

CPCCE4008

Learner Guide Instructions

Who is this document for?

The learner.

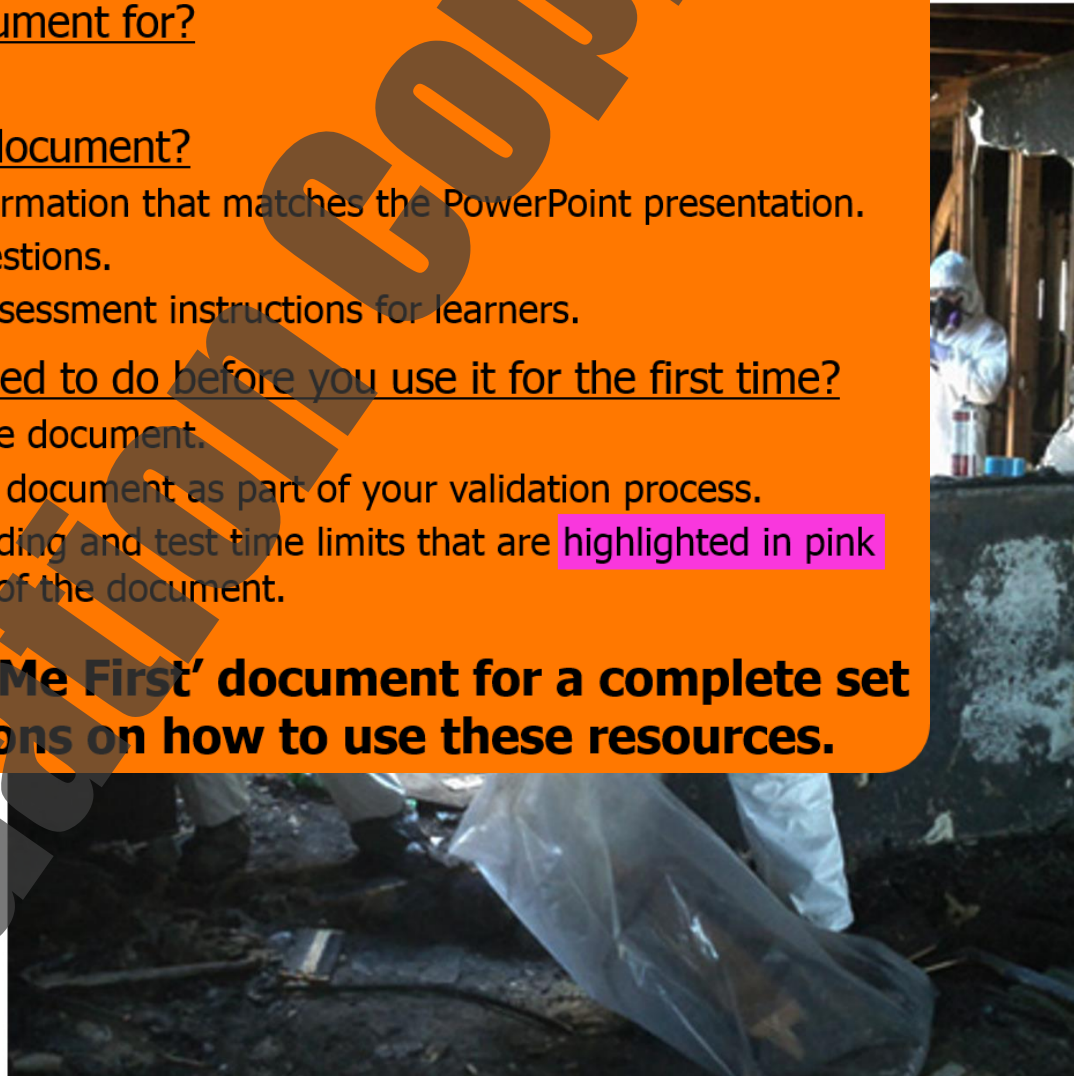
What is in this document?

