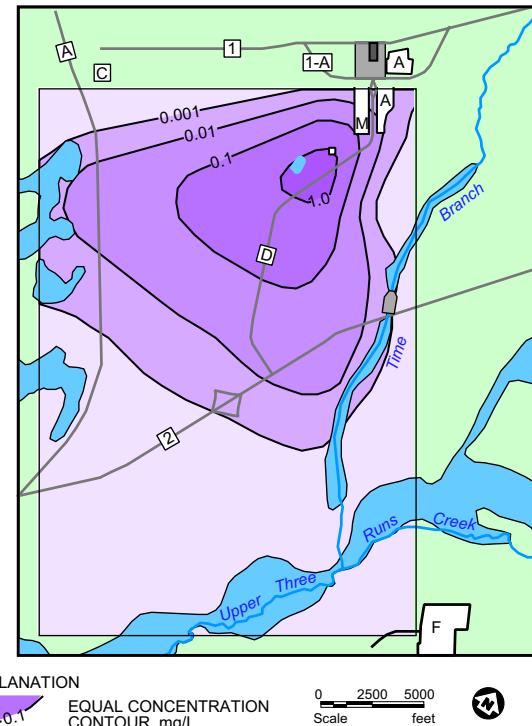


Calculated Flux of Tetrachloroethene from Each Layer



Calculated Tetrachloroethene Concentrations in Layer 3
in 2085 M-Area Settling Basin with No Waste Removal

Savannah River Site, South Carolina

Facility

A- and M-Areas of the Savannah River Site, Aiken, South Carolina.

Problem

Groundwater contamination in the vicinity of the A- and M-Areas and potential migration of hazardous and radioactive compounds including eventual discharge to surface water bodies.

SSP&A's Role

SSP&A assessed the hydrogeologic conditions and developed a three dimensional groundwater flow and transport model to assess contaminant migration for more than eighty compounds and to evaluate options for remediation.

Results

A multi-layer groundwater flow and transport model was developed and calibrated using state-of-the-art parameter estimation techniques.

Migration of selected chemicals in the groundwater was evaluated using numerical groundwater modeling and the concentrations and fluxes of compounds at various locations and time intervals were calculated.

Results were integrated into an Environmental Impact Statement for the site.