

CPCCE3014

Remove Non-Friable Asbestos

Learner Guide Instructions

Who is this document for?

The learner.

What is in this document?

- Course training content (this matches the PowerPoint Presentation).
- Review questions.

What do you need to do before you use it for the first time?

1. Rebrand the document.
2. Review the document as part of your validation process.

See the 'Read Me First' document for a complete set of instructions on how to use these resources.



LEARNER GUIDE

CPCCE3014 Remove Non-Friable Asbestos

Learner Name:	
Learner ID:	
Learner Contact Number:	
Learner Email Address:	
Date Training Commenced:	

This Book Contains:

- Course Information.
- Review Questions.

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1.1 Introduction



This course addresses the requirements of the national unit of competency **CPCCE3014 Remove Non-Friable Asbestos**.

You will learn about:

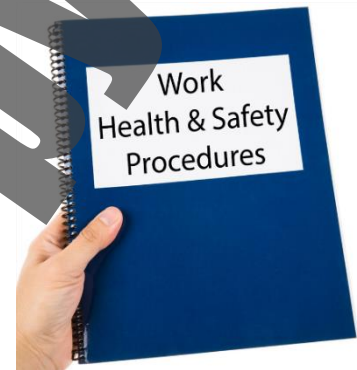
- ◆ Preparing for non-friable Asbestos Containing Material (ACM) removal.
- ◆ Safely containing and removing non-friable ACM.
- ◆ Decontamination and disposal requirements.

1.1.1 Licensing Requirements

This unit is required for all Asbestos Containing Material (ACM) removal workers engaged in the removal of non-friable ACM in quantities more than 10m².

Work must be completed according to relevant legislative, industry, customer and organisational requirements, including work health and safety (WHS) policies and procedures.

Asbestos handling licenses are required nationally. The model WHS Regulations set out the training and competency requirements for asbestos assessors, asbestos removal workers and supervisors.



Under the model WHS Regulations two licences have been established: Class A and Class B.

Licence Class	Allowable Activities
Class A	Businesses with a Class A licence are permitted to remove all types of asbestos, including both friable and non-friable asbestos.
Class B	Businesses with a Class B licence can only remove non-friable asbestos.



When licensed asbestos removal work is being carried out, an asbestos removal supervisor must oversee the work. The licensed asbestos supervisor must have a certification appropriate to the type of licensed asbestos removal work (e.g. Class A or Class B).

The asbestos removalist supervisor must be present (for Class A removal) or readily available (for Class B removal). Readily available means contactable via phone and within 20 minutes travel of the work site.

1.1.2 What is Asbestos?

Asbestos is the generic term for a number of fibrous silicate minerals. Products made from asbestos cement - a bonded asbestos material - include fibro sheeting (flat and profiled) guttering and downpipes, as well as other pipes for water, drainage or flues, corrugated roofing sheets, roofing shingles and guttering.



Asbestos is a type of building material used in the domestic building industry between the 1940s and late 1980s, and was widely used in commercial and industrial settings as early as the late 1800s.

Before the health risks were known, asbestos products were widely used because they were durable, fire resistant and had good insulation properties.

The manufacture and use of asbestos products was banned nationally from 31 December 2003. This ban applies to manufacture, supply, storage, sale, use, reuse, installation and replacement of asbestos.

1.1.3 Non-Friable vs Friable Asbestos

ACM is classed as either friable or non-friable.

Friable ACM

This type of asbestos containing materials can be easily reduced to powder when crushed by hand, when dry.

These materials can contain high percentages of asbestos fibres and are more likely to release these fibres into the airborne environment when disturbed. As such, they pose a greater risk to health.

Friable materials must only be handled and removed by an asbestos removalist with an 'A' class licence.



Examples of friable asbestos-containing materials include:

- Some sprayed on fire retardants.
- Sound proofing and insulation.
- The backing of sheet vinyl and linoleum floor coverings.
- Thermal lagging, such as pipe insulation.
- The lining on some old domestic heaters, stoves and hot water systems and associated pipe lagging

Non-Friable (or Bonded) ACM



These are materials in which the asbestos is firmly bound in the matrix of the material. These materials are unlikely to release measurable levels of asbestos fibre into the airborne environment if they are left undisturbed. Therefore, they generally pose a lower risk to health.

They are mainly made up of asbestos fibres together with a bonding compound (such as cement), and typically contain up to 15 per cent asbestos.

Non-friable materials containing asbestos are solid, quite rigid and the asbestos fibres are tightly bound in the material. Non-friable materials containing asbestos are the most common in domestic houses. They are commonly called 'fibro', 'asbestos cement' and 'AC sheeting'.

Examples of non-friable asbestos-containing materials include:

- Asbestos cement products (flat, profiled and corrugated sheeting used in walls, ceilings and roofs, moulded items such as downpipes).
- Plaster patching compounds.
- Textured paint.
- Vinyl floor coverings.

In some cases a non-friable ACM can become friable due to:

- ◆ Weathering.
- ◆ Wear and tear.
- ◆ Application of tools and equipment.
- ◆ Accidental damage.
- ◆ Fire damage.
- ◆ Exposure to chemicals.



