

Informing staff and parents following an asbestos incident in a school

Case for withdrawing HSE Guidance

HSE documents LAC 5/19 and OC 265/48 give guidance on the level of risk and actions that should be taken following an asbestos incident.

This paper puts the case for the withdrawal of HSE documents LAC 5/19 and OC 265/48. The guidance gives dangerous advice about the level of risk, and gives advice that potentially could cause unsafe practice. It incorrectly applies high workplace control levels to the occupants of buildings, including children.

The Department for Education (DfE), HSE and local authorities direct schools to the guidance if there is an asbestos incident in a school.

Contrary to expert medical opinion the guidance uses a dangerous level of asbestos exposure as a threshold below which HSE claim, incorrectly, that the exposure will normally have been insufficient to pose a long term risk to health. The threshold they use is a defunct Action Level that is 96,000 greater than the level expert medical opinion and the Courts consider is sufficient to cause mesothelioma.

HSE made a policy decision that following an asbestos incident in a school staff and parents need not be informed of their or their children's exposure unless it has exceeded that Action Level. HSE also advise that neither the asbestos incident nor the exposure of staff and children need be officially reported unless it has exceeded the Action level.

The HSE guidance also leaves the reader with the impression that if they smash up asbestos insulating board for less than an hour then the exposure will normally have been insufficient to pose a long term risk to their, or the children's, health.

This is bad guidance that has led to bad practice.

In June 2011 the Asbestos in Schools Group (AiS) formally asked the Chairman of the DfE Asbestos Steering Group that the guidance is withdrawn. This paper puts the case.

The following extracts from LAC 5/19 and OC265/48 explain what the guidance is for and who it is directed at:

*"The level of risk from occupational exposure to asbestos: guidance for HSE and LA staff when responding to enquiries....Provides technical guidance to health and safety regulators and others on the risks from asbestos. The LAC provides guidance to help to respond to enquiries from employers, employees, trade unions and members of the public following exposure or suspected exposure to asbestos."*¹

¹ LAC 4/19 The level of risk from occupational exposure to asbestos: guidance for HSE and LA staff when responding to enquiries
<http://www.hse.gov.uk/lau/lacs/5-19.htm>

There are three Information Documents that accompany the LAC, HSE OC265/48 parts 1 to 3. The covering notes state that they “*may be given to employers, employees and member of the public, and GPs and occupational health professionals.*”² The documents give advice about actions to be taken following an asbestos incident, the legal requirements, the level of risk, reporting the exposure under RIDDOR, medical examinations and advice on entering the exposure in medical records. The latest versions of the guidance were updated in 2008.

Recommendations

- Workplace control levels should not be applied to the occupants of schools. In particular they should not be applied to children.
- DfE should no longer refer schools or local authorities to the HSE guidance OC 265/48 or LAC5/19, until they are amended.
- Local Authorities should no longer refer schools to the HSE guidance until they are amended.
- Both OC265/48 version 3 and the associated LAC 5/19 should be withdrawn from the HSE web-site and publications list and amended.
- The present table of work activities and times in the guidance should be deleted.
- Any reference to the Action level or 48f/ml being normally insufficient to pose a significant long-term risk should be deleted from the guidance.
- The advice that an incident should only be reported to RIDDOR if the level of exposure exceeds the Action Level should be withdrawn.
- Levels above the Control limit should always be reported by schools and local authorities to HSE as dangerous occurrences under RIDDOR legislation.
- If there is an asbestos incident in a school and, as is usually the case, the level of exposure is unknown, the incident should be reported under RIDDOR.
- The Department for Health Committee on Carcinogenicity (COC) has been tasked to assess the relative vulnerability of children to asbestos. As part of that they should be asked to consider the asbestos risks to children from the Action Level, the Control Limits and the Clearance Level.
- The COC should be asked to recommend an environmental limit for asbestos fibre levels in schools.³

²Information document (part 1) - Exposure to Asbestos from work activities: Advice for employers OC 265/48 Version 3
<http://www.hse.gov.uk/foi/internalops/fod/oc/200-299/265-48-1.htm>

³ See [Mesothelioma, Benchmark Levels of Asbestos Exposure](#)

- All cases where the Institute of Occupational Medicine (IOM) has carried out an assessment of the risks from an asbestos incident in a school should be re-examined and opened to public scrutiny.

Staff and pupils exposed to asbestos in schools. If asbestos materials are damaged then asbestos fibres are released. There have been numerous asbestos incidents in schools varying from large releases of asbestos fibres from maintenance or building work, to low level releases over a prolonged period of time from normal classroom activities. These are known to have occurred from simple activities such as slamming a door or just removing stationery from a classroom stationery cupboard. In many cases the fibre releases have been from amosite and in some cases have occurred on a regular basis over the course of years.

If school staff and pupils are present then there is always the possibility that they will be exposed. Mesothelioma can be caused by low level asbestos exposure, with the risks increasing the longer the exposure takes place. Expert medical, epidemiological and legal opinion is that *“There is no known threshold exposure to asbestos below which there is no risk.”*⁴ The majority of schools contain asbestos. Most of those schools contain amosite, some also contain crocidolite, and almost all contain chrysotile. It is accepted that the risks from low level exposure to amosite and crocidolite are significantly greater than the risks from chrysotile alone.

Depending on the circumstances, staff and the pupils are not necessarily aware that they have been exposed to asbestos, and invariably have little concept of the level of risk from the exposure. It is important that people should be given the opportunity to have their exposure recorded in their GP’s medical records, so that if symptoms appear many years later then a GP will be alerted to the fact that asbestos exposure has occurred. It is also important that people are given an honest assessment of the level of risk to them or their children. The manner in which staff and parents are informed has, of course, to be handled very carefully to avoid unnecessary anxiety.

HSE set a threshold level below which people need not be informed. In 2001 the HSE were notified of the long term and frequent amosite exposure of staff and children in a particular infant school where a teacher had died of the asbestos related cancer mesothelioma. They were also told that the school authorities had refused to inform the parents. This was contrary to the HSE guidance on an inadvertent exposure to asbestos (OC265/48) which gives advice on informing people of their exposure following an asbestos incident. The guidance advises that:

*“Asbestos incidents arouse concern and anxiety, and often unrealistic expectations of medical tests or even treatment. This should be addressed by offering prompt and reasoned advice, without contributing to unnecessary alarm.”*⁵

HSE held a meeting in 2004 to discuss the particular case and also the generic principle of informing the occupants of schools following an asbestos incident.⁶ The decision was taken that a threshold

<http://www.asbestosexposureschools.co.uk/pdfnewlinks/MESOTHELIOMA%20%20BENCHMARK%20LEVELS%20OF%20ASBESTOS%20EXPOSURE%2022%20Oct%2009.pdf>

⁴ Dr Rudd. High Court QBD Liverpool District. The Hon Mr Justice Nicol . Dianne Willmore and Knowsley Metropolitan Borough Council 24 July 2009 Para 4 .

⁵ HSE LAC 5/19. HSE/ HELA OC 265/48 revised Nov 2000 . HSE OC 265/48 Version 3 as at 20 Jun 11

⁶ HSE Head of Asbestos Policy. Issues arising from the Lees case (undated Mar 2004)

level of exposure would be set below which people need not be informed of their exposure. In future, they decided, HSE would recommend to their inspectors, local authorities and schools that people need not be informed of their asbestos exposure unless it was “significant.” This was contrary to the expert medical opinion and to the official medical guidance. The HSE minutes record that their medical expert: *“Expressed doubts about our emphasis on the significance of the exposure in deciding on whether the person should be told, as it would be difficult to evaluate in many cases.”*⁷

The medical expert also advised that the guidance is that: *“Even when it is not possible to determine whether an exposure was significant or not, entry in the medical record is recommended.”*⁸

HSE took the decision not to follow the expert medical inspector’s opinion. Contrary to his advice they set a “significant” exposure as a threshold for informing. They further defined “significant” as exceeding the “Action level.” Following the meeting an HSE Asbestos Policy Unit briefing to the Chairman of the Health and Safety Commission informed him of their conclusion. (See Annex 1) The briefing stated:

*“HSE guidance is to inform those who may have been significantly exposed to asbestos (eg exposure has exceeded the action level)”*⁹

HSE were aware that the artificial threshold they were setting was not a safe level. The Action level is a workplace control level that was designed for asbestos contractors wearing breathing apparatus and protective overalls. Certain measures came into force at the level, including regular medical check-ups and the necessity to maintain health records. It was not designed for the occupants of buildings and certainly not for children.

Action level is unsafe. The Action Level is a cumulative exposure to asbestos and when it was in force it was 240 times greater than the “Control Limit.” The HSE recognise this far lower limit is not a safe level. HSE EH10 gave guidance on Control measures for *“work activities involving asbestos.”* In 1984, some twenty years before the meeting, it stated:

*“The Control Limits **do not** represent safe levels... they represent the upper level of permitted exposure, for each form of asbestos, above which the health risk is unacceptable.”*¹⁰

Guidance since then has emphasised the warning, including the 2005 HSE Medical guidance note which reiterated that the Control Limits were not safe levels. It stated: *“Control limits do not represent safe levels of exposure.”*¹¹ It is ethically and scientifically unjustifiable that, as a policy, parents, teachers and support staff are not told about exposures to themselves or their children which are known to be considerably higher than an “unacceptable” health risk to people working on asbestos. (See Annex 2)

⁷ HSE The Lees family Note of video conference meeting held on 19th March 2004. para 4

⁸ HSE Comments on Lees family and OC265/48 Inadvertent exposure Robert Hermanns Medical Inspector Undated (March 2004)

⁹ HSE Asbestos Policy Unit/HSC Chairman’s office CO Case CO/62/04 13 Aug 2004 See Annex 1

¹⁰ HSE Guidance note EH10 Asbestos (revised July 1984)– Control Limits, measurements of airborne dust concentrations and the assessment of control measures. Para 9

¹¹ HSE Guidance note MS13 Asbestos: Medical guidance note. Fourth edition 2005. Para 11

In addition if those working on asbestos are exposed to levels above the Control Limit they have to wear breathing apparatus.¹² And yet when children and occupants of schools have been exposed to a much higher fibre level than that, they and their parents are not even told about it.

When in force the Action level for amosite, crocidolite and chrysotile represented 240 hours at the Control Limit. If the Control Limit is not a safe level of exposure, then the Action Level is far worse. If a person was exposed to the Control Limit for amosite and crocidolite of 48f/ml for an hour they would inhale about 28,000,000 fibres. That is a dangerous level of exposure for an adult. It is considerably more dangerous for a child.

