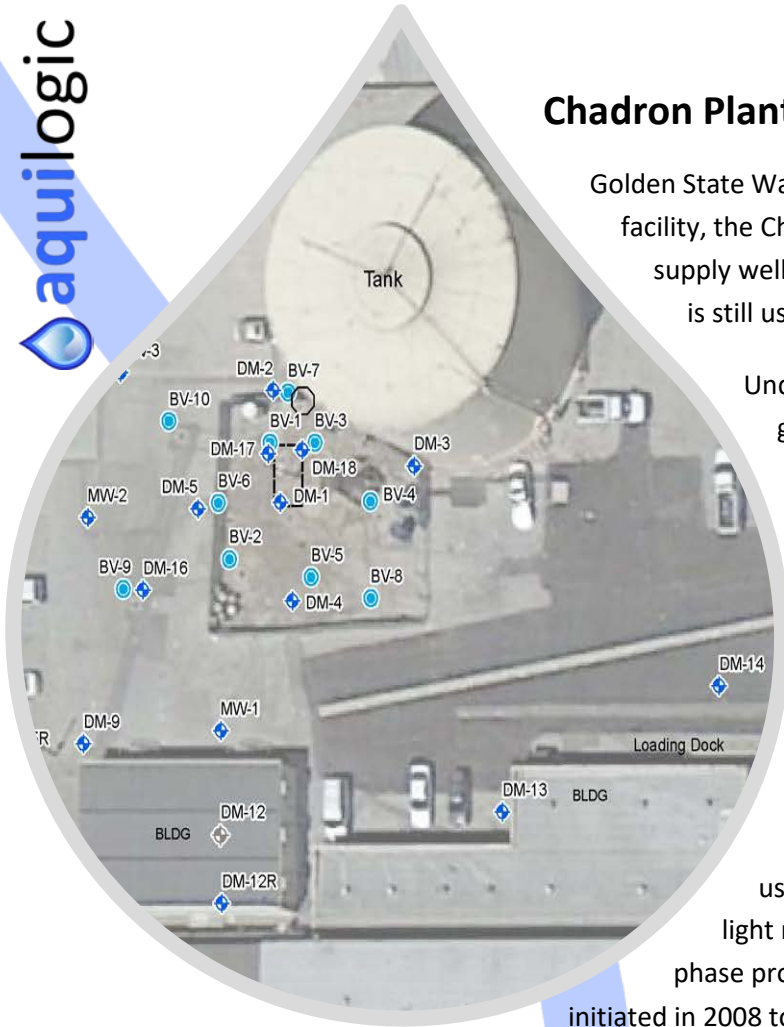


## Chadron Plant Gasoline Remediation

Golden State Water Company has a municipal water supply facility, the Chadron Plant, in Hawthorne, California. The water supply wells at the plant have been destroyed, but the plant is still used for water storage and as a maintenance yard.



Underground storage tanks (USTs) containing gasoline were previously located at the plant. Over time, these USTs leaked gasoline which resulted in soil and groundwater contamination. The primary constituents of concern (COCs) are benzene and methyl tertiary butyl ether (MTBE).

The soil contamination is restricted to an area in the immediate vicinity of the USTs and fueling dispenser. Soil vapor extraction (SVE) and multi-phase extraction (MPE) have been used to remediate soil contamination, as well as light non-aqueous phase liquid (LNAPL or separate phase product). Groundwater pump and treat (P&T) was initiated in 2008 to address dissolved-phased contamination in groundwater. Currently, LNAPL is still present at the vadose-groundwater interface.

**Aquilologic** conducted an investigation to delineate the extent of this contamination. Groundwater contamination appears not to extend beyond the site boundaries. **Aquilologic** also implemented a surfactant enhanced product recovery (SEPR) pilot test for groundwater contamination. The surfactant (VeruSOL) was injected in increasing amounts at various wells in three stages.

The extended pilot was implemented under the oversight of the Los Angeles Regional Water Quality Control Board (LARWQCB) and in accordance with the LARWQCB general waste discharge requirements (WDRs). As recommended by the LARWQCB, **aquilologic** is implementing a groundwater over-purging program to remove residual LNAPL at selected wells near the source area. It is hoped that this program will address the residual LNAPL at the site, eliminating the final impediment to site closure under Low-Threat Underground Storage Tank Case Closure Policy (LTCP).