- Course information that matches the PowerPoint presentation.
- Review questions.
- Practical assessment instructions for learners.

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.
3. Set the reading and test time limits that are highlighted in pink at the end of the document.

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



LEARNER GUIDE

CPCCE4008 Supervise Asbestos Removal

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 **CPCCE4008: Supervise Asbestos Removal**.

You will learn about:

- ◆ Planning for asbestos removal.
- ◆ Preparing for asbestos removal.
- ◆ Supervising testing, compliance and documentation in consultation with licensed asbestos assessor and the asbestos removalist.
- ◆ Overseeing the removal and decontamination process.



1.1.1 Licensing Requirements

Asbestos handling licenses are required nationally. The model Work Health Safety (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.

Asbestos may be found in any of the following items used in building and construction over that period:

- ◆ Acoustic plaster soundproofing.
- ◆ Adhesives and glues.
- ◆ Asbestos cement.
- ◆ Asbestos cement moulded guttering.
- ◆ Asbestos cement sheets.
- ◆ Asbestos tiles.
- ◆ Bitumastic felts and materials.
- ◆ Cable bandages.
- ◆ Compressed asbestos cement panels.
- ◆ Floor vinyl covering.
- ◆ Gaskets.
- ◆ Millboard.
- ◆ Mortar.
- ◆ Pipe lagging.
- ◆ Electrical meter boxes and related devices.
- ◆ Woven textiles, ropes, tapes and braids.
- ◆ Decorative coatings.
- ◆ Resinous backing board.
- ◆ Sealant mastic.
- ◆ Sprayed on fireproofing, soundproofing and thermal insulation.
- ◆ Tape.
- ◆ Thermal insulation.

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



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.

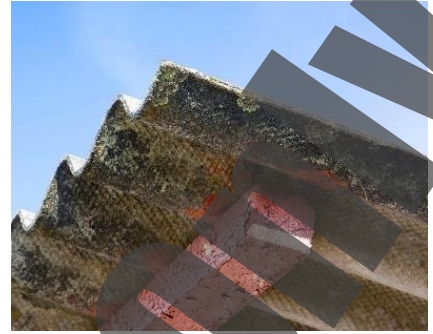
Non-friable materials containing asbestos are solid, quite rigid and the asbestos fibres are tightly bound in the material. Non-friable materials containing asbestos are the most common in domestic houses. They are commonly called 'fibro', 'asbestos cement' and 'AC sheeting'.

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 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.

List five (5) examples of construction items that could contain asbestos.

1.

2.

3.

4.

5.

2.

What can cause non-friable asbestos to become friable?

3.

What is the name of the asbestos-related condition that caused by inflammation or scarring in the lungs?

1.2 Work Details

To be able to properly plan out the job you need to access or organise to get all of the relevant information.



1.2.1 Gather Relevant Information for the Job

Some of the information you will need for the job will come from your organisation, other information will come from the client and the rest will be gathered when inspecting the site and carrying out legislative and other tasks required by the regulator.

As the asbestos removal supervisor you are responsible for gathering, organising and passing on this information to your team in the form of work instructions, briefings, training and an Asbestos Removal Control Plan (ARCP).

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.



Check the following sources of information and pass on the relevant details to ensure the asbestos removal team are always working as safely as possible:

Information Source	Safety Requirements
Company Policies and Procedures	Including: <ul style="list-style-type: none"> ◆ Access to toilets and other amenities. ◆ Managing work hours to minimise fatigue. ◆ Guidelines for working in heat and avoiding heat stress. ◆ Safety and quality requirements. ◆ Risk management procedures. ◆ Reporting and notification responsibilities. ◆ Personnel training requirements.
Legislation and Regulations	Including: <ul style="list-style-type: none"> ◆ The Code of Practice for the Safe Removal of Asbestos. ◆ The Building Code of Australia (BCA). ◆ General WHS procedures for construction work as required, including identifying and mitigating risks. ◆ Decontamination, transport and disposal procedures.
Operating Manuals and Specifications for Materials and Equipment	Including: <ul style="list-style-type: none"> ◆ How to safely prepare, use and maintain the equipment. ◆ The limitations of the equipment. ◆ Applications that should be avoided during use.

