



24th Street WTP Process Control Optimization Project

Project Name:	24th Street WTP Process Control Optimization Project
Location:	24 th Street Water Treatment Plant, Phoenix, AZ.
Owner:	City of Phoenix Water Services Department
Project Construction Cost:	N/A

The City of Phoenix commissioned EIC Engineers, L.L.C. to perform a comprehensive Process Control Optimization Study (PCOS) for the 24th Street Water Treatment Plant. The project involved identifying plant-wide process control concerns, design issues, equipment problems, and any improvement needs for the day-to-day operation and maintenance of the plant and its support facilities.

Over the period of one year the project required assessing a number items of concern put forward by key members of the plant's operation and maintenance staff. The project required investigating as well as providing recommendations and cost estimates for numerous process equipment enhancements and equipment safety upgrades.

Some major project electrical, I&C, and programming recommended improvements included:

- Adding pressure instruments to indicate low pressure alarm for chlorine system both local and remote;
- Adding actual speed indication for the Pre-Sed and Flocculation mixers;
- Improving remote automation of Polymer-Aid system;
- Improving visual and audible chemical alarming system;
- Adding an auto rinse cycle to filter shutdown sequence;
- Adding emergency eyewash/showers alarm system;
- Adding remote operation control to backwash isolation valves;
- Adding level switches to plant-wide sumps;
- Improving sample pumping system with remote control and status;
- Upgrading compliance instruments;
- Upgrading existing sludge pump VFDs;

