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Newsletter

August 2010

Presentation: Management of Asbestos

Wayne Williams, Managing Director, DMW Environmental Safety Ltd.

Mark welcomed **Wayne** who has been a BHSEA Member for over 16 years and is the Managing Director of his own firm. Wayne told us that his interest in protection of the Environment started about 22 years ago, when he saw the effects of fly-tipping as he accompanied his father who worked for the Severn Trent Water Authority.

His firm provides a very wide range of services in Health, Safety, Asbestos Management and the Environment, with clients premises in the UK, China and Australia. He is still actively involved in marketing, project management and health and safety training. He is an examiner for the British Institute of Occupational Hygiene for asbestos competency qualifications as well as being a Certified Competent Person in Asbestos.



**Wayne Williams, Director,
DMW Environmental Safety**

Wayne started his talk by saying that asbestos had been in use for many years because it had been found to be useful in so many ways and because of its cheapness.

There are six basic types, the three most common being: -



White (Chrysotile)



Brown (amosite)



Blue (crocidolite)

brown



White



blue



What it looks like in situ



The Process

Over the years, they had been used in over 3,000 different products, from plastic floor tiles to tiles in the Space Shuttle! For many years the health effects were ignored, even being used in filter tip cigarettes where there was a synergistic effect with smokers' health ailments!

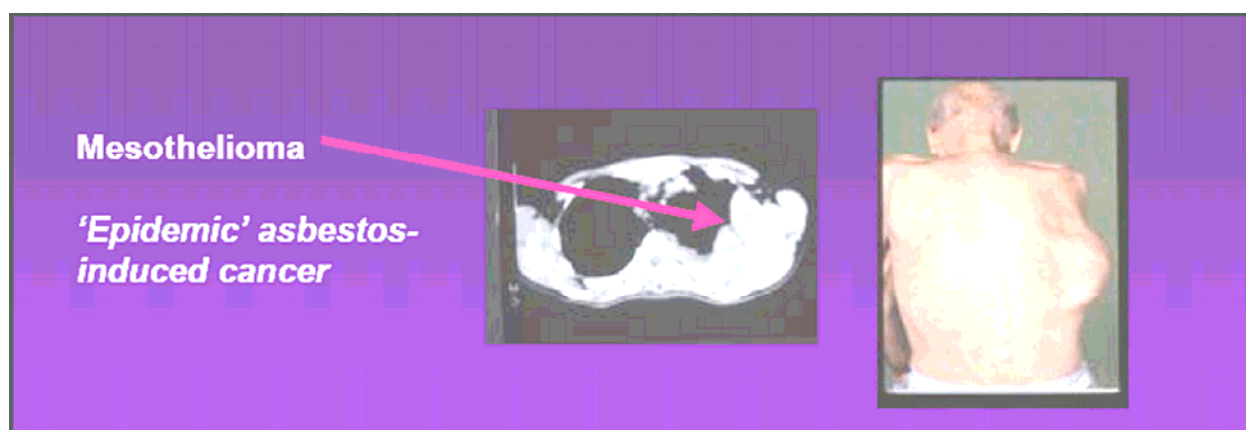


Damaged Fire Stopping spotted on a DMW Survey. This is dangerous from two standpoints, at least!

Eventually it was realised that there was a dose-relationship and that individual susceptibility played a part in the spread of asbestos-related diseases. Legislation has been introduced to control this risk over the years: -

- 1985 Statutory ban on blue and brown and all use as lagging or in spraying
- 1992 Statutory ban on other amphiboles and higher risk use of white.
- 1999 Total ban on use of all asbestos (with some exceptions)

Despite this progressive tightening of the law, exposure still persists, which causes about 20 deaths per week in the UK. The recent legislation has placed more responsibility on Owners, Occupiers and Clients on Worksites to manage asbestos so that all persons are more protected. However, existing uses are so widespread in unexpected circumstances, that it presents a significant threat to the population in general. Research By the Eminent Consultants Sir Richard Doll and Julian Peto in 1995, and later by Peto (et al) in 2006, confirmed an increasing incidence of asbestos disease in the construction and Maintenance trades. He added that we don't know with any certainty where it is always and even if all exposure was stopped today, deaths would still occur because of the long latency period. Wayne described the the Respiratory System and how asbestos affected workers' health and added that Mesothelioma was most prevalent.