An exposure of 48f/ml hours is the same as 0.025 f/ml. years. The accepted risk model was published in 2000 (Hodgson and Darnton¹³ (H&D). From those estimates, for a 30 year old adult an exposure at 0.025 f/ml. yrs to crocidolite would cause 366 mesothelioma deaths per million people exposed, and to amosite 55 deaths.¹⁴ One of the co-authors of the risk assessment also estimated that there is a 5.3 times greater risk to a 5 year old child than an adult of 30.¹⁵ Based on these estimates an expert member of the Government's advisory committee on science calculated that there would be 1940 mesothelioma deaths per million exposed from crocidolite and 291 from amosite if a child of 5 was exposed at the Action level.¹⁶ For crocidolite that is the same as 1 death for 500 children exposed, and for amosite 1 death for 3,400 exposed. That is as an unacceptable level of risk, particularly for children.¹⁷ (See calculations at Annex 3)

Having come to their decision, HSE then informed the Schools Minister, the unions, local authorities and school authorities that they need not tell the parents of their children's exposure unless it had exceeded the Action Level. The Schools Minister, David Miliband, consequently wrote to the General Secretary of the NUT (See Annex 4) He stated:

*"Informing staff and pupils about possible exposure to asbestos fibres must be handled with extreme sensitivity DFES supports the Health and Safety Executive's policy, which seeks to distinguish the relatively small numbers of cases where there is evidence of significant exposure to asbestos fibres (e.g. where exposure has exceeded the action level) from those, where any exposure is likely to have been both low and sporadic."*¹⁸

The Department for Education therefore referred local authorities and schools to the HSE guidance OC265/48 on actions to be taken following an asbestos incident in a school. They also referred them to the guidance's assessment of the level of risk posed by the exposure. Until the DCSF web-site (Teachernet) was taken off the web in 2011 it had links to the guidance.¹⁹ The guidance gives advice that is contrary to expert medical and epidemiological opinion. It stated:

¹² CAWR 1987 ACOP Reg 2 para 5

¹³ Hodgson, JT and Darnton A (2000). Quantitative risks of mesothelioma and lung cancer in relation to asbestos exposure. *Annals of Occupational Hygiene*, 44; 565-602.

¹⁴ See calculations at Annex 3

¹⁵ HSE Statistics Branch Darnton The quantitative risks of mesothelioma in relation to low-level asbestos exposure . BOHS 17 Oct 2007

¹⁶ See calculations of risks from exposure at the Action Level at Annex 3

¹⁷ HSE Reducing Risks Protecting People . HSE's Decision making process 2001

¹⁸ Letter Asbestos in schools. David Miliband/ General Secretary NUT Aug 2004 See Annex 4

¹⁹ DCSF Teachernet An important message for schools. Accidental exposure to asbestos. also: Asbestos warnings published 31 January 2008

“Exposure would usually have been insufficient to pose a significant long-term risk to health where Action levels were not exceeded.”²⁰

Minister guidance should be urgently revised. In the 2004 letter to the NUT the Minister also wrote:

“What schools need is clear guidance on best practice including what should be done in the event of inadvertent exposures. This should not dumb down the subject as has so often happened in the past but needs to be written in a way that is accessible to the layman. We agree with you that our guidance to schools is dated and should therefore be revised as a matter of urgency...”

The HSE guidance was eventually updated in 2008 but, contrary to the Minister’s word, it does dumb down the risks. It still uses the Action Level as a threshold between a significant and insignificant risk. The updated guidance is not only misleading but it also gives bad advice on the level of risk. It is also likely that it has led to bad practice. Incidents have happened in schools where, because of the guidance, staff and parents have been misled about the level of risks from the exposures they and the children have been subjected. It is also known that people have been advised against entering the incident in their GP’s medical records because the exposure was beneath the Action Level. To compound the error the Action level is still used in the 2008 guidance despite the fact it no longer existed as it had been withdrawn in the 2006 Control of Asbestos Regulations (CAR).

Updated guidance uses defunct Action Level. As well as updating OC265/48, the accompanying Local Authority Circular was also updated. It gives guidance for Local Authority enforcement officers, HSE inspectors and operational staff (LAC5/19). The LAC makes it clear that the guidance is to be used to assess the risk following an asbestos incident and to give advice both to professionals and the public:

“This LAC provides technical guidance to health and safety regulators and others on the risks from asbestos. The LAC provides guidance to help to respond to enquiries from employers, employees, trade unions and members of the public following exposure or suspected exposure to asbestos.”²¹

Both the LAC and OC265/48 contain a section entitled *“Factors that influence level of risk.”* The Action level is used as a threshold level of exposure for a significant long-term risk to health. Included is a table of work activities on various types of asbestos material that HSE consider would release asbestos fibres at the Action level. The guidance states:

The timescales quoted are related to advice given in the previous version of OC 265/48 which stated that exposures would usually have been insufficient to pose a significant long-term risk to health where Action Levels were not exceeded”²²

²⁰ HSE LAC 5/19. HSE/ HELA OC 265/48 revised Nov 2000.

²¹ LAC 5/19 The level of risk from occupational exposure to asbestos: guidance for HSE and LA staff when responding to enquiries To: Health and Safety Enforcing Authorities. For the attention of: Local Authority Health and Safety Enforcement Managers, Health and Safety Regulators and others. 18 Jun 2008.

²² HSE OC 265/48 version 3. Information document (part 1) - Exposure to Asbestos from work activities: Advice for employers Factors that influence level of risk <http://www.hse.gov.uk/foi/internalops/fod/oc/200-299/265-48-1.htm>
LAC 5/19 The level of risk from occupational exposure to asbestos: guidance for HSE and LA staff when responding to enquiries To: Health and Safety Enforcing Authorities. For the attention of: Local Authority Health and Safety Enforcement Managers, Health and Safety Regulators and others. Factors that influence level of risk. <http://www.hse.gov.uk/lau/lacs/5-19.htm>

This statement from the original guidance cannot be justified, as it was even then contrary to acknowledged expert medical, epidemiological and legal opinion. It is unacceptable that HSE have repeated it in the updated guidance when all acknowledged expert opinion since it was first promulgated confirms that *“There is no known threshold exposure to asbestos below which there is no risk.”*²³ Not once does the HSE guidance state that. Instead the theme of the guidance is that so long as the Action level is not exceeded then little harm will be done. This guidance is meant to inform people of the level of risk and yet it is grossly misleading.

The guidance also runs contrary to the conclusions of the Government’s advisory committee on science, WATCH. In February 2011 they confirmed the acknowledged expert opinion when they concluded *“The risk will be lower, the lower the exposure, but “safe” thresholds are not identifiable.”* Because there was an element of doubt about the numerical accuracy of extrapolating levels of risk to very low levels, WATCH also considered that the H&D estimates of risks at the lower levels of exposure should not be taken as absolute values. They therefore proposed a system of control banding for the exposures and associated levels of risk. They referred to the table of control banding used in OC265/48 that has four bands; Lowest Risk, Lower Risk, Higher Risk and Highest Risk. Exposure at the Action Level (0.025 f/ml years) sits squarely in the Higher Risk band.²⁴ This once again underlines the fact that exposure at the Action level is not a safe level. (Extracts from the WATCH banding paper are at Annex 5)

Guidance gives Dangerous message. The message from the OC265/48 guidance, and the inference that people will draw from it, is that if they work on asbestos materials for less time than those given in the table they will suffer little or no long term harm. That is an appalling message. It gives a totally wrong impression to anyone who might be considering disturbing asbestos materials. They are left with the impression that they can drill, cut or smash asbestos lagging, AIB and asbestos cement, and so long as they don’t exceed these times then it is unlikely that either they or the occupants of the rooms will come to any harm. That is completely wrong.

The types of asbestos materials and the timescales for work on them quoted in the guidance are:

<i>Sprayed coatings... or loose lagging :</i>	<i>15minutes</i>
<i>Insulation:</i>	<i>30 minutes</i>
<i>Asbestos insulating board:</i>	<i>60 minutes</i>
<i>Asbestos cement:</i>	<i>8 hours</i> ²⁵

*The timescales quoted are related to advice given in the previous version of OC 265/48 which stated that exposures would usually have been insufficient to pose a significant long-term risk to health where Action Levels were not exceeded”*²⁶

²³ Dr Rudd. High Court QBD Liverpool District. The Hon Mr Justice Nicol . Dianne Willmore and Knowsley Metropolitan Borough Council 24 July 2009 Para 4 .

²⁴ See Annex 5 WATCH Control banding for certain tasks involving asbestos 24th February 2009 (Discussion paper) <http://www.hse.gov.uk/aboutus/meetings/iacs/acts/watch/240209/asbestos.pdf>

²⁵ HSE Information document Exposure to Asbestos from Workplace activities OC265/48 Factors that influence level of risk para 3 2008

²⁶ HSE OC 265/48 version 3. Information document (part 1) - Exposure to Asbestos from work activities: Advice for employers

Factors that influence level of risk <http://www.hse.gov.uk/foi/internalops/fod/oc/200-299/265-48-1.htm>

LAC 5/19 The level of risk from occupational exposure to asbestos: guidance for HSE and LA staff when responding to enquiries To: Health and Safety Enforcing Authorities. For the attention of: Local Authority Health and Safety Enforcement Managers, Health and Safety Regulators and others. Factors that influence level of risk. <http://www.hse.gov.uk/lau/iacs/5-19.htm>

It would be dangerous to work on any of the materials for times far less than the ones quoted, and yet one could easily assume from the table that if you smashed up a panel of asbestos insulating board for say five minutes then no harm would be done. 30 minutes would also be ok, but perhaps one should avoid 55 minutes as that is approaching the threshold, but even then HSE say that is insufficient to cause long term harm – so perhaps that would also be ok.

HSE have quoted times that will cumulatively expose a person to 48f/ml hours of crocidolite or amosite fibres, which means they will inhale about 28,000,000 fibres, or at the Action Level for chrysotile of 72 f/ml they will inhale about 43,000,000 fibres. For some of the activities the fibres inhaled will be even greater, for instance a person can inhale 39,000,000 amosite fibres over the hour just cleaning up after the work on AIB, 130,000,000 fibres dry stripping crocidolite for 15 minutes or up to a billion chrysotile fibres disc cutting asbestos cement sheet for eight hours. All these are dangerous levels of exposure, as are levels far less than these. (The timescales quoted in OC265/48 and the numbers of fibres that would be released from the work activities are examined at Annex 6)

Concerns raised in Parliament. So concerned were the Asbestos in Schools Group (AiS) that in 2009 they raised the matter with the Shadow Schools Minister, Nick Gibb MP. They briefed him on the continued use of the Action level in the HSE guidance, and the particular risk to children. They expressed their concerns that the Department for Education was referring schools to the guidance following an asbestos incident, and they recommended that it should be urgently withdrawn. In July 2009 Nick Gibb asked a Parliamentary question to determine the risks to children from asbestos exposure at 48 f/ml (amosite and crocidolite) and 72 f/ml (chrysotile) (The Action Levels). A DWP Minister responded. He stated:

“The information requested could be produced only at disproportionate cost as it is currently not available or cannot be produced on a sound scientific basis in respect of a five-year old.

