

Asbestos Dust/Wipe Sampling

Appendices are attached to Technical Working Group minutes when the nature and extent of discussions (or the complexity of the subject) warrants further explanation and clarification. The following is a summary of the discussions and conclusions on the above topic.

Asbestos fibres are “naturally present” in extremely low levels in the air and surfaces of buildings which contain asbestos products. Therefore where dust sampling (and sensitive analysis) is carried out, asbestos fibres will be detected from time to time on the surfaces in the normal occupancy areas of buildings. Their presence is not unexpected. Surface dust sampling often provides very limited meaningful information and the results of such sampling need to be carefully interpreted.

The detection of a few individual asbestos fibres in surface dust does not provide a reliable measure of exposure or risk. Individual fibres present an inconsequential amount of asbestos. Fibres on some surfaces (eg high level surfaces) may have been present for a long period of time (possibly even years). In the absence of any other evidence of the presence of asbestos (eg debris or suspect material), the dust would generally not even merit any specialist remedial action.

Therefore, it is advised that asbestos in dust sampling is avoided or only carried out sparingly eg where there is an identifiable benefit. Speculative dust sampling is not advised particularly where there is no incident, debris or suspect material. As already pointed out random asbestos fibres may be detected on occasions. Such sampling is actually often unhelpful and can lead to incorrect conclusions on exposure and risk. The presence of low numbers of fibres can often be misinterpreted and lead to suggestions of significant contamination, unnecessary occupier alarm and expensive cleaning or “decontamination”.

Sampling for asbestos in dust may have some practical application where it is linked to a recent suspected disturbance or incident or a known source of contamination.

The sampling may provide an indication of the severity and the extent of spread of contamination. However the primary and most useful assessment of asbestos spread in incidents should be the extent of any visible debris and particles. The focus in the investigation of an asbestos incident should be on the presence of any visible suspect asbestos debris/fragments (not general dust or debris). If there is no suspect debris or material, then the extent of spread will have been minimal and the risk to any occupants also minimal. Consequently, the need for and any value of cleaning up will be quite limited.

Dust deposits are usually non-homogeneous and it is often difficult to take a representative sample. Therefore dust samples analysed for the presence of asbestos should comprise a significant amount of loose dust (a minimum of approximately one tablespoon). Dust samples are best collected by scraping the dust layer into a pile and transferring into a suitable labelled container. It is not recommended that dust samples be collected as wipe samples on adhesive tapes, wet wipes or filters, due to unreliability in collection efficacy and as the types of asbestos present can be difficult to identify using the standard procedures.