



EnviroTechnology
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Enviro Technology Services Plc

MCERTS 2007
25th 26th April 2007



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Continuous Monitoring for WID and LCPD Using MCERTS Approved OP SIS Cross Duct CEMS



QAL 1 – BS EN 14181

- A procedure to demonstrate that the CEM is suitable for the intended purpose before installation, by meeting required performance standards and the uncertainty allowance specified in the EU Directive



QAL 1 – ET and OPSIS

- Performance Standard is proved by MCERTS certificate.
- Uncertainty Allowance is proved by the OPSIS Spreadsheets



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MCERTS Certificate

- [Link to MCERTS Certificate](#)



Uncertainty Allowance Spreadsheet

- [Link to Uncertainty Spreadsheet](#)



QAL 2 – BS EN 14181

- A procedure to calibrate the CEM once it has been installed, using SRMs and then verify whether it still meets the required uncertainty allowances, once installed.



QAL 2 – ET and OPSIS

- Enviro Technology can arrange Testing using a Independent 3rd Party Test House.
- Enviro Technology also need to provide for 1 ET Engineer for 1day to attend site to over lap with 3rd Party Test House



QAL 3 – BS EN 14181

- A procedure to maintain and demonstrate the required quality of the CEM during its normal operation by checking the zero and span reading.



QAL 3 – ET and OPSIS

- Competition use surrogate to simulate zero and span using filters or electrical current.
- OPSIS System 400 requires gas checks.
- Either by manual intervention or auto calibration system.



QAL 3 – ET and OPSIS cont'd

- ET have agreement from the Environment Agency to do Zero and Span Check for the QAL 3
 - At commissioning
 - After 1 month
 - Then at maintenance interval

- Dear Jim

- I wrote to SIRA immediately about the maintenance interval issue, but have not heard yet - I shall chase them.

- I also discussed the issue of QAL3 and maintenance intervals with John Tipping and one of my German counterparts. We share a similar position in that the QAL3 frequency should be linked to the maintenance interval, with the caveat that at each installation, the drift should be verified initially, after, say, one month. In your case, after installation/implementation of EN 14181, the drift performance should be verified initially and once it has been confirmed that the installed system meets the QAL1 performance, the tested QAL1 maintenance interval can be used, ie every six months.

- Regards

- Rick

- Dr Richard Gould
- Technical Advisor
- Releases Monitoring & Assessment
- Environment Agency
- Lutra House
- Dodd Way
- Walton Summit Industrial Estate
- Bamber Bridge
- Preston PR5 8BX



QAL 3 – ET and OPSIS cont'd

- We need to ensure gases will be available.
 - Best to use Customers Gases
 - We can include them in our scope of supply if required (Cryoservice...)
- We need to ensure gas test will be done during commissioning / installation.
- We need to make the customer aware of a follow up visit after one month and cost appropriately.



QAL 3 – ET and OPSIS cont'd

- We need to make sure that zero and span checks are complete at both 6 monthly and annual service visits.
- All this data needs to be recorded.
- Then plotted on a shewart chart for the customer.



AST

- A procedure to evaluate the CEM to show that it continues to function correctly and the calibration function is still valid.
- Again Independent 3rd Party Test House to do the manual tests. This is really out of our scope. Although we have a duty to inform our customers that this is a requirement for running an OPSIS CEM System in compliance with EN 14181.