If there is any indication of damage to the ACM assume that it has become friable and proceed only if you have a Class A licence.

If you think there is a chance that the ACM has become friable for any reason talk to your supervisor and have a competent person re-assess the work site.

1.1.4 Asbestos Exposure Impacts on Health

Asbestos becomes a potential risk to health if fibres become airborne and breathed into the lungs. Breathing asbestos fibres into the lungs can cause a range of diseases, including mesothelioma, lung cancer and asbestosis.

We are all exposed to low levels of asbestos in the air we breathe every day. Ambient or background air usually contains between 10 and 200 fibres every 1,000 litres (or cubic metre) of air. Whether a person goes on to develop an asbestos-related disease depends on a range of circumstances or exposure factors; for example, the level and duration of exposure, length of time since first exposure, the fibre type, and concurrent exposure to tobacco smoke and other carcinogens.

A high amount of attention is required whenever handling friable asbestos as the health implications of breathing in large amounts of asbestos fibres are very serious. If the work area is not properly set up to contain the asbestos effectively there is a risk of releasing fibres into the air which may impact the health and wellbeing of people, workplaces and residencies nearby.



When asbestos fibres are breathed in, they may remain deep within the lungs. They can lodge in lung tissue and cause inflammation, scarring and some more serious asbestos-related diseases, which usually take many years, if not decades, to develop.

The four major asbestos-related diseases are listed in the table below. A person may show signs of more than one of these diseases.

Disease	Description
Pleural Plaques	Areas of white, smooth, raised scar tissue on the outer lining of the lung, internal chest wall and diaphragm. This is often the earliest sign of exposure to asbestos, although not everyone who has been exposed to asbestos develops plaques, possibly because of differences in their immune response to asbestos fibres. People with pleural plaques as their only asbestos related symptom usually have very little impairment of lung function.
Asbestosis	A chronic condition caused by inflammation or scarring in the lungs which causes shortness of breath, coughing and permanent lung damage. This condition is caused by heavy, prolonged exposure to asbestos.
Lung Cancer	Cancerous tumours that mainly occur in the lining of the tubes leading into the lungs, the smaller airways or the middle of the lungs. The risk of developing lung cancer is increased in people who also smoke or have a pre-existing lung disease.
Mesothelioma	A rare form of cancer of the tissue that lines the body cavities, particularly the chest and abdominal cavities. In Australia, about 90% of all mesothelioma patients have a confirmed history of significant asbestos exposure.

1.1.5 Common Locations for ACM Removal

The location for ACM removal may be either domestic or commercial, and include:

- ◆ Residential, commercial, industrial and public buildings (particularly those built from 1940-1980).
- ◆ Plant, equipment and fire boards (e.g. friction plant and gaskets).
- ◆ Demolition sites.
- ◆ Electricity supply authority or work site.
- ◆ Fences.
- ◆ Ships and other forms of transport.
- ◆ Sites for new building development.



Review Questions

1.	What should you assume if there is any indication of damage to Asbestos Containing Material?	<input type="checkbox"/>
2.	What is the risk if the work area is not set up correctly to contain the asbestos effectively?	<input type="checkbox"/>

1.2 Work Instructions

You need to be clear about what work you will be doing. Make sure you have everything about the job written down before you start. This includes what you will be doing, how you will be doing it and what equipment you will be using.



1.2.1 Identify Details About the Job

Before you start the job make sure you have all of the details about where you will be working. For example:

- ◆ **The Site** – Is there clear access for all equipment?
- ◆ **The Weather** – Is there wind, rain or other bad weather? Is it too dark?
- ◆ **Facilities and Services** – Are there power lines or other overhead or underground services to think about?
- ◆ **Traffic** – Are there people, vehicles or other equipment in the area that you need to think about? Do you need to get them moved out of the area? Do you need to set up barriers or signs?
- ◆ **Hazards** – Are there dangerous materials to work around or think about? Will you be working close to power lines or other people?



You also need to make sure you have all of the details about the kind of work you will be doing:

- ◆ **The Task** – What type of asbestos is being removed? How much is there? Does it need any special equipment or treatment?
- ◆ **Plant** – What type of plant will be used? How big is it? How much room does it need?
- ◆ **Equipment** – What equipment will you need to remove the asbestos? Is the equipment available?
- ◆ **Communications** – How are you going to communicate with other workers?
- ◆ **Procedures and Rules** – Do you need any special permits or licences? Are there site rules that affect the way you will do the work?

1.2.2 Reading and Checking Your Work Instructions

All work needs to follow worksite, environment and company safety procedures.

Procedures help to make sure that all work is done in a safe way, without damaging equipment or putting people in unsafe situations. They also help to make sure that work is done in the correct order and doesn't interrupt or get in the way of other work that is happening on the site.

Your work instructions will tell you the safest way to do the job, and the equipment that you will need to use. It is a good idea to check your work instructions with your boss or supervisor to make sure you know exactly what you need to do.

If you don't know where to get your instructions or you can't understand them, you can ask your boss or supervisor. They will tell you where to find your work instructions and explain what they mean.



