

AV PROVIDES SYSTEM TO MEET CA'S POTABLE WATER STANDARDS

# Dunnigan Water Treatment Plant Using Ion Exchange Technology to Address Chromium VI

## BACKGROUND

Aqueous Vets® (AV®) teamed with Garney Pacific, Inc. to provide a complete water treatment system for the removal of Chromium VI at the California American Water's wellhead treatment facility in Dunnigan, CA.

## PROJECT DETAILS

California American Water (Cal Am) purchased the Dunnigan Water Treatment System in 2015, which was previously owned and operated by Dunnigan Water Works. Once the acquisition of the water system was complete, Cal Am committed to installing a treatment system that would address the Chromium VI contaminants using filtration and ion-exchange processes. By installing this system, Cal Am demonstrated its commitment to delivering the highest quality of potable water to its consumers and providing a product that meets or exceeds current drinking water standards.

## AQUEOUS VETS SCOPE

AV provided a complete system to treat the well water to California's potable water standards. Cal Am desired a system that would facilitate whole-vessel exchange services involving removal and replacement using spare units. As a highly experienced team member, AV was asked to provide those value engineering ideas that could streamline the project and enhance the system without sacrificing short or long term operational considerations.

### PROJECT LOCATION

Dunnigan, CA

### PROJECT TIMEFRAME

10/2017 - 2/2018

### PROJECT PHASE

Complete

### END USER

California American Water

### PROJECT TYPE

Construction

### AV® SCOPE OF WORK

\$140,000

### GENERAL CONTRACTOR

Garney Pacific, Inc.

## CONTACT AV SALES

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AV's scope included prefiltration, fabricated steel and PVC manifold piping, ion exchange vessels, sensors for controls monitoring, on-site installation, and system pressure testing.

AV's team worked closely with Garney Pacific and Cal Am to ensure delivery, installation, and successful startup of the system in a timely manner.



*"Aqueo Vets® delivered on what they said they could. This project had unknowns that required team member flexibility and AV was a valuable member of that team. AV performed, and we look forward to future projects with them."*

**- Matt Roberts, Project Manager**

KEY GAC SYSTEM DESIGN & OPERATIONAL PARAMETERS	WELL 27 & 28 VALUES
Number of Systems/Vessels per System	4/2
Operating Configuration	Parallel/Lead-Lag
Carbon Capacity/Volume per Vessel ft <sup>3</sup>	668.5 <sup>2</sup>
Media Type	Coal
Design Flow Rate/Site	3.2 MGD
Hydraulic Loading	7.1 gpm/ft <sup>2</sup>
Empty Bed Contact Time per Vessel	6.25 Minutes
Underdrain	Septa/External Ring Header
Overall System Height to Top of Pipe	16'-0"

