

New National Water Quality Instrumentation Service

The Environment Agency (EA) has created a new National Water Quality Instrumentation Service (NWQIS) to improve the quality and efficiency of water quality monitoring in England and Wales. The new service is part of the National Laboratory Service and will fulfil the field monitoring requirements of the EA. However, it will also be available to other Public and Private sector organisations.

Chris Hunter has been appointed to manage the NWQIS. He says: "The new service will centralise the Agency's water quality instrumentation activities to deliver several important benefits. For example, there will be greater commonality amongst both the instruments that we use and the procedures that we use for set up, calibration, operation and service. This will lower costs and improve data accuracy and repeatability."

Under the European Water Framework Directive (WFD) the EA is responsible for monitoring the quality of groundwater and surface waters such as rivers, streams, lakes, estuaries and coastal waters. A wide range of instrumentation is employed for these purposes, including handheld water quality meters such as the YSI 556, logging multiparameter water quality 'sondes' such as the YSI 6600 and complete water quality monitoring stations with communications capability to provide high-intensity, almost real-time data.

Prior to the establishment of the NWQIS, the Agency's water quality instrumentation was purchased and operated by local offices, but now, under the coordination of Frances Houston, all water quality monitoring equipment is purchased and managed centrally. As Frances explains, "This reduces the variety of instruments that we use, which helps in a number of ways. Firstly, it simplifies the stocking of spares and accessories. Secondly, it provides greater availability of spare or replacement monitors, so that we can quickly replace units that are damaged or lost. Thirdly, it helps us to build a closer partnership with suppliers, which means

that we are able to influence future product development, and finally, central control enables us to ensure that all staff utilise the most accurate and reliable instruments."

Before the NWQIS could be established it was first necessary to undertake a review of all of the EA's monitoring instrumentation, so most of it was sent to the EA's Reading offices for assessment before either reconditioning or disposal.

In recent years the YSI 556 multiparameter water quality monitor from YSI Hydrodata (EA framework partner) has been the workhorse of the EA's water monitoring teams; Matt Loewenthal reports a typical operational lifetime of over ten years for the 556. However, the Agency is now moving to the newer MCERTS approved YSI Pro Plus multiparameter water quality monitors and a full capital asset replacement programme is under way. Matt says, "This will ensure that our regional staff have access to the latest technology which is provided with our own operating procedures so that we can ensure, for example, that pH is monitored in Penzance in exactly the same way as it is in Carlisle."

The creation of the NWQIS will also provide greater access to technology such as that which enables real-time web-enabled display of live water quality data and Matt's team has already installed monitoring systems of this nature at sites across the UK.

Summarising the benefits of the NWQIS, Chris Hunter says: "EA and NLS staff possess a considerable level of water quality monitoring and data communications experience and expertise, so it makes sense to pull this together in order to share best practice. We believe that this will benefit the EA and other clients, whilst also helping to protect the environment in England and Wales."

Ends
Words: 583

For further information, please contact:

National Laboratory Service
Olympia House, Gelderd Lane
Leeds, West Yorkshire
LS12 6DD

Email: enquiries@natlabs.co.uk
Tel: 0113 231 2177

Note to editors:

The National Laboratory Service (NLS) operates as a business of the Environment Agency. Applying the latest chemical and molecular analytical techniques, the NLS laboratories provide testing and monitoring services for air, water and soil.

NLS offers excellence in Science with industry leading customer service and tailored analytical solutions designed to meet customer needs.

For more information visit www.natlabs.co.uk