

HIGHLIGHTS

Ozonation for primary disinfection and taste and odor control.

Wastewater treatment improvements.

Filter-to-waste enhancements.

Evaluation of UV disinfection with standby power to provide backup primary disinfection downstream of the biologically-active GAC filters.

Carollo is currently involved in Stage 2 of the Santa Clara Valley Water District (SCVWD) Water Treatment Improvement Project, which includes detailed design of granular activated carbon (GAC) filter caps, settled water ozonation, wastewater treatment improvements, additional chemical feed facilities, and filter-to-waste enhancements at the Penitencia Water Treatment Plant. The plant will use ozone to meet the multiple objectives of primary disinfection and taste and odor.

SCVWD was concerned that a failure in any portion of the ozone disinfection system would render the plant without primary disinfection. Therefore, the project team evaluated UV disinfection with standby power to provide backup primary disinfection downstream of the biologically active GAC filters, and to meet future regulatory requirements at the 42-mgd Penitencia, 100-mgd Rinconada, and 100-mgd Santa Teresa Water Treatment Plants. Carollo participated in expert panel workshops and prepared a technical memorandum that provided layouts and cost estimates for UV disinfection. SCVWD will consider implementing this technology when it is needed.



*Carollo provided pre-design for 242 mgd of UV disinfection facilities for the Santa Clara Valley Water District's three water treatment plants.*