



## Outlet Pipe Measurement Success with the AVFM 6.1

At a wastewater site in the UK, the Pulsar Measurement team was approached by a key player in the environmental sector as they were struggling to find a solution to identify the amount of treated wastewater flowing through the outflow section of the site.

In the UK, it is crucial for wastewater sites to know how much treated wastewater is going through their outlet pipes and back into the local water source to be able to comply with local permits and prevent prosecution for over-pumping or spills.

Marc Richards, Pulsar Measurement's Senior Engineer, decided to try the AVFM 6.1 Area Velocity Flow Meter. The AVFM 6.1 uses a submerged ultrasonic sensor to continuously measure both velocity and level in the channel. The sensor resists fouling corrosion and abrasion as the exposed materials on the sensor are stainless steel. The best possible accuracy from the AVFM 6.1 will result when the water is not highly turbulent and where velocity is evenly

distributed across the channel. The channel should not have drops or direction changes immediately upstream of the sensor mounting location. Pipe or channel slope should not exceed 3%.

The AVFM 6.1 Area Velocity Flow Meter can measure forward flow velocity up to 6 m/s (19.7 ft/s) and reverse flow up to 1.5 m/s (5 ft/s). The electronics and software sample and average flow rates continuously to provide readings. The submerged velocity & level sensor will measure flow in partially full and surcharged pipes with pressure up to 10 psi. No special setup or adjustment is required.

### **AVFM 6.1 Installation**

The AVFM was placed into the outlet sewer pipe on-site, to measure the amount of treated wastewater being pumped from the site. It was installed by the customer approximately 0.25 meters (10 inches) from the pipe opening facing the oncoming flow.

Inlet flow at the site is monitored elsewhere, and the customer can control the pump frequencies to adjust the amount of flow that goes through the application. Pulsar Measurement's AVFM 6.1 monitors the flow traveling through the outflow pipe.



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### Successful Flow Monitoring for Outlet Pipe

Once installed, the system performed admirably, and the readings obtained were in line with what the customer was expecting to see. The end-user was very satisfied with the results of the AVFM 6.1. Several tests were carried out to confirm that the system-reported flows at different rates were in line with the customer expectations.

Speaking on this installation Marc Richards, Senior Engineer for Pulsar Measurement, said, "It was a pleasure to work with the customer on this project, and extremely satisfying that the results obtained from the system were exactly what the customer required."

For more information on our open channel flow solutions, visit [www.pulsarmeasurement.com](http://www.pulsarmeasurement.com).

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

## More Information

AVFM 6.1: <https://pulsarmeasurement.com/greyline-avfm-6-1>



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