



EXAMPLE PROJECT

Knoxville Utilities Board
PCB Tank Removal and Remediation

QE² has provided long-term environmental services support for the Knoxville Utilities Board (KUB) since the early 1990s. Over the years QE² work for KUB has included a broad range of services including:

- Large scale ground water remediation
- UST and petroleum distribution system design, renovation, system maintenance and emergency release response
- Environmental assessment
- Construction management and oversight
- Geotechnical engineering for substation upgrades
- Contaminated soil management
- Design-Build fueling system renovation

Most recently QE² performed PCB removal and ground water monitoring services. QE² removed a leaking underground storage tank (UST) used for the storage of waste transformer oil. Sampling of soil surrounding the UST indicated a presence of polychlorinated bi-phenols (PCBs). It was determined that all soil sample results were below the Industrial Soil PRG for PCBs. Eighteen ground water monitoring wells have been installed to monitor the presence of PCBs in ground water. These ground water wells were installed to define the vertical and horizontal extent of PCB contamination in ground water and to define the free product contaminant plume.

All soil generated from the installation of the monitoring wells was sampled for PCBs. A Special Waste Permit was generated for all soil associated with the installation of the monitoring wells. The soil was then disposed of at a local landfill.

The site investigation revealed that the free product and dissolved phase ground water contaminant plume is continuing to migrate down-gradient from the former UST location. As an interim form of passive free product removal, sorbent socks were installed in wells containing free product. These sorbent socks continue to be replaced on a bi-weekly basis. Ground water sampling of the monitoring wells were previously conducted on a quarterly basis. Ground water sampling is now conducted on an annual basis. The investigation of this site is on-going with ground water monitoring reports being generated following each sampling event. All reports from this site investigation are submitted to the appropriate Tennessee Department of Environment and Conservation, Division of Solid Waste office.

