TOTAL ENVIRONMENTAL RESTORATION CONTRACTS

A SUCCESS STORY

Pueblo Chemical Depot

At the Pueblo Chemical Depot, contaminated groundwater was migrating off site. As an interim corrective measure, USACE and its TERC contractor completed the design and built a groundwater collection and treatment system and facility. This facility employs a combination of proven and innovative technologies that effectively and efficiently remove volatiles (particularly trichloroethylene) and chromium from the groundwater.

The treatment system comprises a network of recovery wells and sumps, a water conditioning and treatment plant, and a release system for treated water that includes underground recharge galleries and surface water discharge outlets. The treatment process was designed to recover groundwater, separate contaminants from the groundwater, and then reinject cleaned water back into the soil. The area's unconfined aquifer, which varies significantly in both thickness and hydraulic conductivity, presented a real challenge to groundwater modeling and treatment design efforts.

TERC WORKS

Groundwater treatment facility under construction.

Another unanticipated problem was the reluctance of landowners to allow property access for site condition testing and sampling. Difficulties in determining property ownership and obtaining access to off-site property are best addressed as soon as possible in the design stage. Fortunately, the Corps and its TERC contractor were able to overcome the unexpected costs and schedule delays caused by this real estate issue.

TERC saved one year and $600,000, and avoided $9 million in penalties.

The requirement to dispose of extremely large quantities of contaminated soil that had been removed during facility construction presented yet another threat to the potential success of this project. Again, the additional costs and schedule impacts associated with this unexpected scope increase were successfully handled.

To meet regulatory deadlines, the investigation, design, construction, and system startup of the $13 million treatment system had to be completed by March 1995. Since design had been contracted earlier, the Corps managed and coordinated the evolving design with the TERC contractor's management of the construction.

$13 million system designed and built in 11 months.

This bold 11-month design/build schedule, involving the start of cost-reimbursement construction at the 60-percent design stage, was made possible only through the use of TERC. The TERC approach saved one year and approximately $600,000 in procurement and management costs over the traditional design and build approach. By successfully meeting the regulatory deadlines, the Corps and its TERC contractor also avoided potential penalties of $25,000 per day, or $9 million for the customer.

OMAHA DISTRICT

POINT OF CONTACT —

JEROME STOLINSKI

(402) 221-7680