

Former Service Station

Gardena, California

Metals ○ ●
Petroleum ○ ●
VOCs ○ ●
Assessment/Compliance ○ ●
Investigation ○ ●
Tank removal ○ ●
Remediation ○ ●
System design/O&M ○ ●
Litigation support ○ ●
Oversight ○ ●

Period 1995–present

Contaminants TPHg, BTEX, MTBE

Media Soil and groundwater

Agency Los Angeles RWQCB



The site formerly contained an automobile service station with four single-walled steel USTs. Results from groundwater monitoring indicated a significant hydrocarbon plume extending near the property line.

- Conducted a feasibility study and prepared a remedial action plan for submittal to the RWQCB that combined vapor extraction and groundwater extraction (VEGE) for plume remediation.
- Designed, constructed, and currently operating the VEGE system which includes four groundwater extraction pumps feeding a high-efficiency, low-profile air stripper meeting NPDES discharge limits for treated groundwater. Soil gas from the four vapor wells and the air stripper effluent are treated in a recuperative furnace, which provides improved energy efficiency, and then discharged under a SCAQMD permit.
- Maintaining a high on-line performance for the treatment system while meeting the operating and reporting requirements of the RWQCB and SCAQMD.
- Completing the quarterly groundwater monitoring requirements of the RWQCB.
- Designed and installed an innovative in situ remedial technology to reduce operating costs and meet cleanup goals sooner. The pilot system will generate oxygen inside the well, which will decrease dissolved oxygen and provide enhanced bioremediation of the petroleum constituents.
- Designed and installed a second innovative in situ remedial technology for groundwater cleanup. This pilot system combines stripping, sparging, and vacuum extraction in the well to reduce the length of pump-and-treat operation.