

## **MCERTS Bulletin 28 – Certification of meters installed for Instantaneous flow measurement**

This bulletin outlines the process to obtain an MCERTS certificate for a flowmeter system installed on Wastewater Treatment Works (WwTW) and sewage pumping station (SPS) last in line overflow sites to comply with PR19 Driver (AMP7) requirements under the Driver Name 'Measuring Compliance with Pass Forward flow(PFF) to Wastewater Treatment Works (WwTW)'. A summary of the PR19 Driver Objective is contained in Appendix 1.

### ***U\_MON4 Flow monitoring installations***

Instantaneous flow measurement compliance shall be assessed against the Environment Agency's MCERTS Standard 'Minimum Requirements for the Self-Monitoring of Flow'(SMoF) clause 3.2.2 'Instantaneous flow monitoring'.

Site inspection reports for Instantaneous flow measurement may be submitted by inspectors on behalf of the site Operator.

It is the Operator's responsibility to confirm that instruments used for instantaneous flow measurement have been added to their Equipment Inventory and will be operated in accordance with the requirements of the Environment Agency's MCERTS Standard.

Where the Operator has an existing MCERTS management system (MS) which has been certified as compliant with MCERTS scheme requirements, the MCERTS Inspection Certificate for the instantaneous flow measurement installation will be issued after receipt of a satisfactory site inspection report and confirmation that the instruments have been added to the MS's Equipment Inventory.

Operators using an uncertified MS will need to achieve compliance with MCERTS scheme MS requirements before an MCERTS Inspection Certificate can be issued.

Once the MCERTS Inspection Certificate has been issued, operation of the instantaneous flow measurement installation will be reviewed through scheduled MCERTS MS assessments.

Where the Operator is responsible for installations at a number of sites, the QMS assessor will choose a square root sample of Instantaneous flow measurement sites in addition to the number of sites selected for total daily volume (TDV) compliance.

MS audits of instantaneous flow measurement data treatment will take account of requirements specified by conditions within permits. However, there may be instances where a permit authorising a discharge has not yet been varied to include conditions relating to instantaneous flow monitoring. Where this is the case the MS audit should take account of any generic conditions which the regulator has specified for these discharges.

Site Inspection reports for Instantaneous flow measurement sites shall be completed in accordance with Bulletin 6 with customisation where appropriate.

### ***U\_MON3 EDM Installations***

A separate bulletin shall be published to cover EDM inspection certificates once the relevant standards have been published.

### Appendix 1 PR19 Driver Objective

Provide MCERTS flow measurement and Event Duration Monitors (EDM) at WwTW or at last in line overflows\* to allow compliance with permit PFF to treatment requirements to be readily checked and to ensure that storm tanks or offline storm storage does not fill and discharge prematurely. This will prevent more frequent, higher strength and longer duration discharges to receiving waters from last in line overflows, storm tanks or other storm overflows that control PFF to WwTW. It will allow receiving waters to respond to rainfall events to provide additional dilution.

\*Last in line overflows: the final overflows that are designed to limit the flows(PFF) that will be fully treated by a WwTW (rather than operate as a network storm sewage overflow)

There are two driver codes associated with FFT compliance PR19, these are:

*U\_MON3* - recording the operation of the overflow that limits the flow passed forward for full treatment at a WwTW and recording the overflow operation/discharge start and end times and report along with flow data to demonstrate compliance with PFF.

*U\_MON4* – using MCERTS flow monitoring to record overflow PFF within +/-8% combined uncertainty.

Driver code	Purpose	Purpose (detail)	Measurand	Specification	MCERTS Standard	MCERTS required during
U_MON3 <i>"spill to storm tank"</i>	Assess FFT compliance	Discharge start/end times or discharge/no discharge at 2 minute intervals	EDM - Discharge start and end times or discharge/no discharge status (2 minute intervals)	*tbc (water level at point of first spill +/- 5mm for weir overflows)	*tbc (Based on WRc document and part 5)	AMP8
U_MON4 <i>"front end flow monitors"</i>	Assess FFT compliance	Measure the <u>flow rate</u> of the continuation flow immediately downstream of overflow into the storm tank (or to the environment where no storm tank exists)	Rate of flow (l/s) of the Flow to full treatment (FFT) /Flow passed forward (FPF)	Flow rate to within +/-8% of the FFT/FPF flow rate	Version 4, 2014(ver. 5 pending)	AMP7
U_MON4 <i>"Back end flow monitors"</i>	Assess rate of flow receiving full treatment	Assess rate of flow receiving full treatment anywhere within STW	Rate of flow (l/s) receiving full treatment	Flow rate to within +/-8% at the permitted FFT flow rate	Version 4, 2014(ver. 5 pending)	AMP7

\*tbc denotes – to be confirmed