This situation explains why, Wayne continued, recent legislation is aimed at managing the risk and there is a continuing need to train people to control it more effectively. In addition to the Asbestos-specific legislation, Wayne said that the Management of Health and Safety at Work Regulations and the Construction(Design & Management) Regulations both provided complementary requirements to achieve their common aim. Specifically, ACOP L144 Construction (Design and Management) Regulations 2007, on the subject of Asbestos Survey Assessments, says: -

“Clients should carry out the necessary surveys in advance and provide the necessary information to those that need it”

In support of this, Wayne quoted from a court report about contraventions on the Cambourne hospital demolition contract, where the HSE alleged unsafe asbestos stripping, illegal disposal, poor management techniques, and failure to carry out CDM (1994) duties. A large amount of asbestos boiler lagging was never found but the rest of the site needed a £140,000 cleanup operation. The Client, Designer and Planning Supervisor (1994 Regs) were all fined under the CDM Regs., as were

the Contractor AND an *individual* Contract Manager working for him, together with a sub-contractor.

Addressing the Asbestos Law Framework, Wayne continued, the current ACOPs are: -

- L143 Work with materials containing asbestos (Control of Asbestos Regulations 2006)
- L127 The management of asbestos in non-domestic premises (Regulation 4, Control of Asbestos Regulations 2006)

In addition, there is the following series of guidance literature: -

- HSG210 Asbestos essentials: A task manual for building, maintenance and allied trades on non-licensed asbestos work
- HSG213 Introduction to Asbestos Essentials
- HSG227 A comprehensive guide to Managing Asbestos in premises
- HSG248 Asbestos: The analysts' guide for sampling, analysis and clearance procedures
- INDG223 A short guide to managing asbestos in premises

Under the Control of Asbestos Regulations 2006, as befits the risk involved, there are very specific requirements to train everyone involved under three main classifications: -

Category 1 Licensed Work Training (people working in the licensed asbestos industry)

Category 2 Non-licensed Work Training (workers carrying out occasional lower risk tasks with asbestos)

Category 3 'Asbestos Awareness Training' (for anyone at risk i.e. those who work on, or co-ordinates non-new work)

The basic training modules are: -

BOHS P402 Module P402 Buildings Surveys and Bulk Sampling for Asbestos (including Risk Assessment and Risk Management Strategies)

BOHS S301 Certificate of Competence in Asbestos and other fibres.

BOHS CoCA Certificate of Operational Competence in Asbestos

Royal Society for Public Health Level 3 Certificate in Asbestos Inspection Procedures

This training must be delivered by training providers accredited by the **UK Asbestos Training Association (UKATA)**. It must be

All employees need a Training Needs Analysis so that they are placed on the most appropriate course for the work they do. This requires work to be planned and risk assessments to be made, in accordance with CAR, Regs.5 and 6: -

Regulation 5 Presume or identify the presence of asbestos. An intrusive survey is vital to obtain a correct identification of suspect material.

Regulation 6 Ensure risk assessment address the issue of exposure during maintenance or demolition.

In certain cases, Wayne commented, the planning and assessments must also take into account the protection of people *other* than employees, such as when work is being done next to a public area, or in occupied premises.

