

## PRESS INFORMATION

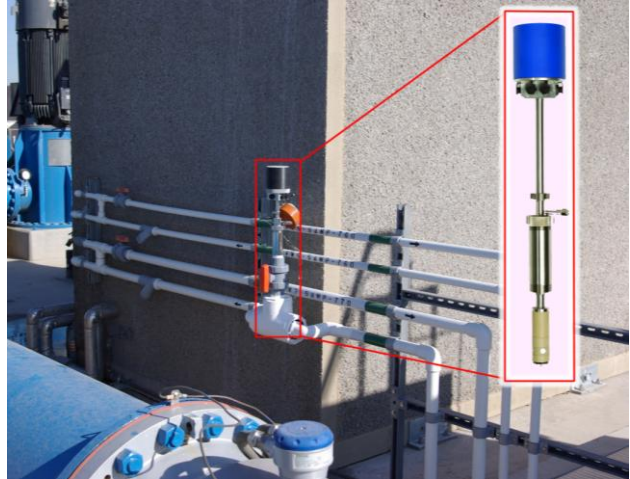
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### New technology excites US water engineers

A unique, highly innovative water quality monitoring technology is making waves in the North American water supply sector following initial trials at a variety of locations.

Developed by Intellitect Water Ltd in the UK, the new analyser (Intellisonde™) features up to 12 sensors in a tiny sonde

head that inserts directly into a pipeline through a hot tap fitting. The Intellisonde™ logs water quality data and provides remote access to the data through a variety of telecommunication options.



Ken Thompson, a Technology Fellow with CH2M HILL's Water Business Group, has led early work on the roll out of the technology and says he is "very excited about the potential benefits of measuring water quality within the distribution network between the treatment plant and the consumer."

Measurement options include Free Chlorine, Total Chlorine, Mono-chloramine, Dissolved Oxygen, Conductivity, pH, ORP/Redox, Flow, Pressure, Temperature, Turbidity and Colour. Importantly, none of these requires membranes or reagents for operation and the sondes can be deployed for long periods without the need for frequent recalibration or maintenance.

Deployed at strategic locations throughout a distribution network, continuous monitoring enables efficient management of water treatment processes including disinfection. It also informs decision making in the rehabilitation process and other operational activities such as flushing and air scouring.

The probe can be inserted through 1-1/2" or 2" hot tap connections into pressurised pipes ranging from 4" street headers to large distribution mains.

Summarising the trials that are currently underway, Thompson says, "The objective is to install units in a wide variety of locations so that they can be fully tested across a broad spectrum of conditions. There are over 50,000 water companies in the United States operating in almost every type of climate and handling water with differing mineral and organic carbon content. I have visited the Intellitect Water R&D and production facilities in the UK and have studied data collected from installations in many countries. The level of confidence in this technology is growing rapidly.



"Intellisondes™ have recently been installed at US locations for which simultaneous water quality measurements are being taken by more traditional techniques, so we are just beginning to evaluate the accuracy and reliability of the water quality measurements.

"Data management is key to the successful utilisation of this technology and we have been working with utilities to employ remote communications with a new data management system to produce an holistic view of the water distribution system. This will enable water providers to foresee quality problems before they reach the consumer and will also provide valuable data for planning, design, construction and operation of

distribution networks. This data management system will also form part of a national program to provide early warning of water quality issues."

As a global leader in full-service engineering, consulting, construction, and operations, CH2M HILL has been helping drinking water professionals to protect public health and deliver high quality potable water since 1946. The company's engineers, planners, and scientists help the water sector to meet challenges such as changing regulations, aging infrastructure, system security, rising costs, and increasing customer demands. This is achieved through the provision of a full spectrum of drinking water infrastructure services, from treatment and conveyance facilities planning through design, construction, start-up, and operations, using conventional or alternative project delivery methods.

Ken has more than 28 years of experience in the water sector and foresees an exciting future for the Intellisonde™. He says, "There is a great deal of interest in this technology because it is small, lightweight, easy to install and offers accurate monitoring data with low operation and maintenance costs. Visibility of water quality data in the distribution network is something that the industry has needed for many years.

The Intellisonde™ technology fits extremely well with the range of services offered by CH2M HILL because it provides previously unattainable visibility of water data, which enables significant improvements in the efficiency of water treatment and distribution."

**ENDS**

**Words: 659**

## **Notes to editors:**

- Originally formed in 2005 and operating from two sites in the UK, Intellitect Water Limited develops highly innovative water monitoring instrumentation. The business is venture capital backed with the principal shareholders being Credit Suisse, Pemberstone Group, Catapult Venture Managers and management, including former Chief Executives of both Anglian Water and South West Water. The company has combined many years of experience in the water sector with a

deep understanding of monitoring technology to create unique products for the measurement of chlorine and other key water quality parameters within drinking water distribution networks.

**Key features of the technology include:**

- Solid state membrane-free sensor technology
- Tiny 'plug-and-play' sensors
- No requirement for chemical reagents
- Robust and highly accurate
- Built in data logger
- GPRS capability
- Easy to use, with no special software

The major benefit of Intellitect's products is that they provide water companies with access to water quality data after it leaves the treatment plant and before it reaches the consumer.

- **Contact details:**

[www.intellitect-water.co.uk](http://www.intellitect-water.co.uk)