The exposures in the question appear to relate to the “Action levels” in the 2002 Control of Asbestos at Work Regulations which are no longer current. The current limit in the 2006 regulations is lower at 0.1 fibres per millilitre of air averaged over a four hour period. Irrespective of this limit the regulations require exposures to be reduced to the lowest reasonably practicable level below 0.1 fibres per millilitre.

Risk assessment models are available for mesothelioma and asbestos-related lung cancer. These can be used to assess risk for given levels of exposure, exposure durations, types of asbestos, and the age at which exposure occurs—but only within the working age range.”²⁷

This Parliamentary written answer is proof that both Government and Shadow Ministers are aware of the facts. They are aware that the Action Level was no longer current and that the limit was considerably lower. There is no scientific basis for applying the Action Level to adults and, as the Minister confirms, there is certainly no scientific basis for applying it to children – and yet that is precisely what has been happening. At the time Nick Gibb was briefed by AiS on the relevance of the Minister’s answer, and how the guidance should be withdrawn before more harm was done.

²⁷Hansard written answers Column 1259W WORK AND PENSIONS Asbestos 21 Jul 2009 See Annex 7
<http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm090721/text/90721w0031.htm#09072269000033>

In May 2010 Nick Gibb MP became the Minister of State for Schools. However more than a year after entering office he has not withdrawn the HSE guidance. Almost two years after he had asked his Parliamentary question as a Shadow Minister, he was asked a similar question in his capacity as the Minister of State. In April 2011 Annette Brooke MP asked what guidance the Minister's Department issues on the level of exposure below which people need not be informed and what guidance they issue on what constitutes a significant risk. The Minister confirmed that *"No exposure level is deemed to be safe."* However, despite the ambiguity between his acknowledgement of the level of risk and the fact that he is fully aware of the unacceptable advice given in the HSE guidance, he confirmed that schools should still refer to the guidance:

"In the event of asbestos fibres being found, the school or local authority should refer to HSE guidance note Local Authority Circular 5/19 "The level of risk from occupational exposure to asbestos: guidance for HSE and LA staff when responding to enquiries."²⁸

At the same time Annette Brooke also tabled a Parliamentary question to the Minister with responsibility for the HSE, asking whether LAC5/19 applies to staff and children in schools. She also asked whether the HSE has considered amending the guidance in light of both the Supreme Court Judgement and the conclusions of the Government's advisory committee on the risks from low level exposure. The Minister's written answer stated:

"Local authority circular (LAC) 5/19 provides technical guidance and is not school specific. In it HSE gives advice to local authority regulators and others on the risks from asbestos to enable them to answer inquiries about possible or inadvertent exposures. It includes generic advice for employers, employees and members of the public. To that extent school staff and school children, who may be inadvertently exposed if all the required systems fail to prevent significant exposures, are covered by the advice in the LAC.

There are no plans to revise the LAC as a direct result of the discussions of the HSE's independent advisory committee WATCH (Working Group on the Assessment of Toxic Chemicals). It has been established for some time that the lower the exposure to asbestos, the lower the risk of disease, and that based on current evidence it is not possible to identify safe thresholds. The LAC's medical advice to anyone concerned that they may have had significant exposure remains current...."²⁹

Both Ministers are aware of the flaws in the HSE guidance and that the threshold of a "significant" asbestos exposure given in the guidance has no scientific basis to be applied to children. They are aware that it is an unsafe level for adults and children are more at risk. They are also aware of the serious implications for the occupants of schools, and yet despite this they have confirmed that they have no plans to revise the guidance. They have also confirmed that DFE still refers local authorities and schools to the guidance following an asbestos incident in a school. This once again underlines the Government's unacceptable practice of applying control levels and practices designed for people who work on asbestos to children in schools. It is not only unsafe but it also gives a dangerous

²⁸ Parliamentary Question Annette Brooke MP/ Minister of State for Schools Nick Gibb MP. 26 Apr 2011 51916, 51917 See Annex 7 <http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110426/text/110426w0012.htm#11042790001660>

²⁹ Parliamentary Question Annette Brooke MP/ DWP Minister Chris Grayling MP. 26 Apr 2011 51981 See Annex 7 <http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110426/text/110426w0010.htm#11042753002007>

message to schools and runs contrary to the Precautionary Principle. The Government is also aware that by adopting, and adhering to, this policy their actions are contrary to European Union guidance.

In 2000 the European Commission published a Communication on the Precautionary Principle. They stressed the importance of a scientific evaluation of the level of risk, and where there was a risk, but it was not possible to put a definitive numerical value on the precise level, then the precautionary principle should be adopted. The paper states:

"The precautionary principle applies where scientific evidence is insufficient, inconclusive or uncertain and preliminary scientific evaluation indicates that there are reasonable grounds for concern that the potentially dangerous effects on the environment, human, animal or plant health may be inconsistent with the high level of protection chosen by the EU....

Recourse to the precautionary principle presupposes that potentially dangerous effects deriving from a phenomenon, product or process have been identified, and that scientific evaluation does not allow the risk to be determined with sufficient certainty.

The implementation of an approach based on the precautionary principle should start with a scientific evaluation, as complete as possible, and where possible, identifying at each stage the degree of scientific uncertainty.³⁰

It is therefore contrary to EU guidance that in 2011 the Government have still not assessed the scale of the asbestos problem in schools or the risk to the occupants, and in particular have not assessed the increased risk to children. Having failed to quantify the increased risks to children, the DfE and HSE knowingly refer schools to guidance that uses an unsafe level, the Action Level, as a threshold of a significant risk for children.

There is considerable evidence that the presence of asbestos in schools presents a very real danger to the occupants, and in particular to children. However there is scientific uncertainty about the precise level of risk, and therefore until the scientific evidence is available the precautionary principle should be applied to schools. Ministers know that the HSE guidance gives incorrect and unsafe advice and they have been asked for it to be withdrawn. They have been given ample opportunity to withdraw the guidance, but instead they have confirmed its continued use by schools and local authorities. They have not only failed to follow the Precautionary Principle, they have also failed in their duty of care for staff and children in schools.

RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) If there is an accident then, if certain criteria are met, it has to be reported to the HSE through RIDDOR. However, HSE give guidance in OC265/48 to employers, including schools and local authorities, that they are not required to report an asbestos incident in a school unless the staff or children's exposure has exceeded the Action Level. This is bad advice.

The purpose of reporting an asbestos incident under RIDDOR is that:

"The reports alert the enforcing authorities to individual incidents. They also provide data which is used to indicate where and how risks arise and to show up trends. This enables the enforcing

³⁰ COMMUNICATION FROM THE COMMISSION on the precautionary principle 2 Feb 2000
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2000:0001:FIN:EN:PDF>

authorities to target their activities effectively and to advise employers on strategies to help prevent injuries, ill health and accidental loss.”³¹

The criteria for reporting an asbestos incident is covered by the RIDDOR regulations, which state:

“Escape of substances:

The accidental release or escape of any substance in a quantity sufficient to cause the death, major injury or any other damage to the health of any person.”³²

The RIDDOR guidance does not define what constitutes the level of asbestos exposure in a “quantity sufficient to cause the death, major injury or any other damage to the health of any person.”

However OC265/48 does, and it uses the defunct Action Level. HSE state:

“The following are examples of uncontrolled work activities likely to create a significant concentration of fibres in the air, thereby adding to the risk of developing an asbestos related disease:

- *Use of power tools (to drill, cut etc) on most ACMs;*
- *Physical disturbance, such as knocking, breaking, smashing of a licensable ACM e.g. sprayed coating, lagging, asbestos insulating board (AIB);*
- *Manually cutting or drilling AIB;*
- *Aggressive physical disturbance of asbestos cement (AC), e.g. breaking or smashing.*

Any of the work activities listed in paragraph 3.1 could be regarded as Dangerous Occurrences. They should be reported to HSE’s Incident Contact Centre (tel: 0845 3009923) where they take place, or are repeated (without effective controls), for more than the periods of time outlined below:*

- *Sprayed coatings (excluding textured decorative coatings) or loose lagging: 15 minutes*
- *Insulation: 30 minutes*
- *Asbestos insulating board: 60 minutes*
- *Asbestos cement: 8 hours.*

** The timescales quoted are related to advice given in the previous version of OC 265/48 which stated that exposure would usually have been insufficient to pose a significant long-term risk to health where Action Levels were not exceeded”³³*

If there is an asbestos incident in a school, and staff or pupils are exposed to asbestos then HSE’s guidance is that the incident only has to be reported through RIDDOR if it has exceeded the Action Level. This means that a whole classroom of children could be exposed to 55 minutes of AIB panels being smashed up and, if the authorities follow the HSE guidance, they need not report the incident.

³¹ HSE A guide to the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 L73, (Third edition, published 2008). Schedule 2 Part 1 para 2 p8

<http://www.hse.gov.uk/pubns/priced/l73.pdf>

³² RIDDOR Reportable dangerous occurrences are: <http://www.hse.gov.uk/riddor/guidance.htm>

HSE A guide to the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 L73, (Third edition, published 2008). Schedule 2 Part 1 para 21 p44 <http://www.hse.gov.uk/pubns/priced/l73.pdf>

³³ HSE OC265/48 Information document 1- Exposure to asbestos from work activities: advice for employers Legal requirements Factors that influence level of risk. <http://www.hse.gov.uk/foi/internalops/fod/oc/200-299/265-48-1.htm>

This is despite the fact that each one of the children will potentially have inhaled in excess of 25 million amosite fibres. The guidance is fundamentally wrong.

It is known that at least one local authority has followed the HSE guidance *“to the letter.”*³⁴ It is inevitable that this bad advice has led to the failure of schools and other local authorities to report asbestos incidents. One of the purposes of RIDDOR is to build up a data bank of incidents. However the data bank will not give a true reflection of the number of asbestos incidents in the workplace, including schools, if the authorities have followed the HSE guidance. The inevitable consequence is that the picture given by the data bank understates the actual numbers of asbestos incidents. This has further implications as RIDDOR data is reported to the EU, and therefore inevitably the HSE returns to them will not give the true scale of asbestos incidents in the UK. No doubt this under-reporting in part accounts for the Minister feeling able to claim that *“Asbestos in the majority of local authority schools is being satisfactorily managed,”*³⁵ when there is ample evidence to show that the very opposite is true.³⁶ Also it would have enabled Lord Young to claim, incorrectly, in his report Common Sense Common Safety that schools as *“a low hazard... low risk environment.”*³⁷

It is wrong that HSE have set such a high level of asbestos exposure as a threshold for triggering a RIDDOR report. Their guidance should be withdrawn and amended with a far lower threshold. The Control Limit is the level that should not be exceeded without special controls being in place. It should at the very least be the threshold above which a school or local authority reports an incident under RIDDOR. However as invariably it will be unknown what level of exposure has been experienced from an asbestos fibre release in a school, then the default position should be that any asbestos incident in a school should be reported under RIDDOR.