The Duty to Manage Asbestos in buildings is enshrined in CAR, Regulation 4, which requires defined categories of ‘dutyholder’ to: -

- Identify or presume the presence of asbestos
- Assess the risks presented
- Communicate this information
- Manage the risks in accordance with the management plan
- Monitor the condition of the asbestos
- Review the plan if anything changes

Looking at similar situations, where CAR Reg.4 may not apply (for instance, in Social Housing or Landlords of rented property), Wayne commented that other parts of CAR might, as would The Housing Act 1985. In such circumstances there would still be a requirement for suitable checks and surveys to be carried out before refurbishment. CAR, Reg 5 imposes a duty on employers to identify Asbestos before work starts: -

“An employer shall not undertake any work in demolition, maintenance, or any other work which exposes or is liable to expose his employees to asbestos in respect of any premises unless either

- a) he has carried out an assessment, or
- b) if there is doubt as to whether asbestos is present in those premises he should —
 - (i) assume that asbestos is present, and that *it is not chrysotile alone*, and
 - (ii) observe the applicable provisions of these Regulations.

Wayne then moved on to the major changes that have been made to the survey process in the new HSG264 Asbestos The survey guide: -

1. The original MDHS100 predated the more modern requirements of CAR, Regulation 4
2. It lacked clear guidance for clients, who had more explicit responsibilities under CAR
3. Current experience was not captured
4. There was no guidance for the domestic housing sector
5. it did not distinguish clearly enough the difference between the types of survey.

He added that it applied to: -

- Surveyors
 - a. To be more competent
 - b. More aware of clients needs
 - c. Provide better quality reports with more detail and fewer caveats.
 - d. Prevent exposure
- Clients
 - a. To be more informed
 - b. Have a greater understanding of surveyors’ needs

- c. Recognise the need for different types of surveys during the building life span
- d. Effect better asbestos management
- Other users of Surveyors' services might be Demolition Contractors, Asbestos Contractors, or Building professionals.

A recent prosecution of a surveying company illustrated how seriously this was viewed.

Wayne went on to say that the ACOP to CDM Reg 10 states that: -

“It is not acceptable for clients to make a general reference to hazards which may exist – for example that ‘.....there may be asbestos present in the building”,

“...where there are gaps in this information, the client should ensure that these are filled by commissioning surveys or by making other reasonable enquiries.”

“Clients should carry out the necessary surveys in advance and provide the necessary information to those who need it”

Any survey information and asbestos management plan must be site specific and prepared in advance of any construction work starting. There must be clear lines of responsibility for doing this and dutyholders should identify an Appointed Person to manage Asbestos Containing Materials (ACMs). This person should have the necessary resources, skills, training and authority to do the job effectively. This is essential if the premises are large or if the portfolio is complex, he added.

Wayne went on to say that the Survey and Sampling of ACMs are, themselves, subject to exposure and personnel are required to have full information and training suitable for non-licensable work. As the exposure is liable to be sporadic and of low intensity (i.e. below the control limit), however, it is exempt from regulations covering licensing, notification and health surveillance. Other hazards, such as work at height and electric cables may be present, so training in general health and safety would be required.

Wayne then reminded us about the application of Asbestos Law as follows: -

- In Workplaces CAR Reg.4 is directly applicable
- Common Areas of Flats “
- Domestic Living Spaces CAR Reg.4 is **not** applicable
CAR Reg.5 (Identification) is applicable
HASAWA 1974, S2 and S3 are applicable
MHSWR 1999, Reg.3 Risk Assessment is applicable

HSE strongly recommend that clients use accredited surveyors to the following standards: -

- ISO 17020 for surveying companies
- ISO 17024 for individual surveyors (sole traders) where it is likely that the scale and volume of work dictates not only individual competency.

- They should possess Training, Qualifications and Knowledge
- Their knowledge should be specific to the task
- They should have formal quality management systems
- Survey content must comply with HSG264
- Accreditation is obtained from: -
 - ❖ United Kingdom Accreditation Service (UKAS)
 - ❖ Asbestos Building Inspectors Certification Scheme (ABICS). This scheme has received accreditation from UKAS and is specifically designed for personal accreditation for sole traders and small inhouse groups and is an excellent source of expert surveyors for CAR Dutyholders.

