

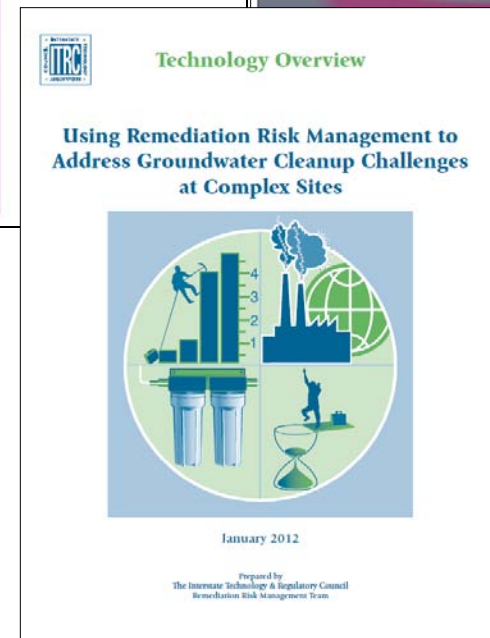
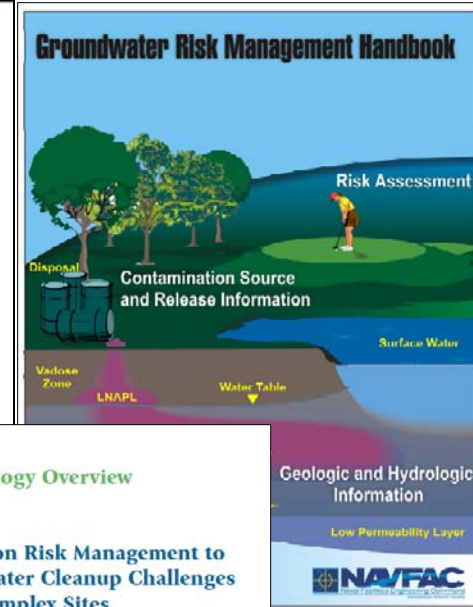
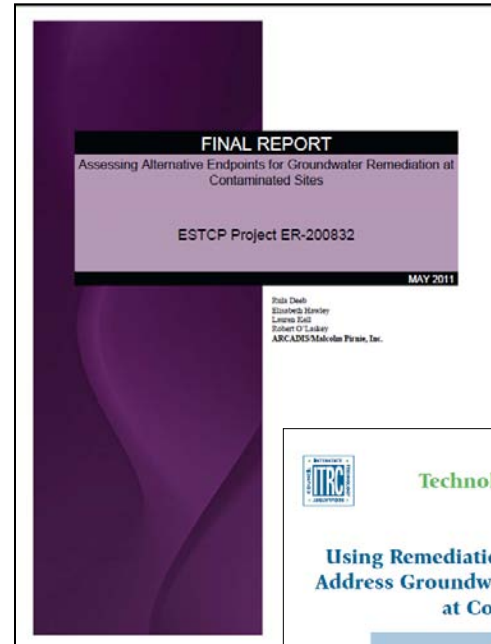


Resources for Large and Dilute Plumes

Resources for Large and Dilute Plumes

Risk Management Approaches

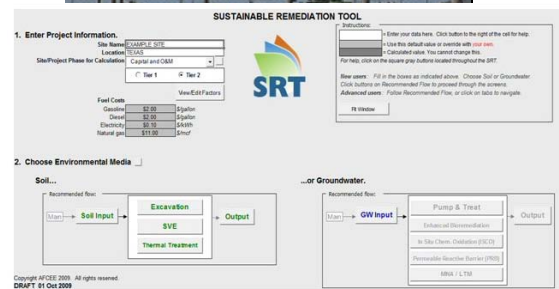
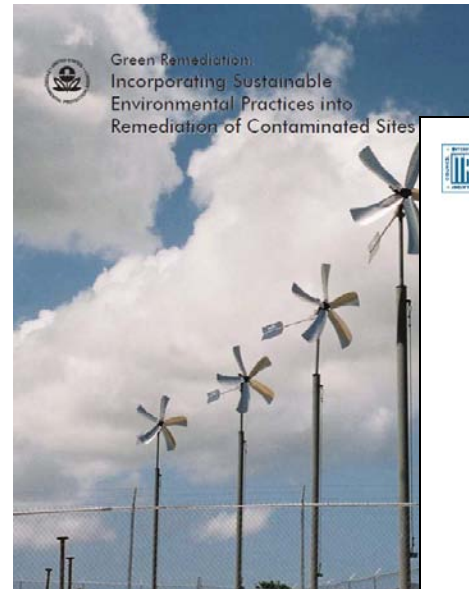
- US EPA OSWER Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration
- ITRC Using Remediation Risk Management to Address Groundwater Cleanup Challenges at Complex Sites (RRM-2)
- ITRC Project Risk Management for Site Remediation (RRM-1)
- ESTCP Assessing Alternative Endpoints for Groundwater Remediation at Contaminated Sites (ER-200832)
- NAVFAC Groundwater Risk Management Handbook
- USAEC Technical Impracticability Assessments: Guidelines for Site Applicability and Implementation



