



Project Name: Remediation Using Dual Phase Extraction

Client: Confidential

Agency: California Regional Water Quality Control Board

Location: Whittier, California

Chemicals of Concern: Free Phased and Dissolved TPH, BTEX, and fuel oxygenates

Project Goal

The subject property, a gasoline service station, is scheduled to be sold; characterization, remedial design, and agency site closure needs to be completed in a timely manner so the site can be sold successfully. However, existing remedial activities performed by the previous consultant were not yielding adequate results. Waterstone's role is to evaluate and supplement the characterization of the site and design an accelerated soil and groundwater remediation program to achieve agency closure of the site within two to three years.

Waterstone's Role

Waterstone's responsibilities include overseeing and directing all aspects of the soil and groundwater remediation, completing quarterly groundwater sampling activities and the preparation of all reports and updates, and serving as the principal contact to regulatory agencies.

Project Challenges and Successes

Initial characterization activities showed groundwater was highly impacted with MTBE, benzene, and other volatile organic compounds and also revealed that the groundwater was under semi-confining conditions and some hydrocarbons were present in pore spaces below the water table. Additionally, free floating product was observed in an off-site well beyond the effective capture radius of the existing vapor extraction and dual phase extraction wells. With the approval of the Regional Water Quality Control Board, Waterstone successfully characterized the site and installed a more appropriate groundwater monitoring and dual phase extraction system at the site to commence remediation. Groundwater impacted with MTBE, TBA, and aromatic compounds was extracted, treated and re-injected into the groundwater zone under the approval of the Regional Water Quality Control Board. Remedial activities at the site are progressing on a timeline that is expected to meet the resale goals for the site.