Wayne described the range of knowledge that a surveyor was required to have: -

- Products
- Building Construction and Components
- Fire protection installations
- Shafts, plenums, undercrofts, risers
- Oversprays, residues and debris

He also added that it is difficult to know when a surveyor has the true expertise to provide a reliable service, so consulting these accredited sources was essential. He quoted several examples of bad advice being given to carry out unnecessary work on minor contamination like mortar spots, or failure to identify asbestos packers underneath wood joists. Another common error, he added, was surveyors 'assuming' that seemingly identical buildings in a small area had the same materials in their structures. The use of checklists and a structured approach to the survey process will minimise the risk of ACMs being missed. The basic training qualification is the BOHS P402, but this must be followed by six months supervised experience.

Dealing now with the types of survey, Wayne continued, these had changed to require a more intrusive survey, with less acceptance for not looking beyond the surface to determine the presence or condition of asbestos. Intrusive surveys should only be done in unoccupied buildings. Regarding clients' duties for risk assessment, he said, these were relatively unchanged but he said that it was important to take note of material condition and frequency of access to the surface.

In summary, the new approach is: -

- Simple Type1 Surveys disappear.
- There presumption of ACMs is incorporated into management surveys.
 - ❖ There is a strong presumption because:
 - Known recognised material which used asbestos
 - Same as other similar sampled ACM (cross-referenced)
 - Visible asbestiform fibres
 - ❖ Or, Presumption where:
 - Area not accessed
 - Material not known and not sampled.
- Always errs on the side of caution

- ❖ Some materials may be presumed to be asbestos when actually fibre-free

Survey types have now been renamed

- Type 2 survey is now a ‘Management Survey’
- Type 3 survey is now either a ‘refurbishment’ or ‘demolition’ survey. The type of survey will vary during the lifespan of the [remises and several may be needed over time. At larger premises a mix may be appropriate e.g. a refurbishment survey on one part where work is being carried out and a management survey of the rest.

Management Survey

- The purpose is to identify ACMs within the buildings and to prevent exposure.
- It is not destructive but may involve minor intrusive inspections and future planned maintenance
- Will normally involve sampling, should assess condition and provide recommendations for the client
- Areas not accessed should be stated in the report
- Details of inspected areas should be recorded
- May be sufficient for minor surface refurb and maintenance
- Risk assessment scoring system remains unchanged from MDHS100.

Refurbishment/Demolition Survey

- Used where extensive refurbishment is carried out e.g. partitions removed or work behind fixed boxing
- Management survey is NOT sufficient
- Fully intrusive and probably destructive in areas inspected as *“aggressive techniques”* are required
- *“...should only be conducted in unoccupied areas ...and furnishings removed”* from areas within survey scope
- Only required in areas where the work is being carried out – however in housing it is usual to survey the rest of the property

Caveats and Survey Restrictions

- The HSE doesn’t like these as they can seriously undermine the usefulness of the survey and originally they were going to say “NO caveats for a Refurbishment or Demolition Survey
- This was clearly not practicable, even for the best of these types of survey and, so, they have taken this on board and the Paras 55 –58 are about as severe as they could get.
- any caveats or restrictions must be agreed by both parties and clearly documented.

Survey Planning

- Much more detailed than in MDHS 100.
- Detailed checklists for both client and surveyor of information to be collected and supplied

- HSG264 recommends a walk-through inspection' as part of the site meeting. See Box 7 on Page 28 for a Questionnaire. UKAS companies already carry this out as part of their contract review for ISO 17020.
- Scope
 - ❖ Areas to be included or excluded
- Survey procedure
 - ❖ How, when, who, how many samples, photographs, material risk assessment system, priority assessment(?), method for recording data, building and room identification, quality and assurance checks.
- Personnel and Safety
 - ❖ How many staff and when on site, access and authorisation issues, site safety issues and emergency procedures.
- Report
 - ❖ Format, hard copy and/or database, plans and/or drawings, asbestos register form, how many copies and who to receive them.

Risk Assessment for Survey Staff

- Site Safety Issues
 - Working at Heights ❖ Slips, trips and falls
 - Electrical Safety ❖ Live machinery
 - Chemical Hazards ❖ Biological hazards
 - Hot Work ❖ Noise
 - Radiological hazards (hospitals, nuclear power stations, etc.)
- Adequate risk assessment of each by a competent person – and available to the surveyors.

