

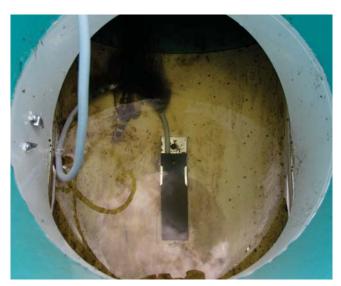
## Application Note

## Lagoon Discharge Flow Monitoring

## Open Channel Flow Monitoring without a Flume or Weir



The Township of South Glengarry in Eastern Ontario discharges continuously from their 72,000 m3 sewage lagoon. But they ran into flow measurement problems when their magnetic flowmeter was unable to detect seasonal low flow rates.



**Area-Velocity Flow Sensor** 

Operations Manager, Shawn Killoran selected a Greyline AVFM 5.0 Area-Velocity Flow Monitor because it was simple to install in a horizontal discharge pipe from the lagoon and because it could accurately detect and monitor the full range of flow rates up to 3,800 m3/D.

Township operators liked the Greyline AVFM 5.0 datalogger reporting system where formatted flow reports (total, minimum, maximum and average) could be downloaded automatically to a USB memory stick without carrying a laptop to the site.



The AVFM 5.0 flowmeter electronics were AC-powered and installed in an insulated shed along with a sampler.



The sealed ultrasonic flow sensor was mounted through a tee section at the invert of the 12" PVC horizontal pipe and connected to the flowmeter electronics through a watertight cable. A stainless steel bracket was screwed into the pipe to secure the sensor in place.

After several months of operation, no algae, sediment or weed build-up was observed on the sensor. But the mounting location was fitted with a removable cover to allow periodic cleaning if required.

Visit www.greyline.com for product information.