High-Quality Monitoring for High-Quality Water

Influent water quality is largely dependent on the source. Receiving water from a singular source, however, isn't typical for most facilities.

"Some water districts might have three or four water sources, all coming from different locations," said Matt Steiger, vice president of sales at Water One in the San Francisco Bay area. "All those different water sources are blended together, which means your water quality is highly variant from day to day."

The diversity in water sources entering a facility means constant measurement is needed to monitor water quality and maintain regulation pH and conductivity levels, among other factors. "The water sources entering a facility can change from day to day, week to week or seasonally — it's constantly in flux," said Steiger. "In some instances, we have engineers conduct water quality testing once a week or even once a day."

With fluctuating water sources, it can be challenging to maintain consistent water quality, and physically measuring the quality can be taxing. That's where connected monitoring devices, such as the MicroVision EX from Pulsafeeder, come in. Connected monitoring devices offer operators time savings, streamlined reporting and troubleshooting capabilities.

"We might see a switch between two water qualities in any given week," said Steiger. It's important to respond promptly when those water source switches occur to ensure proper levels are maintained. "When there's a change in the water source, we receive an alert from our MicroVision EX controller and can log in to see how the switch is affecting the water quality," said Steiger. "Then, we can remotely adjust set points to address that shift and keep the quality in the appropriate range."

Using the connected controller simplifies much of the measuring process and eliminates the need to physically measure and adjust the water quality. "We can check conductivities, pH and various setpoints right from our phones," said Steiger. "Then, we can remotely adjust any setpoints, bleed-offs or biocides — that way we can save a trip to the customer site."

Implementing the controllers streamlines the water quality process and allows teams like Steiger's to address issues immediately. "When a customer calls, you can easily deliver data to them, such as what conductivities or set points we're running, just by pulling out your phone," said Steiger. "Often times you can advise the customer without ever having to make a stop."

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Not only do the controllers put data at your fingertips, they can also help conserve water, according to Steiger. "By having reliable controllers to monitor water qualities remotely, we're sometimes able to increase our cycles." In the past, when two different water qualities were blended, operators would have to assume the worst-case scenario when treating the water to ensure they got the levels correct. "When you have the different monitoring technologies, you can monitor the exact quality of the water coming in, and can increase your cycles based on that quality," said Steiger.

It's a tricky challenge to maintain consistent water quality that meets the city and state regulation requirements when your facility relies on varied water sources, but when you're equipped with reliable connected monitoring devices, maintaining quality and evaluating set points is as easy as checking your phone.