Management Planning – HSG 264 emphasises allocating responsibility lines for :

- carrying out surveys to the required standard
- Managing the data
- Monitoring the condition of the asbestos
- Managing the process, i.e. contractor and trades control

Wayne continued by talking about Survey strategies and said that it is important to realise that ACMs can have a variable presence, even within the same archetypal group because of: -

- Inconsistent and variable use
- Random use of waste pieces and off-cuts
- Modifications of premises by tenants (past and present)

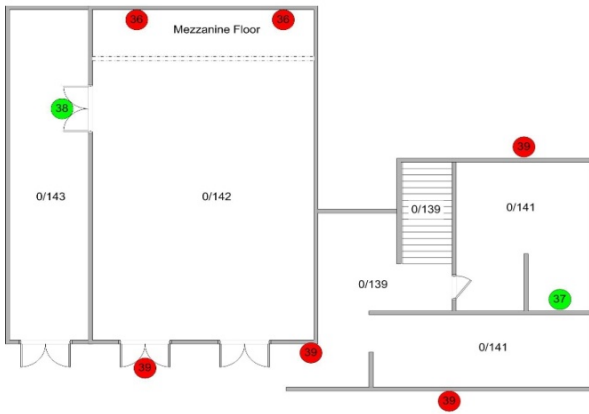
Thus 'cloning' reports on similar properties in, say, the same or adjacent streets, can only be justified if there is sufficient supporting evidence of complete consistency from build data.

Regarding the survey report, Wayne said that it must be easy to read: -

- It must be easy for non-technical people to understand
- It must have simple location summaries
- Hot- spotted plans are useful for more complex sites

Typical Survey Plan and Summary Table

Ground Floor VCM Unit – Plan 7



Room	Description
139	Landing, Stairs & Hall
140	Toilets
141	Staff Kitchen
142	Work Area
143	Lube Bay
144	External

Asbestos samples,
Non Asbestos sam

ASBESTOS SURVEY SUMMARY TABLE

HARLEY LTD|

Site Name: MEADOW ROAD, HARLEY, TF11 7PP

Information based upon D.M.W. Survey P27809 Survey Date 2nd April 2007.

Ref.	Location	Item	Material	Priority	Action	Status
P27809/01	Ground External	Cement eave packing	Chrysotile (White) Cement	3	Manage and label	Surveyed
P27809/02	Ground External	Cement entrance canopy	Chrysotile (White) Cement	3	Manage and label	Surveyed
P27809/03	Ground Bin/Meter Cupboard	Cement base and ceiling panels	Chrysotile (White) Cement	2	Remedial Action Required	Surveyed
P27809/04	Ground Generic throughout	Textured coating to ceiling	Chrysotile (White) Textured Coating - Ceiling	3	Manage and label	Surveyed
P27809/05	Ground Generic throughout	Brown floor tile	Chrysotile (White) Floor Tile	3	Manage and label	Surveyed

