) Webinar on Advances in Per- and Polyfluoroalkyl Substances (PFAS) Destructive Technologies

This webinar will be held on Thursday May 2, 2024 and is sponsored by the DoD Strategic Environmental Research and Development Program (SERDP) and the Environmental Security Technology Certification Program (ESTCP). The webinar will highlight PFAS destruction technology demonstrations including novel semiconductor photocatalysts and a commercially-available smoldering technology for PFAS treatment.

To register for this webinar, please visit the link below: https://serdp-estcp.mil/webinars

This email has been prepared by the NAVFAC EXWC Environmental Restoration Division

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