An entry on a GP's medical records could allow remission. It might save a life.

Although there is presently no cure for mesothelioma, there are treatments that can give remission in some cases over a number of years. However, as with any cancer, if treatment is to stand any chance of success then the cancer must be identified at an early stage. It is unlikely that a person will remember an asbestos incident that took place many years before when they were a child at school, but if it is recorded on their records the GP will be alerted to the fact that asbestos exposure had taken place and will be on the lookout for the early signs of mesothelioma. If there is no record then the early signs can easily be missed and, by the time a diagnosis is made, it might be too late to be able to give any meaningful treatment. In recent years medical science has advanced considerably so that cures have been found for certain cancers. As the latency can be so long, a child exposed at school today might not develop the early symptoms for forty years or more and nobody can say that a cure will not have been found by then. If their exposure is on their records perhaps a life could be saved.

Guidance has been used in schools following asbestos exposure. The HSE guidance has been used in schools following asbestos incidents. This has resulted in parents being unaware of

³⁴ Name withheld but available 24 Jun 2011

³⁵ [08 February 2011 Parliamentary Written Answers](#) Education Schools: Asbestos John Mann MP/Minister of State for Schools Nick Gibb MP

³⁶ [ATAC ASSESSMENT of asbestos management in schools](#) 20 Jan 2010

[http://www.asbestosexposureschools.co.uk/pdfnewslinks/ASSESSMENT%20OF%20ASBESTOS%20MANAGEMENT%20IN%20SCHOOLS%20ATAC.%2022%20FEB%202010.pdf?zoom_highlight=atac+report#search=atac report](http://www.asbestosexposureschools.co.uk/pdfnewslinks/ASSESSMENT%20OF%20ASBESTOS%20MANAGEMENT%20IN%20SCHOOLS%20ATAC.%2022%20FEB%202010.pdf?zoom_highlight=atac+report#search=atac%20report)

³⁷ Lord Young Common Sense Common Safety 14 Oct 10

their children's exposure, or else the school or local authorities have advised them that the exposures were insufficient to cause a long term risk. Advice has also been given, because of the guidance, that entry in medical records was not recommended.

Because of HSE's flawed guidance the parents have never been told of their children's asbestos exposure in the infant school that first brought this problem to HSE's attention.

Another example where the guidance has been followed occurred in a school where staff and pupils had been exposed to asbestos over a prolonged period. Amosite fibres were released into the classrooms each time stationary was removed from the stationary cupboards. The fibres were from unpainted asbestos insulating board containing amosite at the back of the cupboards. The exposures had occurred every time the cupboards had been accessed, which was a regular occurrence every day during the term. Although each exposure was relatively low, cumulatively they became significant as they had taken place for five years for most pupils and for up to twenty years for a number of teachers.

The local authority called in a commercial firm, the Institute of Occupational Medicine (IOM) to assess the likely exposures and the subsequent risks to the staff and pupils. They assessed that the cumulative exposures of the pupils was between 4 and 47.5 f/ml hours over their five years at the school, and for the teachers between 6 and 30 f/ml hours every single year. Consequently for the teachers in just 19 months in the worst case the Action level of 48f/ml hours would have been exceeded. Although the fact was not acknowledged in IOM's conclusions, and neither was the fact that their worst case estimate for the cumulative exposure of the pupils was only marginally below the Action level

IOM based their assessment of the risks and their recommendations on the HSE guidance OC265/48. On the strength of that the local authority released a statement to the press in 2009 which stated that:

"IOM concluded that the exposures and predicted risks are low enough that they should not lead to any occurrence of asbestos related illness.

*The risks are so low that IOM are not recommending that information is placed on individuals' health records or that formal medical surveillance is required."*³⁸

IOM had justified their conclusions as, in their opinion, none of the exposures exceeded 48fibres/ml. Their conclusions are similar for both staff and pupils. They stated:

"In our estimation, none of the interviewees had exposure approaching the 48 fibre/ml.hrs that HSE referred to as an indicator of exposure being sufficient to pose a long term health risk. Many of the interviewees had exposure much less than that....

We interpret the HSE advice as being that at those levels of exposure it is not necessary to put the information onto individual's medical records. Therefore, the interviewees' potential for exposure

³⁸ Derby CC press release 13 Jul 09 Lees Brook school asbestos information.
<http://www.derby.gov.uk/PressReleases/LatestInfo/asbestos.htm> Keith Forrest, assistant education director for children and young people, This is Derbyshire School's asbestos risk is 'very low' Wednesday, July 15, 2009,

*was so low that we recommend that they do not need to ask their GPs to enter a note on their medical record.*³⁹

IOM's conclusions are deeply flawed, but they have been able to justify them because of the guidance given in HSE's OC265/48. Because of it the staff, the parents and the pupils at this school have been given unjustified assurances about the risks from their exposures. They have also been advised that the exposure was so low that an entry in their medical records was not recommended. Consequently if in thirty years' time a member of staff, or particularly a pupil, develops the first sign of mesothelioma and visits their GP, there will be no record of their exposure, and unless they remember the incident then the symptoms might pass unnoticed and a life might be lost.

(Following another asbestos incident in a school IOM gave similarly flawed recommendations and advised that *"In particular, we do not recommend that any record be kept of this incident on people's health or personnel records of children or school staff."*⁴⁰ The role of IOM in assessing asbestos risks in schools is at Annex 8)

Recommendations

- Workplace control levels should not be applied to the occupants of schools. In particular they should not be applied to children.
- DfE should no longer refer schools or local authorities to the HSE guidance OC 265/48 or LAC5/19, until they are amended.
- Local Authorities should no longer refer schools to the HSE guidance until they are amended.
- Both OC265/48 version 3 and the associated LAC 5/19 should be withdrawn from the HSE web-site and publications list and amended.
- The present table of work activities and times in the guidance should be deleted.
- Any reference to the Action level or 48f/ml being normally insufficient to pose a significant long-term risk should be deleted from the guidance.
- The advice that an incident should only be reported to RIDDOR if the level of exposure exceeds the Action Level should be withdrawn.
- Levels above the Control limit should always be reported by schools and local authorities to HSE as dangerous occurrences under RIDDOR legislation.

³⁹IOM Strategic Consulting Report: 629-00224 An assessment of the past exposure and estimation of consequent risks to health of staff that may have arisen from asbestos-containing material in cupboards at Lees Brook Community Sports College, Derby Alan Jones, Andy Stelling, I Levers, Hilary Cowie April 2009 page viii

⁴⁰ IOM A Report on the Likely Risks from Asbestos Exposure at Silverhill School, Derby Report No:628-00009 Dr John W Cherrie and Hilary Cowie reviewed by Dr Alastair Robertson

- If there is an asbestos incident in a school and, as is usually the case, the level of exposure is unknown, the incident should be reported to RIDDOR.
- The Department for Health Committee on Carcinogenicity (COC) has been tasked to assess the relative vulnerability of children to asbestos. As part of that they should be asked to consider the asbestos risks to children from the Action Level, the Control Limits and the Clearance Level.
- The COC should be asked to recommend an environmental limit for asbestos fibre levels in schools.⁴¹
- All cases where the Institute of Occupational Medicine (IOM) has carried out an assessment of the risks from an asbestos incident in a school should be re-examined and opened to public scrutiny.

Michael Lees
6th July 2011

ANNEXES: Supporting documents

- Annex 1. Submission by HSE Asbestos Policy Unit to the Chairman of the HSC.
- Annex 2. Control Limits are Not Safe. Action Level was 240 hours at the Control Limit.
- Annex 3. Calculation of Risks at the Action Level.
- Annex 4. David Miliband letter to the General Secretary of the NUT.
- Annex 5. WATCH Banding. Action Level Exposure in Higher Band.
- Annex 6. Fibres inhaled from Timescales in HSE Guidance.
- Annex 7. Parliamentary Questions about Risks at Action Level and HSE Guidance.
- Annex 8. IOM

⁴¹ See [Mesothelioma, Benchmark Levels of Asbestos Exposure](http://www.asbestosexposureschools.co.uk/pdfnewslinks/MESOTHELIOMA%20%20BENCHMARK%20LEVELS%20OF%20ASBESTOS%20EXPOSURE%2022%20Oct%2009.pdf)
<http://www.asbestosexposureschools.co.uk/pdfnewslinks/MESOTHELIOMA%20%20BENCHMARK%20LEVELS%20OF%20ASBESTOS%20EXPOSURE%2022%20Oct%2009.pdf>

Informing staff and parents following an asbestos incident in a school

Case for withdrawing HSE Guidance

ANNEXES. Supporting Documents.

Annex 1. Submission by HSE Asbestos Policy to Chairman of the HSC.

“HSE guidance is to inform those who may have been significantly exposed to asbestos (eg exposure has exceeded the action level)”

Note: The HSE Asbestos Policy Unit submission to the Chairman of the HSC follows these comments. There are a number of statements in the submission that are incorrect. They are relevant to the general topic of asbestos in schools and indirectly to the topics in this paper. The following are comments on the incorrect statements:

- Background. Mrs Lees had been a teacher for six years at the school, starting ten years before her death from mesothelioma.
- Para 2. HSE was given evidence of daily exposure to asbestos at the school over the course of six years. Cumulatively they would have been significant. Most were low level but on occasions there were higher peak levels.
- Para 3. The HSE were informed that there was asbestos in the school, some was damaged, no asbestos survey had been carried out and there was no system of asbestos management. Despite this HSE never carried out an inspection. At the time no asbestos survey had been carried out although the school knowingly, but incorrectly, informed HSE that it had.
- Para 4. HSE’s reasoning and conclusions are wrong. The latency times HSE quote are from **first** exposure to asbestos. HSE were informed that Mrs Lees had in all probability been exposed to asbestos in a number of schools over the course of a thirty year teaching career, the exposures at this school were just part of her cumulative exposure that had begun thirty years before. Medical opinion is now that all exposures are cumulative until about five years before onset of symptoms.⁴² The regular exposures to amosite in this school therefore materially contributed towards the development of her mesothelioma.
- The strategy HSE were developing to raise awareness was the asbestos in schools campaign that was initiated in November 2004. A year later the campaign was dropped before the first meeting had taken place.
- Four years later HSE updated their guidance on informing staff and pupils of their exposure. LAC5/19 and OC265/48 were the unacceptable result.

