Management of Asbestos

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Getting it Wrong!
Asbestos – What is it?

Naturally occurring silicates

Fibres

3 most common types
- Chrysotile (white)
- Amosite (brown)
- Crocidolite (blue)

Unique Qualities

With the Naked Eye!

‘Respirable’ fibres under a microscope
Who is likely to be exposed to asbestos fibres?

- demolition contractors;
- electricians;
- roofing contractors;
- painters and decorators;
- construction contractors;
- joiners;
- heating and ventilation engineers;
- plumbers;
- telecommunications engineers;
- gas fitters;
- fire and burglar alarm installers;
- plasterers;
- general maintenance staff;
- builders;
- computer installers;
- shop fitters;
- building surveyors.
Asbestos—At Risk if:

- Unfamiliar building
- Building built before 2000
- Asbestos materials were not identified
- Information was not passed on
- Don’t know how to recognise and work safely with asbestos
- Know how to work safely with asbestos but choose to put yourself at risk
Asbestos – Health Effects

- Asbestosis
- Mesothelioma
- Lung Cancer
- Other cancers
- Pleural plaques/effusions
Asbestos - Where is it?

>3000 products

Commercial buildings
Public buildings
Domestic buildings
Vintage cars
Ships/Boats
Lighthouses
Watermains

HSE (UK) asbestos building
Spray insulation

- Brown, White, or Blue
- Greater than 70% asbestos fibre
- Used for thermal and acoustic insulation as well as fire protection of steel work and concrete
Asbestos lagging

Lagging on pipework, boilers, calorifiers, heat exchangers etc
Asbestos insulating boards

Asbestos ceiling tiles, partition walls, service duct covers, fire breaks, heater cupboards, door panels, lift shaft lining, fire surrounds, soffits
Asbestos products were also extensively used in electrical equipment, firebreaks, rope seals in boilers & ductwork, flexible duct connectors.
Textures coatings, or decorative finishes to walls or ceilings.

- 3-5% white content.
- Added until 1984.
- Non asbestos versions available from mid 70’s.
Asbestos cement products

roof and wall cladding, bath panels, boiler and incinerator flues, fire surrounds, gutters, rainwater pipes, water tanks etc
Asbestos Cement Tiles

mainly containing white around 15%
Asbestos

- Reinforced plastics
  - vinyl floor tiles and black toilet cisterns
  - Floor tiles mainly contain white asbestos
  - Amosite sometimes in black ‘shires lynx’ toilet cisterns
Asbestos paper below man made mineral fibre pipe insulation
Asbestos Management

- Employers **must** do risk assessment
- Ask “**Has an asbestos survey been carried out?**”
- **Plan work** to avoid disturbing ACMs
- ACMs should only be worked on if **absolutely necessary.**
Buildings built or refurbished before 2000.

How do you identify it? – Survey carried out to UK HSE HSG 264 The Survey Guide standards by a competent person with suitable insurance

- Management Survey
- Pre-demolition/refurbishment survey
Survey report – contains a register with risk assessments for Asbestos Containing Materials (ACMs) identified (ACMs)

The risk assessment includes a material assessment and a priority assessment.

The Material Assessment looks at the type and condition of the ACM and the ease with which it will release fibres if disturbed.

The Priority Assessment looks at the likelihood of someone disturbing the ACM. (Client should be involved)
Material Assessment

- product type;
- location;
- extent (or quantity);
- asbestos type;
- accessibility;
- amount of damage or deterioration; and
- surface treatment (if any).

The last three will not usually be required for a (Type 3) pre-demolition survey.
Asbestos Management

**Priority Assessment**

- maintenance activity;
- occupant activity;
- likelihood of disturbance;
- human exposure potential.

Materials score + priority score = Risk assessment score
## Asbestos Management

<table>
<thead>
<tr>
<th>Minor damage</th>
<th>Good condition</th>
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<tbody>
<tr>
<td>- The material should be repaired and/or encapsulated</td>
<td>- The condition of the material should be monitored at regular intervals</td>
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<td>- Inform the contractor and any other worker likely to work on or disturb the material.</td>
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<tr>
<td>Poor condition</td>
<td>Asbestos disturbed</td>
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<td>- Asbestos in poor condition should be removed</td>
<td>- Asbestos likely to be disturbed should be removed</td>
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Managing asbestos left in place

- Develop Asbestos Management Plan
- Maintain the asbestos register
- Inform those who may inadvertently disturb the ACMS e.g. use Permit to Work, Job Card, labelling etc
- Monitor condition of material e.g. as part of maintenance inspections, 6th monthly, annually
- Emergency arrangements e.g. specialist contractor
‘Specialist’ contractors – No licensing regime for contractors in the Republic of Ireland

Assess ability to do work

- Safety statement
- Previous experience
- Training policy and records
- Equipment and Face Fit records
- Insurance*
- Sample method statement*
- Trade Association Membership*

Asbestos: The licensed contractors’ guide
A specialist asbestos contactor will ensure:

- Work is **risk assessed** for all inherent hazards
- **Method statement** detailing work method and control measures (wet stripping, shadow vacuuming) is provided
- Work is correctly notified to HSA
- Correct site management – segregation and spread of contamination is eliminated by use of **enclosures** and **negative pressure units**
- Appropriate insurances are held
- Correct arrangements for waste disposal – Waste Transfer Forms
Asbestos Removal
Asbestos Removal
Asbestos removal
Asbestos removal – The Analyst

- Independence
- Air monitoring (WHO Rules)
- Visual Inspections
- Site clearance certification
- Qualifications – S301, P403, P404, Certificate of Competence
- ISO17025/ Quality Assurance
- HSG 248 ‘The Analyst Guide’
List of Best Practice Guidance Documents


- European Commission, Senior Labour Inspectors Committee (SLIC) (2006) A practical guide on best practice to prevent or minimise asbestos risks in work that involves (or may involve) asbestos: for the employer, the workers and the labour inspector.


Further info

http://hw.osha.europa.eu

www.hsa.ie

http://www.hse.gov.uk/asbestos/essentials/index.html
Management of Asbestos

Thank You

For Queries or copy of draft guidelines please email Chemicals@hsa.ie