

Val Vista WTP Chlorine Automation Improvements and Triplex Feed Pumps Upgrades

Project Name:	Val Vista WTP Chlorine Automation Improvements and Triplex Feed Pumps Upgrades
Location:	Val Vista Water Treatment Plant, 3200 E. McDowell Rd. Mesa AZ
Owner:	City of Phoenix Water Services Department
Project Construction Cost:	\$1.5M

The Val Vista Water Treatment Plant Inlet Instruments and Chemical Pumps project involved upgrade of the City of Phoenix (CITY) and City of Mesa Val Vista Water Treatment Plant's (WTP) existing chlorine feed system and triplex chemical feed pumps. This project had two major equipment changes 1) Upgrade the chlorine feed system associated with post-Finished Water Reservoir No. 3 chlorination 2) Converting the existing alum, caustic soda and sulfuric acid triplex chemical feed pumps to simplex pumps for increased flexibility in chemical feed options.

The project was put forward as a design/build team effort with the challenges of coordinating and scheduling design, construction, checkout, and startup around the Plant's operation and scheduled shutdowns.

Project included the following electrical and I&C features:

- Design a retrofit for two new chlorine gas mass flow meters into an existing chlorination system and adding new chlorine residual analyzer at plant's post finished water system.
- Design, reconfigure, and install new control panels for variable speed drive pumps.

