



## Successful trial with transit-time flow meter in a Virginia wastewater treatment plant.

The purpose of a wastewater treatment plant is to separate the sewage from the water, and effectively treat it so that it can be returned to the environment safely. This means that the water will change from being dirty water with various particulates (influent) to clean water (effluent) as it flows through the wastewater treatment system. At a wastewater treatment plant in Virginia, they needed a flow measurement solution for their underground effluent pipes carrying the treated water.

### **Trialing other products with limited success.**

The Virginia wastewater treatment plant had a challenging system to work with when it came to finding the right solution. It needed to fit 500 mm (20 in) and 600 mm (24 in) ductile pipes that had low-flowing effluent. Ductile Iron pipe is susceptible to scaling build up, which can make it

challenging to get an acceptable signal strength with a clamp-on flow meter. The installation location was also a challenge as it was deep underground. Overall, the wastewater treatment plant needed something that would be simple to install, had accurate and repeatable results on a challenging pipe and location, and was able to read the flow of the low-velocity effluent.

The wastewater treatment plant wanted to be sure that they found the right product to replace their existing solutions for their application, so they decided to trial a few products. They tested a few other products that couldn't give the results they were looking for. After a few failed trials, they reached out to Pulsar Measurement's municipal representatives in Virginia, FLOMEC Inc., to find the right solution. The FLOMEC Inc. team suggested Pulsar Measurement's PTFM 6.1 Portable Transit-Time Flow Meter with the SE16C sensors to fit their specific pipe sizes.

### **Why did they use a Transit-Time Flow Meter?**

The existing flow measurement solutions at the wastewater plant were mounted to receive flow readings of the influent and the effluent. The readings weren't matching, so to



*"Wow! Pulsar Measurement is the first to read expected flow on these pipes."*

verify the readings of the existing meters, they mounted the PTFM 6.1 with the SE16C sensors near the existing meters. The SE16C sensors are recommended for measuring nominal pipe sizes ranging from 300 mm (12 in) to 1,200 mm (48 in), which spanned the specification of the application. Once the sensors were mounted, they were easily powerful enough to go through the challenging Ductile Iron pipe, producing a strong signal strength with an exceptionally accurate and steady flow reading. Other flow meters that they tested could not achieve these results.

Pulsar Measurement's PTFM 6.1 is a transit-time flow meter that is an ideal non-contacting flow measurement solution for clean fluids. The PTFM 6.1 is simple to set up and only takes a few minutes to configure. The PTFM 6.1 has three transducer size options for a wide range of pipe sizes, and features more powerful signal processing hardware, standard factory calibration, and intuitive on-screen diagnostics to provide maximum confidence in the accuracy and reliability of your measurements.

### ***Pulsar Measurement's Transit-Time Flow Meters prove to be successful.***

The PTFM 6.1 with SE16C sensors was the ideal solution for this Virginia wastewater treatment plant. The customer said this about the installation, "Wow! Pulsar Measurement is the first to read expected flow on these pipes." They were so impressed by how well the solution worked for their application that they purchased six permanent TTFM 6.1 Transit Time Flow Meters to place throughout their plant and replace their existing meters, and one PTFM 6.1 for completing spot checks throughout the plant. They also plan to order more TTFM 6.1 meters soon.

Providing successful solutions is a top priority of Pulsar Measurement and our partners. Jason Barret with FLOMEC Inc. said this about working with the customer, "It was a pleasure to provide a solution using the C sensors on this tough application."

To find your local Pulsar Measurement partner visit our Partner Locator: <https://pulsarmeasurement.com/partnerlocator>

## **More Information**

**FLOMEC Inc.:** <http://www.flomec.com/index.php>

**PTFM 6.1:** <https://pulsarmeasurement.com/ptfm-6-1>

**TTFM 6.1:** <https://pulsarmeasurement.com/ttfm-6-1>



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