⁴² Supreme Court judgement. *Sienkiewicz v Greif Willmore v Knowsley MBC Lord Phillips Para 19v*

To: Chairman's Office
From: Pauline Nash, Asbestos Policy
Re: CO Case CO/62/04
Date: 13 August 2004

Issue

This submission relates to the CO case (CO/62/04) following a letter from the National Union of Teachers (NUT). The NUT have raised issues relating to the presence of asbestos in schools and the death of one of its members, Mrs Regina Lees, who died of mesothelioma in 2000.

Recommendation

Bill Macdonald, head of asbestos policy rather than Bill Callaghan should reply to the NUT. Although they have written to Bill Callaghan, the NUT are specifically asking HSE to reconsider enforcement decisions in relation to this specific case. In view of the constitutional position between HSC and HSE it does not seem to be appropriate for Bill Callaghan to become involved. Also, all of the issues the NUT have raised have already been dealt with in our previous correspondence with the husband and brother-in-law of Mrs Lees.

Background

HSE has been in correspondence with both Michael Lees (husband of Regina Lees) and [REDACTED] Michael Lees) for a number of years following Mrs Lees' death in September 2000. Mrs Lees had been a teacher at the Stella Maris School in Bideford, Devon for 10 years but we understand that she had worked at other schools for a number of years prior to that

The main issues raised and HSE's response are as follows:

1. HSE to carry out a retrospective investigation into the potential exposure of Mrs Lees and other staff and pupils at Stella Maris School during the 1990s.
- **HSE Response** – Operational staff at HSE's Bristol office reviewed the information given to them by Mr Lees but concluded that there was insufficient evidence available to make conclusions on the degree of exposure at Stella Maris School. Their preliminary enquiries revealed that substantial resources would be required to collect such evidence, and even then it is unlikely that a conviction could be obtained. This decision was supported by Timothy Walker in a letter

to Michael Lees in July 2002 (copy attached), in which he concluded that the decision was consistent with HSC's enforcement policy and the strategic plan.

2. Staff and parents of pupils at the Stella Maris School are contacted and are informed they may have been exposed to asbestos so that they can have the information recorded on their medical records.
 - **HSE Response** – It is difficult to see how informing former colleagues or pupils of the Stella Maris School would serve any purpose other than to create anxiety, particularly for groups of people who may have received very low and occasional exposures as would appear to be the case at the Stella Maris School. HSE guidance is to inform those who may have been significantly exposed to asbestos (eg exposure has exceeded the action level) to distinguish such cases from those where there may have been relatively minor exposure which could apply to considerable numbers of people because of the widespread use of asbestos in the past.
3. The school is inspected to ensure that any asbestos is being managed in accordance with the Control of Asbestos at Work regulations 2002. This would help reassure staff and parents at the school.
 - **HSE Response** – The Stella Maris School building was demolished in 1998 and the School became part of Grenville College. In January 2002 the Bristol office wrote to Grenville College explaining what the law requires on asbestos. Verbal and written confirmation was received from Grenville College that they had obtained the relevant guidance; undertaken an asbestos survey and were committed to providing effective management of asbestos materials. Since then there has been no evidence to indicate that HSE should make further enquiries or take any further action in respect of this matter.
4. The likelihood of Mrs Lees developing mesothelioma as a result of working at Stella Maris School.
 - **HSE Response** – The average time between exposure and development of mesothelioma is between 35 to 41 years with a spread between 15 to 67 years and it is rare that a mesothelioma would appear within 20 years of exposure. As Mrs Lees started work at the school only ten years before her death, it is not possible, in HSE's view, that her mesothelioma was linked in any way to her time at the school.

More details of these issues and the reasons for HSE's response are included in the attached letter which was sent to Michael Lees in April this year. The NUT letter raises the first three of these issues.

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A very similar letter to CO/62/04 has been sent from the NUT to the Right Honourable D Milliband, Minister for Education. This letter asks DfES to update their advice to schools on the management of asbestos and to advocate a policy of openness in relation to exposure of staff and pupils to asbestos. HSE will be contributing to the response.

HSE is currently developing a strategy to raise awareness of the need to manage asbestos in the education sector and to encourage effective and proportionate compliance. DfES have agreed to become involved in this. In the reply to the NUT, it is proposed also to invite them to become involved in this work. The NUT perceived shortcomings in the current guidance on informing staff and pupils of exposure to asbestos and other wider issues can be considered in more detail if they agree to become involved.

Summary and Conclusion

It would seem to be appropriate for Bill Callaghan to respond to the letter from the NUT as the NUT are specifically asking HSE to reconsider enforcement decisions in relation to this specific case.

HSE is currently developing a strategy to raise awareness of the need to manage asbestos in the education sector and to encourage effective and proportionate compliance. The NUT will be invited to become involved so that they can discuss the wider issues they have raised in the letter.

ANNEX 2: Control Limit not safe. Action level was 240 hours at the Control Limit.

The 1984 HSE guidance stated: *“The Control Limits **do not** represent safe levels... they represent the upper level of permitted exposure, for each form of asbestos, above which the health risk is unacceptable.”*⁴³

The 2005 HSE Medical guidance note MS 13 still gave the warning that: *“Control limits do not represent safe levels of exposure.”*⁴⁴

The “unsafe” Control Limit for amosite and crocidolite introduced in 1984 was 0.2 f/ml.⁴⁵ The “unsafe” Control Limit for amosite and crocidolite in 2005 remained at 0.2 f/ml.⁴⁶ In 2006 the Control Limit was reduced to 0.1 f/ml. Even at that level it cannot be considered safe as a person would inhale about 60,000 fibres an hour.

Although the present European wide levels for the Control limit were introduced in 2006, in September 2009 the French Agency for Environmental and Occupational Health and Safety, Afsset, reinforced the fact that the present limit is not a safe level by issuing a report calling for the Control limit to be reduced even further, stating:

*“The occupational exposure limit should “without delay” be reduced from 100 fibres per litre to 10f/l over an average period of eight hours. (0.1f/ml to 0.01f/ml) “This would reduce [the health] risk by a factor of 10,” said Afsset, insisting that the current exposure limit “which provokes 3.3 extra cases of cancer for every 1000 workers cannot be considered as acceptable... Afsset insisted that given the toxicity of asbestos “only the lowest possible level [of exposure] is acceptable” and called for the French government to “re-evaluate the limit regularly in order to reduce it”.*⁴⁷

The Action level was always 48 f/ml hours for amosite and crocidolite and 72 f/ml hours for chrysotile. It never changed. It represented 240 hours inhaling amosite, crocidolite or chrysotile at the Control Limit. If the Control Limit did not represent a safe level of exposure then the Action Level most certainly did not. At 48f/ml for an hour a person would inhale about 28,800,000 amosite or crocidolite fibres. That is a dangerous level of exposure for an adult. It is considerably more dangerous for a child.

Although the Action Level should no longer exist, HSE still use it as a threshold for a significant exposure. The Control Limit is now half of what it used to be and therefore the Action Level is equivalent to 480 hours at the current level. If the present Control Limit is unsafe, and there is every reason to believe it is, then a level 480 times greater than it is most certainly unsafe.

Reducing Control Limits Action level constant.

The following table list the various control limits which have reduced from 177 particles/cc in 1966 to 0.1 f/ml in 2006

⁴³ HSE Guidance note EH10 Asbestos (revised July 1984)– Control Limits, measurements of airborne dust concentrations and the assessment of control measures. Para 9

⁴⁴ HSE Guidance note MS13 Asbestos: Medical guidance note. Fourth edition 2005. Para 11

⁴⁵ HSE Guidance note EH10 Asbestos (revised July 1984)– Control Limits, measurements of airborne dust concentrations and the assessment of control measures. Para 9 Crocidolite or amosite 0.2 f/ml when measured or calculated in relation to a 4-hour reference period.

⁴⁶ CAWR 2002 ACOP p2

⁴⁷ French Agency urges immediate lowering of asbestos occupational exposure limits Chemical watch 22 Sep 2009

Standard in 1966 177 particles/cc⁴⁸

(1968

British Occupational Hygiene Society suggested a safety standard for chrysotile

0.2 f/ml.

Asbestos industry suggested 2 f/ml

Later it was considered that 1 in 10 workers would contract asbestos-related disease at this level.)

1969 limit of exposure

Asbestos Regulations 1969 2 f/ml⁴⁹

Limits up to 31 July 1984

"when measured as a time weighted average over a four hour period."

for crocidolite: 0.2 f/ml

For amosite: 0.5 f/ml

For other types of asbestos: 1 f/ml⁵⁰

Limits after 31 July 1984

"when measured or calculated in relation to a 4-hour reference period."

for crocidolite and amosite: 0.2 f/ml

For other types of asbestos: 0.5 f/ml⁵¹

The Action Level in 1987 remained the same until it was withdrawn in 2006

"Exposures to asbestos accumulated over a continuous 12 week-period, and expressed as fibre-hours per milliliter of air."

For crocidolite and amosite 48 fibre hours /ml

Chrysotile 72 fibre hours /ml

Limits in November 1995

For crocidolite and amosite 0.6 f/ml measured over a 10 minute period or
0.2 f/ml averaged over a 4 hour period

for chrysotile alone 1.5 f/ml averaged over 10 minutes

0.5 f/ml averaged over 4 hours⁵²

Limits in February 1999

For crocidolite and amosite 0.6 f/ml measured over a 10 minute period or
0.2 f/ml averaged over a 4 hour period

for chrysotile alone 0.9 f/ml averaged over 10 minutes

0.3 f/ml averaged over 4 hours⁵³

Limits from November 2006 for all types of asbestos:

0.6 f/ml measured over a 10 minute period or
0.1f/ml averaged over a 4 hour period.⁵⁴

⁴⁸ Ministry of Labour. Safety, Health and Welfare New series No. 8 Dust and fumes in Factory atmospheres. 1966

⁴⁹ [UK asbestos - the definitive guide](#) General Insurance Convention 2004 Lowe Chairman, 1 Nov 2004

⁵⁰ HSE EH10 revised 1984 Asbestos control limits measurements of airborne dust concentrations and assessment of control measures. Annex 1

⁵¹ HSE EH10 revised 1984 Asbestos control limits measurements of airborne dust concentrations and assessment of control measures. Para 9 para 26

⁵² HSE MDHS 39/4 Asbestos fibres in air sampling Nov 1995

⁵³ HSE EH71 Working with asbestos cement and asbestos insulating board Amendment Feb 1999

⁵⁴ HSC CAWR 2006 Work with materials containing asbestos ACOP para 32, 33 p10

The present levels are put into perspective when one considers the number of fibres present in a cubic metre of air:

0.6 f/ml	600,000 fibres
0.1 f/ml	100,000 fibres

Or the number of asbestos fibres a person would inhale at the control limits:

Over the 10 minutes a person would inhale about	60,000 asbestos fibres
Over the 4 hours a person would inhale about	240,000 asbestos fibres
At 48f/ml for an hour a person would inhale about	28,800,000 asbestos fibres

The Action Level was defined as :

“Exposures to asbestos accumulated over a continuous 12-week period, and expressed in fibre-hours per millilitre of air (fibre-hours/ml). If from the assessment of the work it is likely that the exposure of any employee will exceed 72 fibre-hours/ml for chrysotile or 48 fibre-hours/ml for all other forms of asbestos, either alone or in mixtures, including mixtures containing chrysotile, then the action level will be exceeded.”⁵⁵

Note: The half life of amosite is about 20 years and of crocidolite is 5-10 years.⁵⁶ The fact that the Action level was measured over a 12 week period is irrelevant as almost all the fibres that had been inhaled would remain at the end of the period regardless of whether they had been inhaled in week one or week twelve.

