Landfarming of gasoline-contaminated soils & extraction & carbon treatment of contaminated groundwater (Westminster, California)

Lindmark Engineering designed a soil and groundwater treatment plan for a former service station in the City of Westminster. Because the property was being developed as a shopping center, a fast-track approach was necessary in obtaining permits and completing all work. Gasoline had contaminated both soil and groundwater at the site, and there was additional groundwater contamination by chlorinated solvents, originating from off-site.

Initially, we planned and supervised the excavation of 1,500 cubic yards of contaminated soil to the depth of groundwater for subsequent on-site landfarming and backfilling. We also designed a groundwater collection and treatment system, which consisted of a 120-foot-long, 15-foot-deep collection trench and an underground carbon treatment system that was contained in a concrete vault located within a planter area at the property margin.

To expedite the completion of cleanup, we designed and implemented injection of oxygen-reducing compounds (ORC) throughout the site.

Because the remediation system and ORC injection were very effective in arresting off-site plume movement and greatly reduced concentrations of groundwater contamination, the lead agency (California Regional Water Quality Control Board, Santa Ana Region) granted site closure with no further action with respect to site assessment and remediation of hydrocarbon contamination in soils and groundwater.
Client: Spitzer Properties

For more information on this project, please contact Lindmark Engineering at (818) 707-6100 or ulf.lindmark@efiglobal.com.