

Monroe County Waste Treatment Facility Brings Stranded Flow Measurements On-Line

RESULTS

- Reduced operator rounds
- Improved reporting
- Improved odor control
- Improved safety



APPLICATION

Stranded Mag Flow measurements and totalization

CUSTOMER

Monroe County Pure Waters, Van Lare plant in Rochester NY and the Northwest Quadrant (NWQ) plant in Hilton, NY. These wastewater plants are located on the south shore of Lake Ontario. Van Lare dates back to 1916 and is the largest treatment plant in Monroe County with a rating currently at 135 million gallons a day with a capability of handling 660 million gallons a day.

CHALLENGE

Monroe County Pure Waters had “stranded” flowmeter readings on three lines that were important to monitor, for both instantaneous and total flow. “The flow measurements were located in a separate building in this mile-long plant,” said Helfer. “Operators would go take readings once an hour, come back and write down the instantaneous flows, and manually totalize the flows. We wanted to significantly reduce these rounds, as well as eliminate manual recording and totalization.”

The meters were too far away to wire into the PLC. There was no conduit, and there was also the problem of the I/O rack being full when the SCADA system was first installed.

SOLUTION

The plant purchased three Wireless THUM Adapters for the three magnetic flowmeters that needed to be brought on-line. At the same time, a Wireless Gateway and three vibration transmitters were purchased, building an infrastructure for the wireless network. “The THUMs and gateway were easy to install,” said Helfer. “They started up and linked within minutes. I was shocked that they could communicate through steel reinforced concrete and glass.”

“We significantly reduced operator rounds, as operators were going out 24 times a day to record these flow measurements. We eliminated paperwork for recording of the instantaneous and total flows, and also eliminated manual flow totalization. We have much more accurate reporting now, and have better odor control.”

Jeff Helfer

Instrument Technician

Monroe County Pure Waters, Rochester and Hilton, NY

For more information:
www.rosemount.com



EMERSON
Process Management

He also noted, “The THUMs talk to any HART device, and have enabled us not only to bring in the required flow measurements, but also the tube and transmitter diagnostic information.”

Now the plant has instantaneous flows that operators can monitor from the control console. This is important for flows like the chemical recirculation loop in the scrubber. “Odor control is important in our plant, for public relations,” said Helfer. “The recirculation flow of the chemical we use in the scrubber must maintain a specified flow rate. If a unit tripped out, the operators wouldn't know if the flow stopped, and we could have an odor release.”

Reaction to these wireless measurements has been positive. “We significantly reduced operator rounds, as operators were going out 24 times a day to record these flow measurements. We eliminated paperwork for recording of the instantaneous and total flows, and also eliminated manual flow totalization. We have much more accurate reporting now, and have better odor control,” Helfer concluded.

RESOURCES

Emerson Process Management Water/Wastewater Industries

<http://www2.emersonprocess.com/en-US/divisions/power-water/Pages/powerwater.aspx>

Emerson Smart Wireless Gateways

<http://www2.emersonprocess.com/en-US/brands/rosemount/Wireless/Wireless-Gateways/Pages/index.aspx>

Smart Wireless THUM™ Adapter

<http://www2.emersonprocess.com/en-US/brands/rosemount/Wireless/THUM-Adapter/Pages/index.aspx>



Wireless THUM Adapters bring stranded flow measurements on-line, and eliminate the need for manual totalization.

The contents of this publication are presented for information purposes only, and while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, expressed or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which can be found at www.rosemount.com/terms_of_sale. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

The Emerson logo is a trade mark and service mark of Emerson Electric Co. Rosemount and the Rosemount logotype are registered trademarks of Rosemount Inc. PlantWeb is a registered trademark of one of the Emerson Process Management group of companies. All other marks are the property of their respective owners.

**Emerson Process Management
Rosemount Division**
8200 Market Boulevard
Chanhassen, MN 55317 USA
T (U.S.) 1-800-999-9307
T (International) (952) 906-8888
F (952) 906-8889
www.rosemount.com

Emerson Process Management
Blegistrasse 23
P.O. Box 1046
CH 6341 Baar
Switzerland
Tel +41 (0) 41 768 6111
Fax +41 (0) 41 768 6300

Emerson FZE
P.O. Box 17033
Jebel Ali Free Zone
Dubai UAE
Tel +971 4 811 8100
Fax +971 4 886 5465

**Emerson Process Management Asia
Pacific Private Limited**
1 Pandan Crescent
Singapore 128461
T (65) 6777 8211
F (65) 6777 0947
Enquiries@AP.EmersonProcess.com

**Emerson Process Management
Latin America**
1300 Concord Terrace, Suite 400
Sunrise Florida 33323 USA
Tel + 1 954 846 5030

For more information:
www.rosemount.com