Health and Safety Committee
June 2010

Setting threshold levels for action: low-level mercury contamination

The recent history of the Rutherford Building has been well-documented elsewhere and can be reviewed at the University's Rutherford Review web pages: www.manchester.ac.uk/rutherfordreview

In Professor David Coggon's final report on the Rutherford Building he makes the following recommendation:

"Further work has since been initiated to address the residual contamination by mercury. After completion of this work, repeat environmental monitoring for mercury should be carried out in the rooms concerned and in those adjacent to them (since changes in under-floor airflow associated with the remedial work might alter levels of mercury in adjacent rooms). In addition, it would be prudent to carry out further monitoring of mercury levels in air in those rooms, which in the most recent HSL survey, had airborne concentrations of mercury in excess of 4 µg/m^3. The purpose would be to check that the measured values were not unrepresentatively low, with higher levels at other times of year. Thus, this additional monitoring (both post- remediation and in those rooms with measured concentrations above 4 µg/m3) should be carried out on four occasions at three-monthly intervals over the course of a year."

Further mercury monitoring has been commissioned from HSL, is being undertaken and will continue as part of the long term maintenance programme for the building. Results of this monitoring will be continually updated on the Rutherford Review web page.

It is important to note that, throughout the recent history of the building and many measurements taken both via spot and long-term monitoring regimes, all results have been below the Workplace Exposure Limit.

However, it is only prudent that we establish and agree thresholds for low level mercury contamination, especially as these levels can fluctuate significantly over time. The current Workplace Exposure Limit of 25µg/m^3 is expected to be lowered to 20µg/m^3. We have unequivocal Health and Safety obligations above this limit and, below it, an obligation under the Health and Safety at Work Act to minimise exposures where reasonably practicable.

Figure 1 overleaf illustrates the proposed action levels and specifies actions to be taken.

Figure 1: Proposed action levels for low-level mercury contamination