1.2.3 Asbestos Removal Control Plan (ARCP)



A licensed asbestos removalist must prepare an asbestos removal control plan (ARCP) for any licensed asbestos removal work they are going to undertake.

An ARCP is a document that identifies the specific control measures you will use to ensure the safety of others when asbestos removal work is being conducted. It is similar to a job safety analysis (JSA) but is focused specifically on minimising any risk from exposure to asbestos.

The plan also needs to reflect relevant details from the asbestos register (if there is one) and the characteristics of the work area and specific task.

The ARCP must include the following details:

- How the asbestos will be removed (the method being used).
- The tools and equipment that will be used.
- Personal Protective Equipment (PPE) that is required.
- The location, type and condition of the asbestos.

You should attach any relevant specifications or drawings to the ARCP to provide further information about the asbestos.

When preparing the ARCP you should consult with:

- ◆ The person who commissioned the work.
- ◆ The person with management or control of the workplace (or the owner/occupier of a domestic property).
- ◆ Workers.
- ◆ Health and safety representatives.



Once the ARCP is prepared, a copy must be made available at the work site and copies given to anybody that was consulted during the preparation of the plan.

1.2.4 Asbestos Removal Documentation

Throughout the asbestos removal process you may be required to use or contribute to different types of reporting or filling out paperwork. The risk associated with asbestos exposure means there are lots of documents associated with asbestos removal procedures.

This may include:

- ◆ Air-monitoring results (where necessary*).
- ◆ Asbestos register.
- ◆ Notification to regulator of asbestos removal work.
- ◆ Clearance certificates.
- ◆ Asbestos removal control plans (ARCP).
- ◆ Procedures for the WHS management system.
- ◆ Emergency response plan.
- ◆ Equipment test reports.
- ◆ Health-monitoring programs.
- ◆ RPE fitment and instructions.
- ◆ Personnel training and certification requirements.



*Note: Air monitoring is not required during non-friable asbestos removal but may be considered to be carried out by an independent licensed asbestos assessor or competent person to ensure compliance with the duty to eliminate or minimise exposure to airborne asbestos and to ensure the exposure standard is not exceeded. (Code of Practice: How to Safely Remove Asbestos, April 2016)

1.2.4.1 Regulator Notifications

The health and safety regulator must be notified in writing at least five days before the asbestos removal work starts.

The following information will need to be provided:

- ◆ All details of the company/business responsible for the asbestos removal.
- ◆ All details of the supervisor who will oversee the work.
- ◆ Name of the person who will be issuing the clearance certificate.
- ◆ Name and contact details of the client.
- ◆ All details of the organisation in control of the workplace.
- ◆ Location of the asbestos removal job.
- ◆ Type of workplace where removal work will be completed (factory, office, construction site etc.)
- ◆ The start date and expected completion time.
- ◆ Type of asbestos (friable or non-friable).
- ◆ Details of the ACM to be removed including what the material is and how much of it there is.
- ◆ Number of workers who will be involved in the removal work and their relevant qualifications and experience.



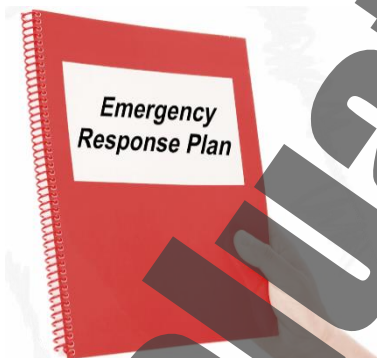
1.2.4.2 Emergency Response Plan

A site-specific emergency plan reflecting the risks involved needs to be developed before any asbestos removal work commences. The plan must be shared with and explained to all employees and relevant persons (e.g. the person who commissioned the asbestos removal work).

Personnel need to be trained and prepared for emergency situations. Decontamination procedures can be temporarily ignored in the event of an emergency such as a fire or seriously injured personnel.

The most important aspects of the emergency plan need to cover:

- ◆ The location of emergency signs and maps.
- ◆ The locations of emergency exits for evacuation.
- ◆ Methods that will be used to communicate the occurrence of an emergency situation.
- ◆ The locations of first aid supplies, fire fighting equipment and evacuation assembly points.



Review Questions

3.

List four (4) details you will need to know about where you will be working.

1.

2.

3.

4.

4.

What do procedures help to make sure of?

5.

What details must be included in the Asbestos Removal Control Plan?

6.

What are six (6) types of reports or paperwork that you may be required to use or contribute to throughout the asbestos removal process?



1.

2.

3.

4.

5.

6.

7.

List six (6) pieces of information that will need to be included in written notification to the health and safety regulator before asbestos removal work can start.



1.

2.

3.

4.

5.

6.

8.

When must a site-specific emergency plan be developed?



1.3 Confirm Health and Safety Requirements

Part of the job preparation and planning is to gather relevant information about how to safely complete the work.

The ARCP will contain the details relevant to the asbestos removal but there may be other safety issues that need to be managed. Your organisational policies and broader WHS legislative requirements will outline the safety requirements that you need to follow.

