

# Aerial Acres Water Company

County: Kern

Population: 150

Challenges: Long-term violation of the maximum contaminant level for arsenic

Like many small public water systems in the Central Valley, Aerial Acres Water Company faced a continued problem in delivering drinking water that did not violate the maximum contaminant level (MCL) for arsenic.

A small, privately-owned water company serving approximately 150 residents in the eastern portion of

Kern County near the community of North Edwards, the water system had been in violation of the arsenic MCL since January 2009.



Part of the new water system at Aerial Acres.

The two wells in the system were both in violation of the drinking water standard for arsenic, and then one of the wells completely failed, reducing the company's supply of water for its customers.

Facing these challenges, Aerial Acres received Proposition 84 planning funds to solve its arsenic problem. As part of the planning project, the water company conducted a pilot study for arsenic removal and eventually prepared plans for a new arsenic removal plant, two new storage tanks and a new well to replace the one that failed.

After completion of the planning project, Aerial Acres received Proposition 84 construction funding and successfully completed the project in 2015. Included in the construction project was the abandonment of the failed well; refurbishing the existing well; construction of a new groundwater well; retrofitting the existing 105,000-gallon water storage tank and hydro pneumatic pressure tanks; and construction and installation of one 105,000-gallon water storage tank, one sodium hypochlorite disinfection system, two adsorptive-media treatment vessels, two booster pumps, and one 50-kilowatt backup generator. The total for the project was \$491,071.

With the completion of this project, the water company achieved compliance with the arsenic MCL and now provides safe and reliable drinking water to its customers.