Information Source	Safety Requirements
Work Specific Safety Information	Including: <ul style="list-style-type: none"> ◆ Asbestos register and any amendments. ◆ Job Safety Analysis (JSA) and Work Method Statements (WMS). ◆ Safety data sheets (SDS). ◆ Enclosure construction. ◆ Use of decontamination units.
Environmental Requirements	Such as: <ul style="list-style-type: none"> ◆ Clean-up management. ◆ Dust and noise management. ◆ Notification to occupants, neighbours and other affected parties. ◆ Sedimentation control. ◆ Vibration management. ◆ Waste management, including the safe disposal of ACM. ◆ Air monitoring requirements.

All asbestos removal activities must be guided by sustainability principles. This means the ARCP must minimise the chance of negative environmental impacts occurring.

Under the Environment Protection (Industrial Waste Resource) Regulations the disposal of waste asbestos (industrial or domestic) is controlled by EPA. All removal and transport of asbestos must meet the requirements set out by the EPA to ensure there is as little impact as possible on the environment and health of adjacent areas.



By meeting the requirements of these guidelines you can ensure that all work is carried out, and completed to industry and organisational quality standards. This means all asbestos has been removed with minimal risk to the health and safety of workers and nearby people, in accordance with asbestos removal and decontamination best practice and with the least possible exposure to asbestos and work associated risks.

1.2.1.1 Asbestos Register



An asbestos register is a report that lists all identified (or potential) asbestos in a workplace.

At a minimum the asbestos register needs to list any asbestos or ACM that has been identified or is likely to be present at the workplace including:

- ◆ The date that the asbestos or ACM was identified.
- ◆ The location, type and condition of the asbestos.

An asbestos register can also include:



- ◆ Details of any asbestos assumed to be in the workplace, but not necessarily identified.
- ◆ Results of any testing that confirms a material at the workplace is or is not asbestos.
- ◆ Asbestos identification dates.
- ◆ Details of inaccessible areas that may contain ACM.
- ◆ Photos or drawings showing the location of the asbestos or ACM.

Check the plans and asbestos register to work out how much ACM will need to be removed. You need to make sure you will have enough material to contain, seal and store the asbestos (and any other related equipment that is contaminated throughout the removal process).

1.2.1.2 Work Method Statements

Under WHS legislation, worksites require a work method statement before any high risk construction work can start. A work method statement is a list of steps that outlines how a job will be done and includes details for any hazards that occur at each step, and how to control or minimise them.

These statements can also be known as Safe Work Method Statement (SWMS), Job Safety Analysis (JSA) or Safe Operating Procedure (SOP).

You will need to develop a work method statement prior to starting any work.

Go through the work method statement with your team to make sure they understand all of the task requirements before starting the work. It will help them to complete the work as safely as possible.



1.2.1.3 Safety Data Sheets

A Safety Data Sheet (SDS) is a detailed document outlining the risks and hazards associated with handling chemicals and other materials.

The SDS will contain details that can help you to identify:

Basic Details of the Chemical or Material	Name, type and identification number.
Hazards Associated with the Material	Whether it is flammable or corrosive.
Safe Handling and Storage Procedures	PPE to use, sealed containers or storage temperatures.
Emergency Procedures	What to do if the chemical or material gets out of hand.
Disposal Procedures	Suggestions for removing the chemical or material from the site.

It will be issued by the manufacturer and may or may not include material handling methods.

1.2.2 Confirm Job Requirements and Make Preparations

You need to gather up all of the relevant information about the job so that you can prepare your team properly.