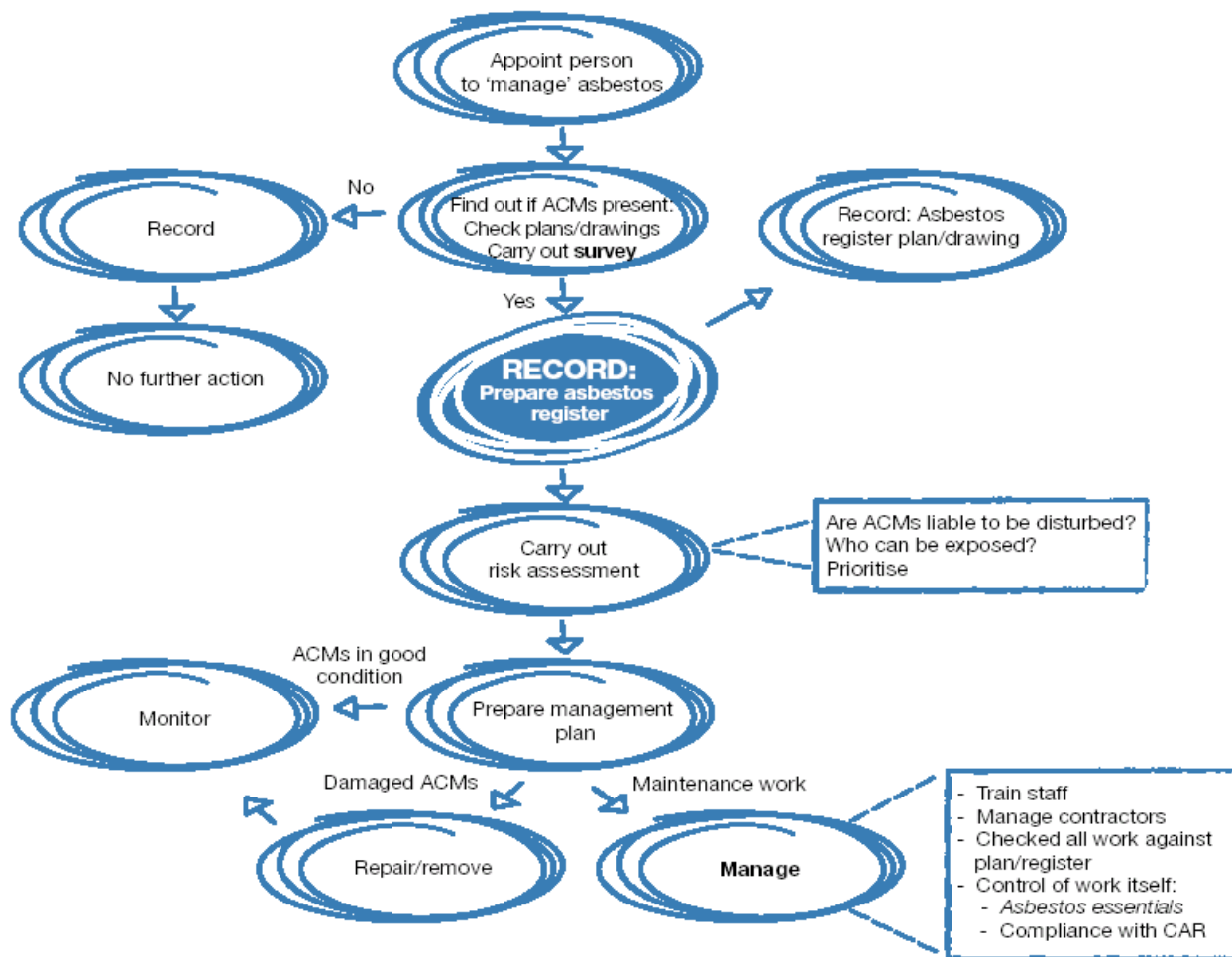
It is also crucial to treat the Asbestos Register as a live document, Wayne added, as it must be actively managed by being updated as: -

- ACMs have been removed
- ACMs have been re-inspected
- New areas have been surveyed during, say, refurbishment surveys
- The surveys must be available to those who plan or initiate maintenance and refurbishment work.

At the end of this process the Client then has to take over and either manage personally or arrange for an Appointed Person to: -

- Check the accuracy of the report.
- Produce the Asbestos Management Plan and control its implementation.
- Keep the register and other key documents such as plans updated.
- Make the information available to other parties, as and when necessary.

Although HSG264 is a Survey Guidance document, it is important to place it in the context of the Asbestos Management process that is summarised in this schematic diagram: -



Wayne concluded with an example of how badly things can go wrong with photographs from a refurbishment job in the West Midlands, where there was significant exposure of workers and members of the public. It resulted in a prosecution and conviction but Wayne commented that HSE often prosecute for infringement of Asbestos related law in the absence of any actual exposure.



Wayne completed his presentation by telling us about DMW's Fast Response Unit, 24/7 capability to carry out bulk identification on site, contactable at wayne@dmwsafety.co.uk Tel.no. 01902 791565