



Quantum Environmental & Engineering Services, LLC

EXAMPLE PROJECT

TDOT CERCLA Projects
Jackson and Knoxville, Tennessee

QE² has two projects on property owned by TDOT which fall under CERCLA: (1) are a stream bed and site remediation at the former TDOT facility in Jackson, Tennessee, and (2) removal of PCB-contamination from a sinkhole located at eastern junction of I-40 and I-640. The total cost for both projects is approximately \$1,244,000.

The Stream Bed Remediation at the Former TDOT Facility in Jackson was conducted under the State Voluntary Cleanup, Oversight and Assistance Program (VOAP) administered by the Tennessee Department of Environment and Conservation (TDEC), Division of Superfund (TDSF). The cleanup was triggered by previous risk assessments that showed adverse risk to human health and the environment posed by site contaminants. The cleanup and investigation activities occurred over a 6-month period from August 2000 to January 2001.

The majority of the cleanup involved the excavation, treatment, and off-site disposal of (primarily lead) contaminated sediment along a 1,250 foot section of the South Boundary Creek (SBC) which forms the south property border. A temporary dam allowed for creek dewatering throughout the excavation process. Uncontaminated surface water was discharged downstream of the site. The exposed saturated sediment was excavated by trackhoe and spread on asphalt-paved areas at the site for mechanical aeration and drying. A portion of the sediment contaminated with relatively higher concentrations of lead and classified as hazardous waste, was treated with lime ash to stabilize contaminants. The treatment rendered the material as a non-hazardous special waste rather than a hazardous waste. Treated and untreated sediment was disposed at the Jackson-Madison County Landfill (JMCL). A total of 3,278 tons was disposed as special waste under a permit from the Division of Solid Waste Management (DSWM) of the TDEC. The creek bed was backfilled and the banks were restored with vegetation and erosion controls.

Cleanup actions were also conducted at two comparatively smaller sites designated as the Paint Spills Area (PSA) and the Above Ground Storage Tanks (AST) Area. In addition, a total of 184 mostly empty drums (55-gallon) remaining around the facility were assembled for characterization and off-site disposal. The results of additional laboratory analysis and toxicity testing of sediment were used to support a final recommendation of no further action for the Wetlands on the western perimeter of the TDOT site.



QE2 – Example Project – TDOT CERCLA Projects, Jackson and Knoxville, Tennessee

The I40 / I640 Sinkhole Site was originally identified by TDOT personnel who, in conjunction with TDEC staff recognized the potential for hazardous waste contamination at the Site from the indiscriminate disposal of solid waste in and around the sinkhole. Because the Site is within and adjoining the TDOT right of way (ROW), TDOT agreed to address the Site under the Voluntary Cleanup, Oversight, and Assistance Program (VOAP) administered by TDSF which addresses the investigation and cleanup of inactive hazardous waste sites in Tennessee (TDEC, 1996). TDOT was not responsible for the dumping activities at this site, they simply inherited this problem and agreed to proceed with investigation and site cleanup as a matter of sound environmental policy.

