

Valley Court Pump Station

New Controls for Sewer Pump Stations Provide User-Friendly Operations

A new control system for one of Juneau's sewage lift stations is making the job easier for municipal sewage employees.

The Operator Interface (OI), an Allen-Bradley PanelView 300, displays all information about pump status and other systems. It's a menu-driven system that easily allows operators to configure level setpoints and operation of the pumps and to monitor alarms and historical data.

It includes a built-in operations manual, which can be used as a step-by-step guide for operators to work through alarms or other problems with the system.

That manual came in handy the first weekend the new system was running and one of the operators responded to a call-out at the pump station. With no training, he was able to use the operations manual to clear the alarm.

"It's real user-friendly," said Tom Trego, wastewater collection supervisor for the city of Juneau. "Compared to what we did have, it's 100 percent better."

BCI worked with the municipality to come up with a system to meet their needs, including an Allen-Bradley Micro 1500 PLC, with two A-B 30 hp soft starters to control the motors. BCI's duplex pumping system only needs a dial-up or radio modem for an easy link to the Mendenhall Valley wastewater treatment plant for a full-blown SCADA system.

"The controller is an open PLC which has the expansion capability to control and monitor anything that anybody can think of," said BCI president Greg Smith. He said the wastewater department was skeptical at first about switching to new controllers.

The city had sole-sourced another system to control its pump stations for the past five years, but opened up the bid to consider the new approach from Boreal Controls. BCI was awarded the project on competitive bid.

"It's been trouble-free," Trego said.



Pump station control panel for the Valley Court Pump Station.
Juneau, Alaska