South East Water Case Study
Remote controlled sewer systems

**Issue**
Enable undisrupted remote monitoring and control of pumped sewer systems over the 3G network.

**Solution**
Manage the delivery of data from sewer stations back to a central host system using a rugged wireless communications router.

3G M2M Benefits:
- Simple centralised management, monitoring and control
- Consistent transfer of data back to host system without fixed-line requirements
- Rugged enclosure supports extreme environmental conditions
- Includes a web interface for easy management from any computer or smartphone
- Customised to meet specific requirements
- Cost-effective, scalable and supportable
- Advanced security

**South East Water** is one of Melbourne’s three providers of water, sewerage, trade waste and water saving services. The Victorian Government owned water retailer services over a million residential and business customers in an area spanning the South East of Melbourne to South Gippsland.

With an increasing number of properties requiring a reliable pumped sewer system in areas where traditional gravity methods are not feasible, **South East Water** faced the challenge of remotely monitoring and controlling pressure sewer stations located throughout backlog areas in Victoria without access to fixed-line infrastructure.

South East Water’s SCADA Manager, Andrew Forster-Knight, approached NetComm to discuss the deployment of a customised wireless communications solution designed to pass data from the sewer stations back to the SCADA host system over the Internet. Following a thorough screening process, a high-speed NetComm 3G Industrial Router was selected to develop wide area networks utilising the flexibility of 3G.
“We chose NetComm as they had the experience and flexibility to tailor their technology to meet our needs now and in the future. We have found the device to be extremely robust in design and operations,”

Andrew Forster-Knight, South East Water.

Designed to support remote installation and exposure to harsh environments, NetComm HSPA M2M Router support point-to-point or point-to-multipoint communications in mountainous terrains, high water table districts, environmentally sensitive regions, high gravity point zones and other areas typically serviced by pressure sewers.

With the need for constant network surveillance and regulation, the router is designed to support multi-level system monitoring for undisturbed communications.

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“The NetComm device underpins the Touchpoint technology used by South East Water to enable proactive monitoring and predictive control of the pressure sewer networks and related infrastructure. Over time the benefits realised will be huge thanks to the innovative solution involving NetComm products.”

The rugged NetComm HSPA M2M router supports multiple communication interfaces and protocols, and meets the demands of today’s telemetry and WAN applications. The embedded Linux operating system and available Software Development Kit (SDK) enables the installation of custom firmware.