Job preparation will generally include:



- ◆ Assessing conditions and hazards.
- ◆ Determining work requirements, and safety plans and policies.
- ◆ Identifying labour requirements.
- ◆ Consulting with local authorities (councils) and local waste management and transport authorities to determine requirements.
- ◆ Identifying equipment defects.
- ◆ Inspecting work site.
- ◆ Preparing and implementing the Asbestos Removal Control Plan (ARCP) and Work Method Statement (WMS).
- ◆ Conducting work site inductions.
- ◆ Identifying and preparing for containing and removing asbestos from a work site according to the ARCP.

You will need to make sure a proper inspection of the work site is completed to identify the location and type of any asbestos that needs to be managed.

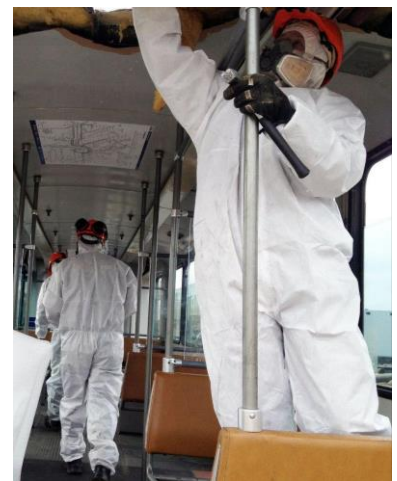
The following areas need to be inspected to determine the scope of the job:

- ◆ All buildings and structures.
- ◆ Ceiling spaces.
- ◆ Cellars.
- ◆ Shafts.
- ◆ Storage areas.
- ◆ Wall cavities.

If it is not possible to identify a particular material or cannot be sure if it contains asbestos it must be considered as ACM and handled appropriately.

The design plans for the area or plant being inspected can give you clues about identifying materials in areas that are currently inaccessible.

All asbestos assessments must be conducted by competent personnel.



It can be difficult to determine if a material contains asbestos (especially if it is not clearly marked). Some materials manufactured overseas may not be marked as ACM or may only be labelled if it contains more than 10% asbestos. In these cases samples should be taken and analysed.

To ensure safety it is strictly prohibited for anybody other than a competent person to take samples of potential ACM. Taking a sample of the material increases the potential health risk of releasing airborne fibres.

A competent person is somebody who has had training and experience in handling asbestos and includes:

- ◆ Occupational hygienists who have experience with asbestos and ACM.
- ◆ Licensed asbestos assessors.
- ◆ Asbestos removal supervisors.
- ◆ Individuals who have a statement of attainment in the VET course for asbestos assessors.
- ◆ A person working for an organisation accredited by the National Association of Testing Authorities (NATA) under ISO 17020 for surveying asbestos.



If the sampling is not conducted properly the material can be left in a state that is more dangerous than before it was disturbed.



Asbestos samples must be analysed by an approved or NATA accredited laboratory. Samples must be sealed in an appropriate container or asbestos bag and clearly labelled.

The sampling process may have taken place before you are notified of the job. In this case the information from the inspection and lab analysis will help you to determine the best approach to take for the removal.

1.2.2.1 Confirm Staffing Levels for Job

Once you have identified the scope of the work to be completed you should be able to work out how many people you need on the work team.

The size of the team will depend on a range of factors including:

- ◆ The type, condition and amount of ACM to be removed.
- ◆ The size of the work site (it may be difficult for larger teams to operate in a very restricted or small area).
- ◆ Time constraints (the work needs to be completed by a specific deadline).
- ◆ The experience and skills of the team members.

The type of asbestos being removed will also impact on the staffing decisions you make. You will need to ensure that all personnel on site are appropriately trained and hold the appropriate license to conduct the asbestos removal.



Review Questions

4.

What are three (3) examples of work specific safety information or instructions that you need to refer to when planning any asbestos removal job?

1.

2.

3.

5.

What are two (2) examples of legislation and regulations that you need to refer to when planning any asbestos removal job?

1.

2.

6.

What environmental issues need to be considered when planning out the asbestos removal job?