

# Ovation® Drastically Improves Control of Ridgway Water Treatment Plant Processes

## RESULTS

- 25% reduction in water and chemical usage during the backwash process
- Improved record keeping by providing 90% of information from a central source
- Improved communication with the Laurel Mill Reservoir, eliminating four one-half hour trips to check water level each day
- Eliminated obsolescence issues with plant control equipment
- Met aggressive project schedule within five months of project start



## APPLICATION

Control of the water treatment process and five bay filtration system.

## CUSTOMER

Borough of Ridgway Water Treatment Plant located in Ridgway, Pennsylvania.

## CHALLENGE

In the early 1990s, the Borough of Ridgway purchased several separate systems to control their water treatment and five bay filtration processes. Through the years, technology obsolescence led to difficulties in obtaining support and spare parts for all the systems. At one point, the existing systems completely failed, leaving Ridgway employees to manually operate the plant for several months. A new, more efficient system was desperately needed.

Based on previous experience, Ridgway's search for a new control system included some strict requirements. First, they required state-of-the-art technology that would unify the plant processes into a single system with a high degree of reliability. Second, Ridgway wanted a system that could expand and move with them into the future. Third, they wanted a financially stable vendor that would provide long-term support for years to come. Municipal financial obligations also required selecting a technology solution that would meet budget constraints.

*“From day one, the Emerson people listened to us, worked with us to design a system that met our needs, and went the extra mile to get it implemented.”*

**Ray Imhof**  
Ridgway Operations Engineer



For more information:  
[www.EmersonProcess-PowerWater.com](http://www.EmersonProcess-PowerWater.com)



## SOLUTION

The Borough of Ridgway partnered with Emerson Process Management to replace the failed controls and secure future support with a financially stable company. Emerson provided a technically sound solution by implementing a single 700 I/O point Ovation® expert system that provided continuous monitoring and control of both the plant control and filtration at the Ridgway Water Treatment Plant. Ovation provided Ridgway with increased operating efficiencies that directly translate into better and safer water production for their consumers. Examples of other benefits attributed to Ovation include:

**Reduced Costs** - Emerson replaced several outdated, non-supported systems with one unified platform, which significantly reduced plant costs by decreasing spare parts expenditures and time spent pursuing multiple vendors for support. New, reliable components also have reduced plant downtime, which had been frequently required to replace parts with the old systems.

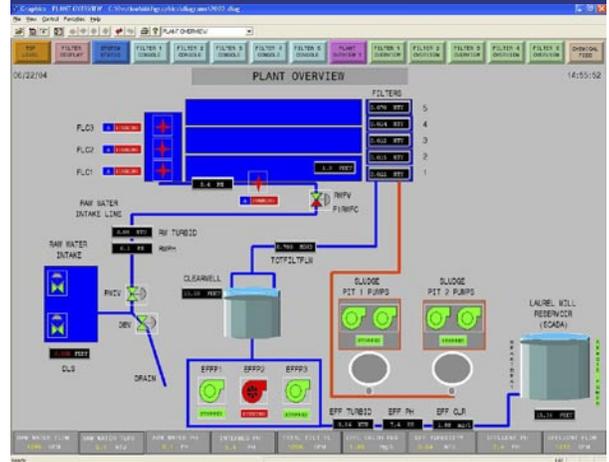
**Improved Communication** - The Ovation SCADA server, located in the plant's office and laboratory, maintains constant communications with the telemetry unit located at the Laurel Mill Reservoir. Important information from the SCADA remote terminal units is readily available to the control system and desktops of Ridgway supervisors and managers, enabling faster and more effective decision-making. Operators who used to spend a total of two hours per day manually checking reservoir water levels can now dedicate those two hours to focusing on improving plant processes and water quality.

**Increased Operational Efficiency** - Ovation has greatly increased the efficiency of many Ridgway operations. One example is improvements to the extremely sensitive and complex backwashing system, a cyclic process in which filters are periodically washed out to remove sediment. With Ovation, Ridgway now utilizes only 15,000 gallons of water, versus approximately 20,000 gallons needed before installing Ovation. This translates into a 25% reduction in water and chemical usage during each backwash process.

**Enhanced Reporting** - Prior to Ovation, important plant data was collected and compiled manually from each separate control system. Now, Ovation provides approximately 90% of the information required to complete EPA reports. Additionally, improved efficiency of plant operations provides more accurate plant information for reporting.

*“As a whole, our maintenance, operations and documentation processes are much more efficient with Ovation - translating into reduced costs for us.”*

**Ray Imhof**  
Ridgway Operations Engineer



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