## Assessment and Remediation of Asbestos Damaged Properties

#### **Course Topics**

- What is Asbestos
- Legislation
- Typical Impact scenarios
- Incident Response
- Remediation





(brown/grey asbestos)



Crocidolite (blue asbestos)

# Common Terms

- ACM Asbestos Containing Materials
- Includes any material, object, product or debris that contains asbestos
- "Bonded" material with a firmly bound matrix e.g.
  - Vinyl floor tiles
  - A/C sheeting
- "Friable" material which, when dry, is easily crumbled or reduced to powder e.g.
  - sprayed limpet
  - pipe/boiler lagging

# **Bonded or Non-Friable ACM**



Any asbestos containing material other than friable that contains asbestos in a bonded matrix and cannot be crushed by hand when dry. Non friable materials in good condition represent a low risk unless damaged or disturbed.

### Friable ACM



Example of friable asbestos - sprayed insulation

## **Asbestos Legislation**

- From 1 January 2006
- The Asbestos Advisory Standard 2004
- (now known as a code of practice is repealed).
- The Workplace Health & Safety Act 1995 establishes mandatory requirements for Asbestos hazards through:
  - Workplace & Safety Regulation 1997
  - National Code of Practice for the Management and Control of Asbestos in Workplaces (NOHSC: 2018 (2005)).
  - National Code of Practice for the Safe Removal of Asbestos 2nd Edition (NOHSC:2002 (2005)).

#### **Asbestos Legislation**

From 1 July 2006

- A new 'B' class licence will be introduced meaning only competent, licenced people can remove 'non-friable' asbestos (bonded materials such as asbestos cement sheeting) in quantities greater than 10m2.
- An 'A' class licence, also known as an Asbestos Removal Business Certificate, is required to remove 'friable' or loose asbestos in any quantity.

#### **Asbestos Legislation**

- Part 11 of the Workplace Health & Safety Regulation refers to the National Asbestos Management and Asbestos Removal Code of Practice. These codes are given legal standing in Queensland's Workplace Health & Safety framework and must be complied with.
- Part 11 Division 3 of the Workplace Health & Safety Regulation 1997 states that all building owners must comply with the National Asbestos Management Code by 1st January 2008.

#### **Asbestos Legislation**

- Requirements of the National Asbestos Management Code of Practice:
- Identify the locations of all ACM's onsite.
- Maintain a register on the premises which includes date of assessment, location of asbestos, analysis, risk assessments, control measures, and details of competent person who undertook the assessment.
- Review the register of ACM at least every 12 months.
- Label all ACM's.
- Provide training for workers, contractors and others who come in contact with ACM's.

## **Asbestos Legislation**

- Requirement of the National Asbestos Removal Code of Practice:
  - Air monitoring should be performed whenever ACM's are being removed.
  - Removal works must stop if levels exceed 0.02 fibres/ml.
  - Clearance inspections must be conducted by competent persons, who are independent to the removal process before a work area is reoccupied.

# **Typical Insurance Claims**

- Storm damage
- Hail may cause:
  - Physical damage to asbestos cement roof (e.g. holes, fractures)
  - Impaired structural integrity of asbestos cement roof sheeting
  - Migration of asbestos contamination to ground below, lower surfaces and possibly neighbouring properties
- Strong winds may cause:
  - Trees, etc to impact on asbestos cement roofs and external wall cladding
  - Migration of asbestos debris

# Typical Insurance Claims

- Fire
  - ACM may explode causing:
  - Asbestos fibres to be released
  - Migration of asbestos
- Other
  - Miscellaneous damage caused by cars, vandalism etc may result in:
    - Physical damage to asbestos walls, roofs, etc
    - Migration of asbestos

#### **Incident Response Procedure**

- Establish whether ACM is present
- Age of property (Post 1990 Asbestos Free)
- · Asbestos Register ( Commercial properties only)
- · Sample collection and Lab Analysis
- · Always assume suspect material contains Asbestos until proven otherwise Lab data.

## **Incident Response Procedure**

If ACM is Present:

- Engage a "competent person" ("CP") to:
- Assess risk (airborne fibre sampling)
- Determine extent of ACM contamination (visual inspection and surface dust sampling)
- Develop ACM remediation plan
- Notify relevant parties:
  - Client
  - Occupants
- contractorsEvacuate affected areas
- Isolate affected areas with physical barriers and warning signs to prevent access on site

## **ACM Remediation Plan**

- · Engage a licensed asbestos removal contractor
- · Request a site specific Work method Statement from contractor and have reviewed by a "CP"
- Engage a "CP" to supervise the remediation works including:
  - Airborne fibre sampling
  - Surface dust sampling
  - Visual inspections

## **ACM Remediation Plan**

- · Upon completion of works, obtain a Clearance Report from the "CP" incl.:
  - Results of air sampling
  - Results of surface dust analysis
  - Copies of asbestos waste tracking documents
  - Clearance letter advising the site is safe to reoccupy

#### **Remediation Issues**

- · Fibrous and porous items are often difficult to clean and it may be safer to dispose
- · Roof space should be decontaminated
- · Gardens and plants should be cleaned
- · Consider removal and replacement rather than repair