



Project Name: Soil Remediation

Client: Developer

Agency: California Regional Water Quality Control Board

Location: Carson, California

Chemicals of Concern: TPH (crude oil, gas condensate), BTEX

Project Goal

Waterstone's goal was to perform excavation and on-site treatment of petroleum-contaminated soil to reduce the concentrations to levels acceptable for re-use and to achieve agency closure.

Waterstone's Role

Waterstone directed the excavation, land-farming treatment, verification sampling, permit compliance with Waste Discharge Requirements (WDR), and preparation of progress and closure reports. During excavation, Waterstone personnel directed the segregation of impacted soil and performed air monitoring in accordance with AQMD Rule 1166 permit requirements. Regular monitoring and testing was performed on treatment soil to verify that the soil met the requirements for onsite re-use. In addition, Waterstone designed and implemented soil vapor extraction systems to remediate areas of deep contamination. Summary reports were prepared for completed portions of the property and submitted for review to obtain No Further Action letter from the RWQCB. Waterstone personnel also participated in community relations activities by speaking at neighborhood meetings.

Project Challenges and Successes

Waterstone personnel successfully directed the removal of isolated deep contamination within dry wells using large diameter auger borings, resolving environmental concerns in concert with geotechnical requirements. Waterstone personnel directed the successful treatment of over 300,000 cubic yards of impacted soil and performed environmental quality control on over 200,000 cubic yards of imported soil. Closure has been received on over 40 acres of the site which already contain occupied homes.