

Ovation® Proves to be a Perfect Fit for Ridgway's Small Wastewater Treatment Plant

RESULTS

- 40% reduction in time to prepare government reports
- 95% improvement in ability to efficiently control the plant
- 20% reduction in maintenance costs
- 10% savings in energy consumption



APPLICATION

Control and monitoring of a six million gallons per day (MGD) municipal wastewater treatment plant servicing the Borough of Ridgway, Ridgway Township, and industrial users in both the borough and the township

CUSTOMER

Borough of Ridgway Municipal Wastewater Treatment Plant, located in Ridgway, Pennsylvania

CHALLENGE

In 1993, the Borough of Ridgway upgraded the control system at their wastewater treatment plant. Shortly after installation, the Borough began experiencing numerous problems that greatly hindered plant operation. Operators were unable to make modifications to graphics or control logic directly from the designated workstations. Control changes required the staff to travel between the treatment plant buildings to manually check flows, wet-well levels, and operation of the main intake pumps, as well as start and stop pumps. Another major problem was the lack of replacement parts and support services. Finally, the upgraded controls did not communicate with the other independent plant systems for the constant speed pumps, variable frequency drive pumps, chemical feeders, and process sampling equipment. Operating with separate systems required additional work to control and monitor the plant and to prepare reports for federal and state agencies. After years of working around the challenges, the Borough allocated funding to purchase a new control system that unified all plant control systems, allowed quick and easy changes, improved process control capability, and provided a means for enhancing the accuracy of the plant's documentation to government agencies. Additionally, the Borough wanted to work with a financially secure, reputable company that would provide system support well into the future.

“Ovation completely unified control of our wastewater processes into a single system. Since installing Ovation, our plant operations have improved over 95%, our maintenance costs have been reduced by 20%, our energy consumption has dropped 10%, and our ability to produce required government reports has improved 40%. Now that’s what I call a good return on my investment.”

Ray Imhof

Operations Engineer
Borough of Ridgway
Ridgway Wastewater Treatment Plant



SOLUTION

Emerson's Ovation® expert technology was selected as the replacement control system for Ridgway's wastewater treatment plant. Originally thought to be a system for larger sites, Ovation proved its ability to efficiently and economically control smaller plant processes in the Borough's water treatment plant, thus making it a perfect choice for the wastewater treatment plant.

Ridgway's Ovation system provides a complete picture of all the wastewater treatment processes using a single system in a centralized control room. Operators now claim a 95% improvement in their ability to efficiently control plant processes, from either the control room or the lab area, without wasting time traveling throughout the plant. Live or historical trends of plant data allow operators to view process activity over a period of time. If a trend shows that the process is not operating properly, the process can be easily adjusted online to within appropriate limits. Changes to graphics, database, or control logic can now be performed on a separate engineering workstation without disrupting the operators from their normal duties. Additionally, by automating control of the plant's numerous pumps and motors, the operators no longer have to manually put the equipment through start and stop cycles, which has decreased energy usage by 10%.

The Ovation system periodically collects the plant's data and automatically generates reports required for federal and state agencies. The operator workstation has the ability to capture up to 1,000 points for trending of important plant points, which are used to create the required daily, monthly, and yearly statistics. Ovation has greatly increased the accuracy of the reported information and reduced the daily time required to perform compiling and generating tasks by almost 40%.

By using a dependable, reputable company, with services that are available 24 hours a day, seven days a week, Ridgway was able to reduce maintenance costs by 20%. Attending Emerson's Ovation training courses has provided the Ridgway staff with the tools to efficiently operate and maintain the system. Ridgway can also count on their SureServiceSM maintenance contract for quick access to various avenues of support, including spare parts, remote system diagnostics, and scheduled on-site service.

"Even though our treatment plant only processes 6 million gallons per day, we have never felt like a small fish in a big pond when dealing with Emerson. I know I can always count on them to be there if I have a need, a question, or a problem."

Ray Imhof

Operations Engineer
Borough of Ridgway
Ridgway Wastewater Treatment Plant



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