EPA and HRSC at Superfund Sites

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Background/Objectives. Through EPA's CERCLA Education Center, training on high resolution site characterization(HRSC) is being provided to EPA and State staff in Regional offices. The focus is on the conceptual site model, collecting data at an appropriate scale with a variety of tools, the management of that data for current and future use and then integrating the various lines of evidence, both new and historic, to make better remedial decisions.

Approach/Activities. The application of these techniques will be demonstrated using examples from current on-going work at the EPA Fund lead site of American Creosote Works in Jackson, Tennessee. The integration of TARGOST, UVOST and Hydraulic Profiling Tool data over the 60 acres of the former creosote works allows for the identification of residual creosote DNAPL, diesel and the lithologies that are controlling these contaminants. This and other historic data have been integrated into 3-D models which will allow for the selection of appropriate remedial technologies for the various subsurface portions of the site.

Results/Lessons Learned. The HRSC techniques have identified just where the residual creosote DNAPL is, where the dissolved phase contamination may be amenable to bioremediation and identification of finer-grained units that will be a back diffusion source.