2006 ERSD Annual Report
DOE-BER Environmental Remediation Sciences Project # 1016431

Field Research in Bacterial Transport

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Research Objective:

The objective of the final phase of this project is to incorporate new understanding and practical insights derived from interdisciplinary field studies by DOE and other agencies into a broader research framework to address DOE remediation problems. This effort will lend unique strength to Environmental Remediation Sciences Division (ERSD) strategic planning and offer real linkages to remediation problems faced in the field at DOE sites nationwide.

Research Progress and Implications:

Much has been learned from comprehensive field research supported by the Environmental Remediation Sciences Division (ERSD) and other agencies that can be used in development of future research strategies to provide the scientific underpinnings for cleanup of subsurface environments and for long-term stewardship at DOE sites. New knowledge derived from recent scientific research and assessments, including the results of past research on this project, was used over the past year to develop an updated, integrated structure of information needs as an aid to DOE in formulation of an overall research approach for addressing fundamental issues in environmental remediation sciences (e.g., effects of coupled processes occurring at different scales in subsurface systems). Information needs encompassed the range of subsurface systems at DOE sites nationwide and were categorized into those supporting prediction of contaminant fate and transport, exploration of new concepts for remediation, and new measurement and monitoring tools. ERSD has developed a strategic plan that encompasses scientific goals, research priorities and expected accomplishments for the next decade and the plan is currently under review by the scientific community.

Planned Activities:

The results of research on new projects implemented in FY 06 and 07 as part of the Environmental Remediation Sciences Program, as well as related scientific progress in the biological, chemical, and physical sciences will be reviewed and used to refine and augment the list of fundamental research needs.

Information Access:

The Draft ERSD Strategic Plan referenced above is available at http://www.sc.doe.gov/ober/ERSD/Strategic_plan_cover_letter.html