Most of the Regulations are written principally for people who work on asbestos and only by default do they apply to the occupants of buildings. The regulations concerning the Action Level and Control Limits are a case in point, for the regulations require respirators to be worn if the Control Limit is liable to be exceeded. The 1987 CAWR stated:

“Like the action level, the control limits for asbestos also trigger particular regulations. If, from the assessment of the work required by regulation 5, it is concluded that the exposure of an employee is liable to exceed a control limit, the employer must provide suitable respiratory protective equipment.”⁵⁷

If workmen are likely to be exposed to asbestos at the Control Limit then by law they have to wear respirators. However the occupants of schools do not wear respirators, and yet they can be exposed to asbestos fibres hundreds of times greater than that and a record does not even have to be entered in their GP’s notes, the children’s parents do not have to be told and an official report does not have to be filed with RIDDOR. That is clearly wrong.

ANNEX 3. Calculation of risks from the Action Level.

The following calculations were carried out by Robin Howie, an expert member of the WATCH committee. They show the increased risk to children, the younger the child the greater the risk. The calculations are based on the H&D risk assessment model, and therefore the number of deaths

⁵⁵ CAWR 1987 ACOP The Action level and control limits. Para 3

⁵⁶ World Trade Organization Dispute Settlement Reports 2001

⁵⁷ CAWR 1987 ACOP The Action level and control limits. Para 5

should be taken as a good reflection of the scale of the increase in risk.

HSE have stated that it was unnecessary to inform parents of children who have been exposed to asbestos at school unless the Action Level was exceeded. Under the previous CAW Regulations the Action Level for the amphiboles was 48 fibres/ml.hours over a 12-week period, i.e. for a single exposure to the Action Level a Cumulative Exposure of 0.026 fibres/ml.years. It is useful to quantify the consequences of a single Action Level exposure to asbestos at different ages.

Excess deaths/million – a single 0.026 fibres/ml.years exposure at age 30

Asbestos	Mesothelioma	Lung cancer	Total
Crocidolite	366	6	372
Amosite	55	6	61
Chrysotile	$<15 \times 1.4 = <20$	<4	<24

Excess deaths/million – a single 0.026 fibres/ml.years exposure at age 20

Asbestos	Mesothelioma	Lung cancer	Total
Crocidolite	$366 \times 2.1 = 768$	6	774
Amosite	$55 \times 2.1 = 115$	6	121
Chrysotile	$<15 \times 2.1 \times 1.4 = <44$	<4	<48

Excess deaths/million – a single 0.026 fibres/ml.years exposure at age 15

Asbestos	Mesothelioma	Lung cancer	Total
Crocidolite	$366 \times 3.0 = 1098$	6	1104
Amosite	$55 \times 3.0 = 165$	6	171
Chrysotile	$<15 \times 3.0 \times 1.4 = <63$	<4	<67

Excess deaths/million – a single 0.026 fibres/ml.years exposure at age 10

Asbestos	Mesothelioma	Lung cancer	Total
Crocidolite	$366 \times 4.0 = 1464$	6	1470
Amosite	$55 \times 4.0 = 220$	6	226
Chrysotile	$<15 \times 4.0 \times 1.4 = <84$	<4	<88

Excess deaths/million – a single 0.026 fibres/ml.years exposure at age 5

Asbestos	Mesothelioma	Lung cancer	Total
Crocidolite	$366 \times 5.3 = 1940$	6	1946
Amosite	$55 \times 5.3 = 291$	6	297
Chrysotile	$<15 \times 5.3 \times 1.4 = <111$	<4	<115

ANNEX 4. David Miliband Letter to the General Secretary of the NUT

“DfE supports the Health and Safety Executive’s policy, which seeks to distinguish the relatively small numbers of cases where there is evidence of significant exposure to asbestos fibres (e.g. where exposure has exceeded the action level)from those, where exposure is likely to have been both low and sporadic.”

Note: The letter from the Minister follows these comments. There are a number of statements in the letter that are incorrect. They are relevant to the general topic of asbestos in schools and indirectly to the topics in this paper. The following are comments on the incorrect statements:

- P1 para3 and 4. (As in annex 1) HSE’s reasoning and conclusions are wrong. The latency times HSE quote are from **first** exposure to asbestos. HSE were informed that Mrs Lees had in all probability been exposed to asbestos in a number of schools over the course of a thirty year teaching career, the exposures at this school was just part of her cumulative exposure that had begun thirty years before. Medical opinion is now that all exposures are cumulative until about five years before onset of symptoms.⁵⁸ The regular exposures to amosite in this school therefore materially contributed towards the development of her mesothelioma.
- P1 para5. P2 para1, 2 and 3. The Government’s advisory committee in science (WATCH) examined all the tests and concluded that the drawing pin tests carried out by Howie Associates gave a true picture of the numbers of asbestos fibres released. (6,000 fibres per drawing pin) They confirmed that in the breathing zone of the teacher the exposure would have been 0.05f/ml. WATCH were highly critical of the 1st HSE tests, the methodology and conclusions. They dismissed the results that had counted just 30 and 60 fibres and equated the exposure to between 0.00000316f/ml and 0.00000632 f/ml. WATCH concluded that the teacher’s exposure was between 8,000 and 16,000 times greater than the HSE 1st test had concluded.⁵⁹
- P2 para 3. The Minister is wrong as cumulatively the exposures would have been significant and capable of causing mesothelioma.
- P2 para 4. HSE’s interpretation of the 1st drawing pin test was shown to be incorrect. Requests were made that the Minister’s statement should be withdraw, however the Minister, HSE and DfE refused to do so.
- P2 para 4. Despite the Minister’s word, the staff and pupils at the school never have been informed of their asbestos exposure.
- P2 para 5. Removal see [PQ Gibb/Mann Comment 8 Feb 11 Manage or remove](#) p15 -19
- P2 para 6. Teachers deaths. See: [PQ Gibb/Mann Comment 8 Feb 11 Teachers deaths](#) p3 – 8
- P2 para 7 and p3 para1. Four years later an updated version of what should be done in the event of an inadvertent exposure (LAC5/19 and OC265/48) were published. Contrary to the Minister’s wishes the guidance does dumb down the subject, it is badly drafted, misleading and gives dangerous advice. The asbestos guidance for schools has never been updated despite an ever increasing need for it to be. Instead school authorities have to navigate their

⁵⁸ Supreme Court judgement. Sienkiewicz v Greif Willmore v Knowsley MBC Lord Phillips Para 19v

⁵⁹ WATCH minutes 1 Feb 2006 <http://www.hse.gov.uk/aboutus/meetings/iacs/acts/watch/010206/minutes.pdf> para 3 p 9 para 3.70 p 16

way through generic HSE guidance that has principally been drafted for contractors who work on asbestos rather than for the occupants of buildings.

- P 3 para 1, 2 and 3. It was an honest admission of the Minister that *“asbestos in schools has not always been dealt with in a professional manner.”* The campaign that was set up to improve the asbestos management in schools and *“dramatically”*⁶⁰ reduce the asbestos exposures of teachers and pupils. It was scrapped a year later before the first meeting so that HSE’s resources could be reallocated to reduce the exposures of building maintenance contractors.⁶¹ The standards of asbestos management in some schools continued to be ineffective and at times unsafe. Serious asbestos incidents continued in schools with large numbers of staff and pupils being exposed. It was only two weeks before the general election in May 2010, some six years later, that the last Government finally reinstated the campaign. The DfE Asbestos Steering Group is the result.

⁶⁰ HSE paper LAFORUM/04 Asbestos management in schools 23 Nov 2004

⁶¹ E-mail HSE Asbestos in Schools. HSE Campaign Trevette Exit Strategy. 23 Aug 2005

Steve Sinnott
General Secretary
National Union of Teachers
Hamilton House, Mabledon Place
London
WC1H 9BD

Your ref: SL/JM

August 2004

Asbestos in Schools : Mrs Regina Lees

Thank you for your letter of 4th August 2004 detailing the issues that have arisen following the death of one of your members Mrs Regina Lees. Mr Lees has also provided Richard Daniels of the School Buildings & Design Unit with detailed information on the case. Richard has in turn consulted Bill MacDonald the Head of Asbestos Policy at HSE about the case.

In this case, the HSE maintain that, while Mrs Lees' death may have resulted from exposure to asbestos at a school at some time in the past, this cannot be proved to any extent. Due to the long latency period for asbestos related diseases, it is often difficult to identify the source of the actual exposure to asbestos fibres, which caused the mesothelioma.

As Mrs Lees started work at the school only ten years before her death; it is not possible, in HSE's view, that her mesothelioma was linked in any way to her time at the school. HSE believe that any asbestos exposure would almost certainly have been some time before her employment at Stella Maris School.

HSE state that Mesothelioma is almost always but not exclusively associated with exposure to asbestos fibres and that the average time between exposure and development of mesothelioma is between 35 to 41 years and it is rare that a mesothelioma would appear within 20 years of exposure.

The difference of opinion between Mr Howie the scientific adviser of Mr Lees and the HSE's own scientific advisers hinges around the results of drawing pin tests on Asbestos Insulation Board w which contains brown asbestos. An independent report from Howie Associates for Michael Lees suggested that there might be significant asbestos exposure as a result of puncturing asbestos insulating board with drawing pins. However, independent research carried out by HSE's Health and Safety Laboratory (HSL) identified this as a consequence of the sampling method used by Howie Associates, which in their view does not reflect the

degree of airborne fibre release that occurs in practice. I understand that a copy of the HSL paper and an explanatory note from HSE's expert will be sent to you and to Mr Lees shortly.

