

The Harwell site was audited in November 2007 and a number of recommendations were made, most notably on the sampling inlet and regulating the humidity of the inlet air. The new manifolds installed for the SMPS and CPC at Harwell now meet these recommendations:

(1) To change the sampling head and inlet manifold.

The copper pipe work and 'funnel' sampling inlet has been replaced with a PM1 sampling head and stainless steel tubing, as part of a contract to supply improved inlet systems for the CPC and SMPS instruments.

(2) To make measurements of the flow rates on a routine basis.

A calibrated flow meter has been provided to the LSO to measure the flow rate of the CPC and SMPS on a fortnightly basis. Visual checks are made on a weekly basis.

(3) To make better provision for the cleaning of the impactor head.

Ultrasonic baths have been provided to each site.

(4) To control and monitor the humidity of the sample.

The humidity of the sample air is controlled and monitored through the use of Nafion driers and installation of humidity sensors.

(5) To provide local access to documentation.

The site operators are provided with copies of the documentation on instrument performance and measurement quality. A web portal, operated by the network management team at King's College London, provides information on site visits, instruments' performance, calibration and call-outs to the instruments' manufacturers.