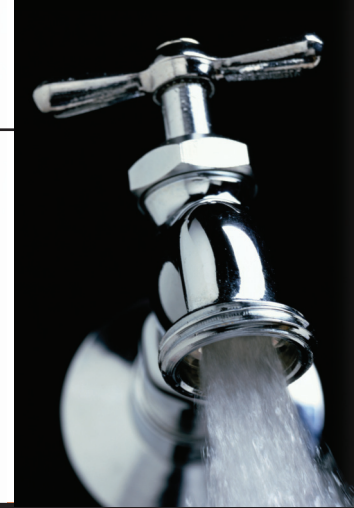


# “If you Don't Monitor it, you Can't Manage it”

## WWEM SET TO BE THE FOCUS FOR UK WATER MONITORING



WWEM 2005

### Author Details

Graham Meller, Buttonwood Marketing  
Tel. +44 (0) 1604 862 404  
Email: gmeller@buttonwoodmarketing.com  
www.buttonwoodmarketing.com



‘If you don’t monitor it; you can’t manage it!’

That’s the ‘why’. **WWEM** will seek to deal with the ‘what’, ‘where’, ‘when’ and ‘how’.

**WWEM** (Water and Wastewater Environmental Monitoring) is a new event designed to provide the latest news and information on how to monitor water quality and quantity. It is jointly organised by the Environment Agency, SWIG and Environmental Technology publications, and organiser Marcus Pattison has warned...

*“...anyone interested in attending should book soon because places are allocated on a first-come, first-served basis. The exhibition is already fully booked and delegate places are limited to only 300 per day”*

The EU Water Framework Directive requires river basin management plans to be published at the latest by 23 October 2009. As a result, EU member states are following a plan designed to meet this objective, and the agreed programme for 2005-2006 highlights a number of priorities including the completion of a register of all the water bodies deemed to require special protection in each river basin. A detailed analysis is required showing, for example, the human impacts upon the quality of ground and surface waters. Naturally the effective implementation of the Directive is heavily dependent on both the quality and quantity of water monitoring data.

The Environment Agency of England and Wales is in the process of placing a greater emphasis on self-monitoring for those organisations with discharges or emissions to the environment. The main reasons for this are to increase continuous monitoring, and at the same time increase the quality and quantity of data being collected. It follows therefore that a rigorous system must be in place to ensure that water quality and flow data is as accurate and as representative as possible, and this is the reasoning behind recent initiatives in the water monitoring sector.

Much of the focus at **WWEM** will be on the Environment Agency’s monitoring certification scheme, MCERTS, which aims to improve the quality of monitoring data delivered by operators of regulated processes.

Quality data is dependent upon proper use of methods, standards, services and equipment, trained and qualified personnel, effective planning, quality assurance and quality control. Many of these issues will be addressed by both the **WWEM** Conference presentations and the Workshops.

Commenting on the importance of **WWEM**, Paul Wiggins from the Environment Agency says “MCERTS has been a resounding success in air emission monitoring, and the Environment Agency is

building on that success with two schemes concerning discharges to water. Firstly, Self-Monitoring of Effluent Flow which was introduced in January 2004, and secondly, Continuous Water Monitoring Equipment Product Certification (the certification of automatic samplers and continuous emission monitors for parameters such as turbidity, pH, ammonia, COD, TOC, dissolved oxygen, total phosphorus, nitrate and TON). **WWEM** provides an ideal opportunity to discover how the schemes are progressing and what the plans are for MCERTS in the future.”

MCERTS assures users of certified instruments and services that they meet performance standards set out within current international standards, and the growing requirements of EC Directives. It assures users of certified instruments and services that they comply with relevant national regulations and requirements such as the Environment Agency’s Operator Monitoring Assessment requirements, and it enables instrument manufacturers and service providers to assure customers that certified instruments and services are suitable. MCERTS also provides independent inspections of monitoring installations.