The HSE estimate that based on normal primary infant school activity, the use of drawing pins represents (conservatively) an additional daily inhaled asbestos fibre dose of between 0.006% and 0.44% over and above the usual background asbestos level in the UK. Such short-term low-level additional exposures are unlikely to add significantly to the risk caused by the "natural" asbestos fibre exposure to which we are all subjected.

Since the original test we understand from Mr Lees' latest letter to our Secretary of State, dated 12th August, that there have been three more tests carried out by independent experts. I will ask Mr Macdonald to respond to these results, and I am sure he will wish to seek independent scientific advice before doing so. Therefore I would suggest that the best way forward might be if the further test results are provided to DfES, HSE and perhaps yourselves.

Although some potential exposures to asbestos may have occurred at Stella Maris School there is no evidence as to what the actual level of exposure was. You will be aware that if HSE interpretation of drawing pin tests is correct this exposure is likely to have been very low and that it is highly unlikely that it would have posed a significant long-term risk to health.

Informing staff and pupils about possible exposure to asbestos fibres must be handled with extreme sensitivity. Unless and until the HSE interpretation of the drawing pin tests is shown to be incorrect DfES agree with HSE that it is difficult to see how informing former staff and pupils of the Stella Maris School about a possible exposure to asbestos would serve any purpose other than to create anxiety. DfES supports the Health and Safety Executive's policy, which seeks to distinguish the relatively small numbers of cases where there is evidence of significant exposure to asbestos fibres (e.g. where exposure has exceeded the action level) from those, where any exposure is likely to have been both low and sporadic. Each case has to be considered on its own merits and the policy applied accordingly.

You mention that NUT policy still calls for complete removal of asbestos, unless this is completely impracticable. Whilst respecting your point of view, we would hope to persuade you that this current policy of the NUT is not the best way forward. We would not therefore go as far as this in our advice but would follow the current advice of the HSE that removal creates its own risks; particularly to those removing it and it is often unnecessary. The reasons for this are that the release of fibres during removal in a building, that will continue to be used, is in the opinion of HSE and DfES often more dangerous than containment until final demolition. If asbestos is in good condition and not going to be disturbed, it is probably better and safer to leave it in place and manage it.

We have also sought clarification from HSE on the statistics concerning the health risks to school teachers quoted by Mr Lees. The statistical analysis we have received from HSE statisticians states that Statistics gathered by HSE show that the mortality rate for female teachers is broadly in line with the average for the whole of the working female population, ie there is no higher risk for female primary school teachers. We will be passing their analysis to our own statisticians for confirmation of this interpretation.

There is a lot of debate within the scientific community on the relative dangers of different types of asbestos and this has confused the issues of asbestos management greatly. What schools need is clear guidance on best practice including what should be done in the event of inadvertent exposures. This should not dumb down the subject as has so often happened in the past but needs to be written in a way that is accessible to the layman.

We agree with you that our guidance to schools and LEAs is dated and should therefore be revised as a matter of urgency and DfES together with HSE plan to take this forward in a campaign targeting asbestos management in schools.

We also accept that asbestos found in schools has not always been dealt with in a professional manner. As part of the Control of Asbestos at Work Regulations 2002, a new duty to manage asbestos in non-domestic premises (including schools) was introduced. This new duty requires those with responsibility for any maintenance activities in non-domestic premises (duty holders) to take effective action to manage the risks from asbestos. The duty to manage asbestos will, if applied properly, ensure that any hazardous practices which are likely to release asbestos fibres in schools will not occur in future.

HSE is currently developing a strategy to raise awareness of the need to manage asbestos in the education sector, and in primary and secondary schools in particular, in order to encourage effective and proportionate compliance and I believe that they will be inviting you to become involved in developing this strategy. DfES will be involved in this initiative, which will include reviewing relevant guidance, including Administrative Memorandum 3/86.

Since asbestos is a complex and slightly contentious issue, DfES and HSE are considering the formation of a working group to help take the asbestos campaign into schools. Please contact Richard Daniels on 0207 273 6690 if you would like to be involved in this process.

DAVID MILIBAND

ANNEX5: WATCH banding. Action Level exposure in Higher risk band

The Action level is 48f/ml.hours which is equivalent to 0.025 f/ml. years. In 2009 the Government's advisory committee on science (WATCH) published a discussion paper on control banding. They referred to the reference in OC 265/48 to bands for the levels of risk. Those bands are Lowest Risk, Lower Risk, Higher Risk and Highest Risk. WATCH then drew up table based on the same bands and added exposure levels that they considered were appropriate for each band. The Higher Risk band is from 0.01 – 0.99 f/ml. years. Therefore 0.025 f/ml. years sits squarely within the Higher Risk band. This is further evidence that exposure at the Action level is not a safe level.

The following is an extract from the WATCH discussion paper (for ease of reference the banding from OC 265/48 have been added to the WATCH table):

"WATCH Committee. Control banding for certain tasks involving asbestos

HSE guidance document OC 265/48 Version 3 Exposure to Asbestos from work activities: Advice for employers sets out general advice about exposure to asbestos from work activities and the associated risks to health. In particular, it provides 4 ordered bands to indicate in broad terms which activities are likely to be associated with higher or lower levels of risk. These are reproduced in Table 2 below and plausible cumulative exposure ranges have been assigned in an additional column.

OC 264/48 Table	WATCH Table		
	Table 2: Exposure scenarios and likely associated exposure ranges/bands		
Exposure Banding	Exposure band	Exposure scenario	Fibres/ml-year
Lowest risk	A. Lower band	One-off disturbance with prompt clear-up	<0.0001
Lower risk	B. Intermediate band	Being an occupant in a building which has asbestos-containing materials in poor condition that are disturbed regularly and release fibres	0.0001-0.0099
Higher risk	C. Higher Band	Regular powered tool cutting, drilling, breaking or smashing high-hazard materials eg as part of maintenance and refurbishment work	0.01 -0.99
Highest risk	D. Highest band	Licensable work done without suitable controls	>1

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ANNEX 6: Fibres inhaled from timescales in HSE guidance

OC 265/48 and LAC 5/19 lists a series of activities and the related timescales that HSE consider would expose people to levels of 48f/ml. They advise that if the timescales are not exceeded the activities would give "exposures insufficient to pose a long term risk to health." The activities include cutting, drilling, smashing and breaking sprayed coating, asbestos lagging and AIB and aggressive disturbance of asbestos cement. The guidance states that only if the period of time is exceeded, or the activity is repeated, should the incident be considered dangerous and reported. The HSE table is as follows:

⁶² WATCH Control banding for certain tasks involving asbestos 24th February 2009 (Discussion paper) <http://www.hse.gov.uk/aboutus/meetings/iacs/acts/watch/240209/asbestos.pdf>

Sprayed coatings... or loose lagging : 15minutes
Insulation: 30 minutes
Asbestos insulating board: 60 minutes
Asbestos cement: 8 hours⁶³

Other documents give typical fibre release from the activities. The table below gives the activities, the fibre levels and the approximate number of fibres a person would inhale during the period HSE consider that the exposure would be insufficient to cause a long term risk to health. The table is based on a person inhaling 9 litres a minute⁶⁴:

Activity and material	Fibre levels f/ml	Time	Fibres inhaled
De-lagging Dry stripping of crocidolite ⁶⁵	100 -1000 f/ml	15 minutes	13,500,000 To 130,500,000 Crocidolite
Uncontrolled dry stripping of lagging ⁶⁶	1-100 f/ml	15 minutes	135,000 To 13,500,000 Amosite, or Chrysotile
Drilling AIB overhead ⁶⁷	5-10 f/ml	60 minutes	2,700,000 To 5,400,000 Amosite
Removal of asbestos insulating board and tiles. Breaking and ripping out ⁶⁸	5-20 f/ml	60 minutes	2,700,000 To 10,800,000 Amosite
Circular saw without exhaust ventilation asbestos insulating board ⁶⁹	Greater than 20 f/ml	60 minutes	Greater than 10,800,000 Amosite
Breaking a single AIB ceiling tile (8ftx4ft). ⁷⁰	50 f/ml.	60 minutes	27,000,000 Amosite
15 minutes dry brushing and bagging of AIB dust and debris after breaking of single 8ft x4 ft AIB panel. ⁷¹	73 f/ml	60minutes	39,420,000 Amosite
Abrasive disc cutting asbestos cement sheet or pipes ⁷²	15-25	8 hours	64,800,000 To 1,080,000,000 Chrysotile

It is dangerously misleading of HSE to claim that these fibre levels would normally be insufficient to pose a significant long-term risk to health. Not only are they misleading the people carrying out the work about the risk to their health and that of others, they are also giving totally the wrong impression to anyone who might be considering disturbing asbestos materials. The HSE guidance gives them the impression that they can drill, cut or smash asbestos lagging, AIB and asbestos cement, and so long as they don't exceed these times then it is unlikely that either they or the occupants of the rooms will come to any harm. The numbers of asbestos fibres that the workman and the occupants of the rooms will inhale gives a graphic illustration of how terribly wrong they are.

⁶³ HSE Information document Exposure to Asbestos from Workplace activities OC265/48 Factors that influence level of risk para 3 2008

⁶⁴ Californian Environmental Protection Agency. Air Resources Board. How much air do we breath? August 1994

⁶⁵ HSE EH 35 Probable asbestos dust concentrations at construction process

⁶⁶ HSE A comprehensive guide to managing asbestos in premises HSG 227 2004 p95

⁶⁷ HSE A comprehensive guide to managing asbestos in premises HSG 227 2004 p95

⁶⁸ HSE EH 35 Probable asbestos dust concentrations at construction process

⁶⁹ HSE EH 35 Probable asbestos dust concentrations at construction process

⁷⁰ Risks with asbestos insulating board. Howie ACADemy Autumn 2001 p11-12

⁷¹ Risks with asbestos insulating board. Howie ACADemy Autumn 2001 p11-12

⁷² HSE EH 35 Probable asbestos dust concentrations at construction process

ANNEX 7: Parliamentary Questions. Action Level . Significant risk. HSE guidance

In July 2009 the Shadow Schools Minister, Nick Gibb MP, asked a Parliamentary question to determine the risks to children from asbestos exposure at the Action Level:

Asbestos 21 July 2009 : Column 1261W

Mr. Gibb: To ask the Secretary of State for Work and Pensions (1) what assessment her Department has made of the health risks to (a) a child aged five years and (b) an adult aged 30 years from an exposure to 48 fibres of (i) crocidolite and (ii) amosite per millilitre of air in a 12 week period;

(2) what assessment her Department has made of the risk of (a) a child aged five years and (b) and adult aged 30 years developing mesothelioma as a consequence of exposure to asbestos; [288724]

(3) what assessment she has made of the health risks to (a) a child aged five years and (b) an adult aged 30 years from an exposure to 72 fibres of chrysotile per millilitre of air in a 12 week period.

