

Wastewater Service Provider Improves Accuracy of Payables with Accurate Magmeter Flow Measurement

RESULTS

- Improved accuracy of payables
- Reduced operation and maintenance costs



APPLICATION

Thickened sludge totalized flow measurement

APPLICATION CHARACTERISTICS

5-7% thickened sludge, consistency of pudding

CUSTOMER

Wastewater services operator in North Eastern, USA

CHALLENGE

The facility manager for this wastewater treatment facility had challenges with inaccuracies of thickened sludge custody transfer measurement. The facility produces thickened sludge which is temporarily stored in holding tanks. The sludge is then loaded in to hauling trucks to be transferred to landfills and other users.

This facility was previously using a clamp-on ultrasonic flowmeter in an 8-in. pipe for custody transfer flow measurement. The ultrasonic flowmeter inaccurately measured the totalized flow of the thickened sludge hauled due to coating and the high solids content.

Inaccurate custody transfer measurement resulted in several negative business impacts. The treatment facility frequently over paid the hauling company based on the inaccurate measurement. High operation costs resulted from excess hauling truck trips due to under filled trucks. Routine troubleshooting of the ultrasonic meter and flushing the lines to remove build-up also resulted in high maintenance costs.

SOLUTION

Rosemount 8750WA Magnetic Flowmeter System solved the facility manager's problem of inaccurate sludge measurement. The 8750WA provided higher flow accuracy and was not affected by the high solid content. Decreasing the 8750WA flowmeter size below the line size increased the velocity through the meter and reduced the build-up.

The 8750WA provided higher flow accuracy and was not affected by the high solid content.



Figure 1. Rosemount 8750WA Magnetic flowmeter

By improving the sludge flow measurement, the facility manager was able to increase the accuracy of payables to the hauling truck company. He also reduced operations and maintenance costs by reducing trucking needs and time spent troubleshooting the custody transfer measurement and flushing the lines to reduce build-up.

RESOURCES

Emerson Process Management Water & Wastewater Industry

<http://www.emersonprocess.com/solutions/water/>

Rosemount Magnetic Flowmeters

<http://www2.emersonprocess.com/en-US/brands/rosemount/Flow/Magnetic-Flowmeters/Pages/index.aspx>

Rosemount 8750WA Magnetic Flowmeter

<http://www2.emersonprocess.com/siteadmincenter/PM%20Rosemount%20Documents/00813-0100-4750.pdf>

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