Resources for Large and Dilute Plumes

Green/Sustainable Remediation

- US EPA Green Remediation: Incorporating Sustainable Environmental Practices into Remediation of Contaminated Sites
- US EPA GR Best Management Practices
- ITRC Green and Sustainable Remediation: A Practical Framework (GSR-2)
- ITRC Green and Sustainable Remediation: State of the Science and Practice (GSR-1)
- Sustainable Remediation White Paper: Integrating Sustainable Principles, Practices, and Metrics Into Remediation Projects
- Department of the Navy Guidance on Green and Sustainable Remediation
- NAVFAC/USACE SiteWise™ Tool
- AFCEE Sustainable Remediation Tool



Media Type 1	Media Type 2	Media Type 3	Media Type 4	Media Type 5	Media Type 6
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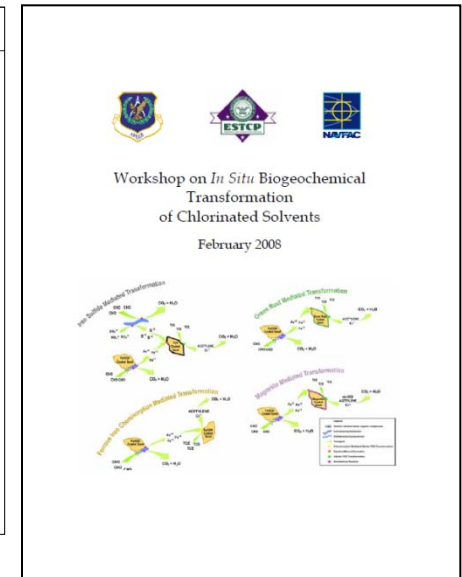
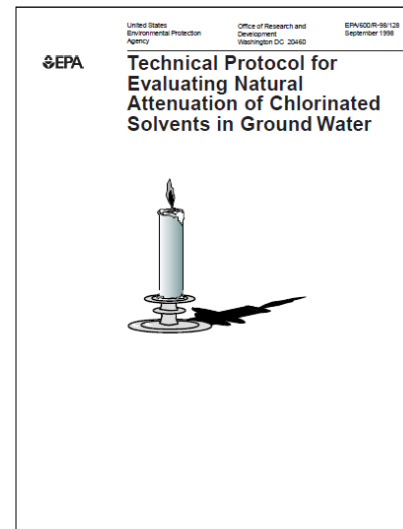
Resources for Large and Dilute Plumes

Monitored Natural Attenuation

- Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water (1998; Foundational Document)
- MNA Protocol Being Updated Under ESTCP Development and Validation of a Quantitative Framework and Management Expectation Tool for the Selection of Bioremediation Approaches at Chlorinated Solvent Sites
- AFCEE Field-Scale Evaluation of Monitored Natural Attenuation for Dissolved Chlorinated Solvent Plumes
- ITRC Decision Framework for Applying Monitored Natural Attenuation Processes to Metals and Radionuclides in Groundwater
- USEPA Performance Monitoring of MNA Remedies for VOCs in Groundwater
- US EPA Clu-In Natural Attenuation Guidance Web Page

Passive Technologies

- ESTCP Workshop on In Situ Biogeochemical Transformation of Chlorinated Solvents
- ITRC Permeable Reactive Barrier: Technology Update (PRB-5)
- ESTCP Protocol for Enhanced In Situ Bioremediation Using Emulsified Edible Oil



Resources for Large and Dilute Plumes

Optimization, Treatment Trains, Hot Spot Treatment

- FRTR Remediation Optimization Case Studies
- Navy Guidance for Optimizing Remedy Evaluation, Selection, and Design
- AFCEE Remedial Process Optimization (RPO) Handbook
- Improving Remedial Effectiveness at U.S. Department of Energy through Optimization Review and Performance Basis
- USEPA Recommendations from the EPA Groundwater Task Force
- ESTCP Delivery and Mixing in the Subsurface: Processes and Design Principles for In Situ Remediation
- ITRC Integrated DNAPL Site Strategy (IDSS-1)

Modeling and Monitoring Tools

- BIOCHLOR, Natural Attenuation Software
- ESTCP Mass Flux Toolkit
- NAVFAC Vapor Intrusion Evaluation Tool
- Navy Guidance for Planning and Optimizing Monitoring Strategies
- AFCEE Long-Term Monitoring Optimization Guide
- GTS, MAROS, and Sampling Optimizer