Jonathan Shaw: The information requested could be produced only at disproportionate cost as it is currently not available or cannot be produced on a sound scientific basis in respect of a five-year old.

The exposures in the question appear to relate to the “Action levels” in the 2002 Control of Asbestos at Work Regulations which are no longer current. The current limit in the 2006 regulations is lower at 0.1 fibres per millilitre of air averaged over a four hour period. Irrespective of this limit the regulations require exposures to be reduced to the lowest reasonably practicable level below 0.1 fibres per millilitre.

Risk assessment models are available for mesothelioma and asbestos-related lung cancer. These can be used to assess risk for given levels of exposure, exposure durations, types of asbestos, and the age at which exposure occurs—but only within the working age range.⁷³

Nick Gibb MP was aware that the Action level was no longer in force, and that exposures far below it are unsafe. Despite this In April 2011 as Minister of State for Schools he confirmed that DFE refer local authorities and schools to the guidance for what constitutes a “significant” risk and also for guidance on actions to be taken following an asbestos incident. He responded to a parliamentary question as follows:

Schools: Asbestos 26 Apr 2011 :

Annette Brooke: To ask the Secretary of State for Education (1) what guidance his Department issues on the level of exposure to asbestos of (a) school staff and (b) school children below which (i) individuals exposed and (ii) parents of children exposed need not be informed; [51916]

⁷³Hansard written answers Column 1259W WORK AND PENSIONS Asbestos 21 Jul 2009
<http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm090721/text/90721w0031.htm#09072269000033>

(2) what guidance his Department issues to local authorities and schools on the level of exposure to asbestos that constitutes a significant risk to (a) school staff and (b) school children; [51917]

26 Apr 2011 : Column 295W

(3) what guidance his Department issues on the minimum level of exposure to (a) amosite, (b) crocidolite and (c) chrysotile which poses a significant long-term risk to (i) school staff and (ii) school children; [51969]

(4) [51970]

Mr Gibb: The Control of Asbestos Regulations and the Codes of Practice published by HSE do not differentiate between the risks at different levels of exposure to asbestos fibres. No exposure level is deemed to be safe. The Regulations and Codes of Practice require all reasonable steps to be taken to manage asbestos to prevent exposure to all types of asbestos fibres, and cover school buildings. Therefore no guidance is currently issued by the Department on the level of exposure to asbestos that constitutes a risk to school staff and children.

The Department has however asked the Health and Safety Executive (HSE) and Partnerships for Schools to produce a website to develop the awareness among key personnel of their responsibilities in relation to asbestos in schools. The intended users of the website are head teachers, governors, teachers, support staff; and those local authority officers identified as duty holders under the Control of Asbestos Regulations 2006. The objectives of the website are to ensure that all these groups are aware of their responsibilities and of the risks if asbestos is not managed properly.

In the event of asbestos fibres being found, the school or local authority should refer to HSE guidance note Local Authority Circular 5/19 "The level of risk from occupational exposure to asbestos: guidance for HSE and LA staff when responding to enquiries".

<http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110426/text/110426w0012.htm#11042790001660>

The HSE are aware that the Action level is far too high a threshold between an exposure insufficient to cause a long term risk to health and a significant exposure. Despite that, in April 2011 the Minister with responsibility for the HSE confirmed that the guidance in LAC5/19 remains current and that there are no plans to revise the guidance. He responded to a parliamentary question as follows:

26 Apr 2011 : Column 235W

Chris Grayling: Local authority circular (LAC) 5/19 provides technical guidance and is not school specific. In it HSE gives advice to local authority regulators and others on the risks from asbestos to enable them to answer inquiries about possible or inadvertent exposures. It includes generic advice for employers, employees and members of the public. To that extent

school staff and school children, who may be inadvertently exposed if all the required systems fail to prevent significant exposures, are covered by the advice in the LAC.

There are no plans to revise the LAC as a direct result of the discussions of the HSE's independent advisory committee WATCH (Working Group on the Assessment of Toxic Chemicals). It has been established for some time that the lower the exposure to asbestos, the lower the risk of disease, and that based on current evidence it is not possible to identify safe thresholds. The LAC's medical advice to anyone concerned that they may have had significant exposure remains current.

Under the Control of Asbestos Regulations 2006 employers are required to prevent exposure to asbestos and, if this is not reasonably practical, reduce exposure to the lowest level reasonably practicable below the control limit. Neither the WATCH conclusions, which are shortly to be published, nor the Supreme Court judgment in the recent civil law compensation case *Knowsley Metropolitan borough council v. Willmore* imply any alteration to the existing duties under the regulations are required.

The work to further advance our knowledge of risk at current exposure levels is ongoing and HSE will continue to keep this and related matters under review.

<http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm110426/text/110426w0010.htm#11042753002007>

ANNEX 8: IOM

The flawed reasoning, conclusions and recommendations of IOM when assessing asbestos risks in schools are a concern. Local authorities have employed IOM to assess risks following asbestos incidents, and their recommendation not to include an asbestos exposure in medical records highlighted in this paper has happened before.

IOM are a high profile organisation who work closely with the HSE. They provide *“health and safety research and consultancy for many clients including central government agencies, local government, international organisations (including the European Commission), and many companies in the UK and internationally.”*⁷⁴ As part of this they provided three members of the WATCH committee when they assessed the risks from low level asbestos exposure. One of those members was the co-author of the report that used OC265/19's definition of significant, and she also was a co-author of a report into another asbestos incident in school. In that incident thirty windows had been ripped out of their AIB surrounds with crowbars and power saws while the schools was occupied. Teachers then swept up the AIB debris. HSE were critical of the IOM assessment and assessed the risks to the contractors, cleaners and teachers as considerably higher than IOM had,⁷⁵ as did an independent expert.⁷⁶ However, despite evidence to the contrary, IOM assessed the risks as “minimal and

⁷⁴ IOM Strategic Consulting Report: 629-00224 An assessment of the past exposure and estimation of consequent risks to health of staff that may have arisen from asbestos-containing material in cupboards at Lees Brook Community Sports College, Derby Alan Jones, Andy Stelling, I Levers, Hilary Cowie April 2009 para 1.1

⁷⁵ Risk to health from exposure to asbestos at Silverhill school HSE Nigel Black Senior Scientific Officer (Occupational Hygiene) 2 July 2004

⁷⁶ BOHS presentation Robin Howie Assessment of the potential consequences of an asbestos incident at a primary school Robin Howie, Robin Howie Associates,

negligible.”⁷⁷ Once again IOM recommended that no record be kept of the incident in medical records. They stated:

*“We believe that no further action should be taken in respect of this incident to monitor the health of those exposed. In particular, we do not recommend that any record be kept of this incident on people’s health or personnel records of children or school staff.”*⁷⁸

This is bad advice, particularly as it was given by a high profile organisation, and yet they are able to justify it because of the guidance given in HSE’s OC265/48.

It is relevant that the other co-author of the IOM report into the classroom cupboards was the expert witness for the Defence in the case of Sienkiewicz,⁷⁹ a case that was heard jointly with that of Dianne Willmore in the Supreme Court. The High Court Judge was critical that IOM had underestimated the risk and he recalculated the figure. The Supreme Court dismissed the Defence case and accepted the expert medical evidence given on behalf of the Claimant in the case of Willmore that:

*“Mesothelioma can occur after low level asbestos exposure and there is no threshold dose of asbestos below which there is no risk.”*⁸⁰

...“Significant” is defined in accordance with the definition adopted in relation to mesothelioma causation by the Industrial Injuries Advisory Council in their 1996 report (CM3467) “A level above that commonly found in the air in buildings and the general outdoor environment.”

*It would be appropriate for the Court to conclude that each such exposure materially increased the risk that she would develop mesothelioma.”*⁸¹

The expert medical definition of a “significant” asbestos exposure that was accepted by the High Court, the Appeal Court and the Supreme Court is 96,000 times less than the level that IOM consider is the threshold for a “significant” exposure. Despite this, or perhaps because of it, local authorities employ IOM to assess the risks to staff and children in schools when there has been an asbestos incident and the occupants have been exposed.

HSE work in close collaboration with IOM and have paid them significant funds for various research reports. For instance between 2001 and 2006 they paid IOM more than £1,500,000 for 17 research projects.⁸² It is therefore reasonable to assume that HSE consult with IOM and pay heed to their conclusions and recommendations.

⁷⁷ IOM A Report on the Likely Risks from Asbestos Exposure at Silverhill School, Derby Report No:628-00009 Dr John W Cherrie and Hilary Cowie reviewed by Dr Alastair Robertson

⁷⁸ IOM A Report on the Likely Risks from Asbestos Exposure at Silverhill School, Derby Report No:628-00009 Dr John W Cherrie and Hilary Cowie reviewed by Dr Alastair Robertson

⁷⁹ IOM Consulting Report 629-00233 S1 5 Sep 2008 Supplementary report for the Court Mrs Karen Sienkiewicz v Grief Report by Dr Alan Jones

⁸⁰ High Court QBD Liverpool District. The Hon Mr Justice Nicol . Dianne Willmore and Knowsley Metropolitan Borough Council 24 July 2009 Para 4 .

⁸¹ High Court QBD Liverpool District. The Hon Mr Justice Nicol . Dianne Willmore and Knowsley Metropolitan Borough Council 24 July 2009 Para 8, 57b

⁸² HSE Research Projects <http://sro.hse.gov.uk/PublicPages/ShowRPD.aspx>

One cannot therefore dismiss IOM's statements as being those of an inconsequential organisation, for the opposite is true, as they are listened to and have influence at a level where policy is made. Both HSE and IOM consider that "*Exposures would usually have been insufficient to pose a significant long-term risk to health where Action Levels were not exceeded.*"⁸³ It is unacceptable that policy is influenced, made and put into practice based on a premise that is fundamentally wrong and runs contrary to expert medical opinion, the Government's advisory committee on science's opinion and that of the Courts.

It is scientifically and morally wrong that because of the bad guidance in LAC5/19 and OC265/48, teachers, support staff and parents are advised not to enter their asbestos exposure, and that of their children, on their medical records.

Michael Lees
6th July 2011

⁸³ HSE OC 265/48 version 3. Information document (part 1) - Exposure to Asbestos from work activities: Advice for employers
Factors that influence level of risk <http://www.hse.gov.uk/foi/internalops/fod/oc/200-299/265-48-1.htm>
LAC 5/19 The level of risk from occupational exposure to asbestos: guidance for HSE and LA staff when responding to enquiries To: Health and Safety Enforcing Authorities. For the attention of: Local Authority Health and Safety Enforcement Managers, Health and Safety Regulators and others. Factors that influence level of risk. <http://www.hse.gov.uk/lau/lacs/5-19.htm>