TOTAL ENVIRONMENTAL RESTORATION CONTRACTS

A SUCCESS STORY

SHAW AIR FORCE BASE

TERC WORKS

The thermal/catalytic oxidizer at Operable Unit 1.

The Omaha District of the U.S. Army Corps of Engineers is using International Technology Corporation, one of its TERC contractors, to remediate contaminated sites at Shaw AFB, located on 3,336 acres 7 miles west of Sumter, South Carolina. The ability to take a project through all phases of a cleanup effort, combined with the flexibility to "change directions" when site conditions are different from original expectations, is a key feature of the TERC approach.

An assessment completed prior to award of the TERC contract identified a large plume of 70,000 to 100,000 gallons of free-phase JP-4 jet fuel. Based on earlier pilot test results from a nearby area, the TERC team selected vacuum-enhanced pumping as the technology best suited to recover the spilled JP-4. The Corps tasked its contractor to design and install a system to collect the free product

TERC flexibility facilitated field changes.

from an area adjacent to an active test cell. The completed design included a network of 30 extraction wells manifolded to three skid-mounted blowers and one thermal/catalytic oxidizer. TERC design engineers developed equipment specifications as field crews mobilized for well installation.

Once in the field, the TERC contractor quickly discovered that the extent and volume of the JP-4 plume was smaller than originally estimated. TERC flexibility enabled the Corps to switch its contractor immediately from the remedial action mode back to investigation. Design work was suspended while the mobilized field crew redefined the plume using sample data from new temporary wells. With a new estimate of just 30,000 gallons of JP-4, designers were able to reduce the number of extraction wells required from 30 to 5. Field work to convert temporary wells in the proper locations to permanent extraction wells took only 6 weeks.

Scope and schedule reductions saved nearly $900,000.

Since the project scope was reduced, smaller equipment could be used, and the wells could be connected to an existing soil vapor extraction system that had excess capacity to handle output from the additional five wells. The flexibility of the TERC contract mechanism enabled the TERC team to execute the field changes quickly and efficiently and saved almost $900,000 on this project.

OMAHA DISTRICT

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