MCERTS covers the inspection of effluent flow monitoring arrangements including the monitoring installations and the associated quality assurance systems. The main focus of this extension is the Agency’s requirements for consent holders under the Water Resources Act 1991 (WRA) to measure the flow of sewage or trade effluents and collect and report the monitoring data to the Agency.

The Agency requires consent holders regulated under the WRA to measure the total daily volume of effluent flow in excess of 50 cubic metres per day that discharge to the aquatic environment. The total daily volume of effluent should be measured within an uncertainty of +/- 8% at a confidence level of 95%.

Successful flow monitoring depends on using the appropriate equipment combined with effective installation, calibration, maintenance, quality assurance and data management. These must be managed within a quality system that can be routinely audited to ensure that performance can be maintained over time. The Agency has set its minimum requirements for effluent flow monitoring in an MCERTS Standard.

In addition, the Agency has decided that independent inspection of flow monitoring arrangements should be undertaken by appointed specialists with proven technical expertise in effluent flow monitoring. The Agency has set competency requirements for the appointment of these specialists in an MCERTS Standard.

MCERTS Inspectors have been appointed following the rigorous selection process applied by the scheme Inspection Body. The following specialist Companies currently offer the services of MCERTS Inspectors (as of 1/12/04); Critical Flow Systems, Flowcheck, Hydro-logic, Siris Environmental Flow Surveys, Solartron Mobrey and Trueflow Surveys.

MCERTS Inspectors will be responsible for carrying out a site inspection and assessing if the site meets the MCERTS minimum requirements for process configuration and flow monitoring arrangements. Following an audit of the company quality management system, the Inspector will establish if the +/- 8% uncertainty target can be achieved. If it does the MCERTS Inspector will arrange for an MCERTS Site Conformity Certificate to be issued confirming that the site meets the MCERTS

requirements. This Certificate is valid for five years or until there is any significant change that may impact on the flow monitoring. If the site fails to meet the +/- 8% uncertainty target the MCERTS Inspector will recommend remedial work.

From January 1st 2004 the Agency has only accepted Site Conformity Certificates produced by the MCERTS inspection body. The Agency will, however, still accept Certificates produced prior to the implementation of the scheme i.e. prior to December 31st 2003. Certificates remain valid for up to five years.

MCERTS schemes are constantly evolving. Version 2 of the MCERTS Self monitoring of effluent flow Standards was published in August 2004 on the Environment Agency’s website at [www.mcerts.net](http://www.mcerts.net) which also provides regular updates and new developments.

All relevant WRA regulated sites must have a valid Site Conformity Certificate by April 1st 2005 in order for the Agency to “sign off” the site as compliant with Water Company Asset Management Plan obligations.

**The WWEM event will appeal to all those interested in the testing of water, and in particular to those involved in process or compliance monitoring with on-line, portable or laboratory instrumentation.**

**WWEM is an event comprised of a Conference, Workshops and Exhibition, and will take place at the Bretby Conference centre near Burton-on-Trent on 29th and 30th June 2005. Delegate places are £50 + VAT per day.**

**The Conference will address a number of critical themes, including MCERTS and its application in the water sector, calibration and communications technology.**

**Around 50 Workshop presentations will take place on both days on a wide variety of topics within a water monitoring theme. These presentations will be given by some of the 63 exhibitors. Topics will include the latest developments in testing for heavy metals, DO, nutrients, turbidity, pH, algal blooms, cyanide, chlorine, ammonia, VOC’s, endocrine disruptors and much more. In addition, there will be presentations covering scanning spectrometry, MCERTS in flow monitoring, aeration control, SRT control, coagulation control, laboratory automation and long-term sensors deployment using wiper technology.**

**Catherine Wright, Head of Monitoring and Assessment for the Environment Agency, will speak at the WWEM Gala Dinner, and will also make presentations to those organisations that have achieved certification under the Agency’s MCERTS scheme.**

Further information, including a registration pack and details on the Conference and Workshop presentations can be obtained from

[www.wwem.uk.com](http://www.wwem.uk.com)