

## School's asbestos risk overestimated

Fears that a school in Wales might have to be demolished because of asbestos contamination are waning, after tests carried out by the Health and Safety Laboratory (HSL) disputed the findings of an earlier survey.

Cwmcarn High School, in Caerphilly, closed last October after a structural report identified the presence of asbestos. A month later, Caerphilly County Borough Council issued a report by Santia Asbestos Management Ltd identifying evidence of widespread contamination within the school's ceiling voids.

According to this report, tests detected airborne fibre levels up to  $0.007 \text{ fibres/cm}^3$  – more than ten times above the accepted level for schools of  $0.0005 \text{ fibres/cm}^3$ , as referred to in government guidance issued in 1999.

The HSE arranged for the HSL to carry out its own asbestos tests, which aimed to measure the release and/or transfer of airborne asbestos fibres into the classrooms, which had been identified in Santia's report as a cause of concern. The Laboratory's findings, which were published on the school's website earlier this week, concluded that there is "no evidence for a quantifiable transfer of asbestos fibres from the ceiling void into the classrooms".

The HSL report highlights flaws in the testing methodology used, which was based on phase contrast microscopy (PCM). The HSL report explains: "This method does not identify asbestos fibres; it counts all particles that meet the international definition of a fibre, as set out by EU regulations and the World Health Organisation (WHO) method for fibres in the air."

Other sources of fibres in schools include those in paper, machine-made minerals and clothing, as well as skin cells and calcium-sulphate fibres from plasterboard and chalk.

The HSL's tests were based on a method known as analytical transmission electron microscopy (TEM) – an approach that the Laboratory describes as the "gold standard" for the identification of asbestos fibres in the air.

Its report concluded: "HSL measurements found that airborne asbestos-fibre concentrations in the areas suspected to be most at risk from the asbestos-insulating board debris in the ceiling voids were very low, and many times lower than the concentrations assumed from the previous PCM measurements made. This confirmed what is already recognised by analysts: that counting 'fibres' by light microscopy is unlikely to give accurate, or reliable results for assessing the environmental asbestos exposure and risk in buildings."

The council has agreed to provide funding for a further management survey to consider all options for the school site. This is due to be completed by the end of February, when both the school and the council will consider the options identified.

The report by Santia is available at <http://tinyurl.com/bt6oa5o>

The HSL report can be found at <http://t.co/LEIdlaz2>

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