



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

UOW SAFE@WORK

ASBESTOS MANAGEMENT PLAN

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1 Introduction

The University of Wollongong is committed to maintaining the health and safety of its workers, students, contractors and visitors. There are buildings and equipment under the control of the University that contain asbestos or Asbestos Containing Material (ACM). The University aims to eliminate exposure to asbestos through the identification and removal of asbestos where safe to do so. Where elimination is not possible, exposure is to be minimised so far as is reasonably practicable.

2 Purpose

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3 Definitions

<i>Airborne asbestos</i>	Any asbestos fibres small enough to be made airborne. For the purposes of monitoring airborne asbestos fibres, only respirable fibres are counted.
<i>Asbestos</i>	The asbestiform varieties of mineral silicates belonging to the serpentine or amphibole groups of rock forming minerals, including actinolite asbestos, grunerite (or amosite) asbestos (brown), anthophyllite asbestos, chrysotile asbestos (white), crocidolite asbestos (blue) and tremolite asbestos or a mixture of any of these.
<i>Asbestos containing material (ACM)</i>	Any material or thing that, as part of its design, contains asbestos.
<i>Asbestos contaminated dust or debris (ACD)</i>	Dust or debris that has settled within a workplace and is, or is assumed to be, contaminated with asbestos.
<i>Asbestos management plan</i>	Set out how asbestos or ACM that is identified in the workplace will be managed, for example what, when and how it is going to be done.
<i>Asbestos register</i>	A written register recording the asbestos containing materials (ACM) within a workplace.
<i>Asbestos-related work</i>	Work involving asbestos (other than asbestos) removal that is permitted.
<i>Asbestos removal licence</i>	Class A asbestos removal licence or a Class B asbestos removal licence.
<i>Asbestos removal work</i>	Work involving the removal of asbestos or ACM, or Class A asbestos removal work or Class B asbestos removal work.
<i>Asbestos removalist</i>	A person conducting a business or undertaking who carries out asbestos removal work.
<i>Asbestos waste</i>	Asbestos or ACM removed and disposable items used during asbestos removal work including plastic sheeting and disposable tools.
<i>Competent person</i>	In relation to carrying out clearance inspections as outlined in Section 473 of the WHS Regulation means a person who has acquired through training or experience the knowledge and skills of relevant asbestos removal industry practice and holds a certification in relation to the specified VET course for asbestos assessor work or a tertiary qualification in occupational health and safety, occupational hygiene, science, building, construction or environmental health. For all other purposes, competent person means a person who has acquired through training, qualification or experience, the knowledge and skills to carry out the task.

<i>Friable asbestos</i>	Material that is in a powder form or that can be crumbled, pulverised or reduced to a powder by hand pressure when dry, and contains asbestos.
<i>Naturally occurring asbestos (NOA)</i>	The natural geological occurrence of asbestos minerals found in association with geological deposits including rock, sediment or soil.
<i>Non-friable asbestos</i>	Material containing asbestos that is not friable asbestos, including material containing asbestos fibres reinforced with a bonding compound.
<i>Respirable asbestos</i>	Asbestos fibre that is less than 3 microns (m) wide, is more than 5 microns (m) long, has a length to width ratio of more than 3:1.

4 Responsibilities

4.1 Divisions and Faculties

Divisions and Faculties are responsible for ensuring that the provisions set out in these guidelines are implemented for areas that fall under the control of the Division/Faculty.

4.2 WHS Unit

The WHS Unit is responsible for:

- The review and monitoring of implementation of the Asbestos Management Guidelines.
- Updating the University's [Asbestos Register](#) including keeping records of asbestos inspection, testing and monitoring results.

4.3 University Workers

University Workers are responsible for:

- Not placing themselves or other colleagues at risk of injury;
- Observing safe work procedures, and;
- Reporting hazards including unsafe work methods to their supervisor.

5 Risk Management

Asbestos can pose a risk to health and safety when asbestos fibres become airborne. When asbestos or ACM (e.g. fibro) is in good condition and left undisturbed the health risk of asbestos exposure are significantly reduced.

The risk management process attempts to identify asbestos exposure hazards by identifying whether asbestos or ACM is present in the workplace. When asbestos or ACM has been identified in the workplace its location is to be noted in the University's [Asbestos Register](#). The register is used to ensure that ACM can be located so that any work that could potentially disturb asbestos can be avoided.

When ACM (or suspected ACM) is identified in the workplace the controller of premise or equipment, in consultation with workers, will be required to report the hazard via [SafetyNET](#), including assessing the risk associated with the identified ACM and implementing appropriate controls measures to manage the risk. The purpose of the risk assessment is to assess the level of risk and enable decisions to be made about appropriate risk control measures such as induction training, health and air monitoring. The risk assessment process enables a distinction to be made between the 'hazard' and 'risk' and enable decisions to be made about appropriate control measures to lower the risk as far as practicable.

5.1 Identification of ACM in the Workplace

Identifying asbestos or ACM is the first step in managing the risk of exposure. The identification of asbestos should be a part of the pre-job planning process. Prior to any work being undertaken that could result in the possible disturbance of ACM, including before demolition or refurbishment, the project manager needs to:

1. Review the asbestos register;
2. Arrange for a visual inspection by a competent person if prompted by The Asbestos Register / age of building; and,
3. Arrange for testing if suspect ACM is found.

If it is uncertain as to whether material contains asbestos, a sample is to be taken for analysis by a competent person. Where there are inaccessible areas that are likely to contain ACMs, the employer and/or controller of premises should assume that asbestos is present.

Asbestos may be identified at the University via the following means:

- Information contained in the Asbestos Register;
- Building or equipment surveys;
- Hazard inspections; and
- General observation.

Once identified the following information is required to fully identify the scope of the ACM hazard:

- The location and condition of the ACM;
- The type of ACM, (e.g. asbestos cement sheet);
- Whether the ACM is friable or non-friable;
- If there are any inaccessible areas that are likely to contain ACM; and,
- If the nature or location of any work to be carried out is likely to disturb the ACM.

5.2 Assessment of ACM using Sampling Analysis

Once a suspect ACM is identified it is required to be analysed by a NATA-accredited laboratory accredited for the test method, or other approved laboratory, to:

1. Confirm the material contains asbestos
2. Determine the level of risk associated with the ACM *in situ*.

Contact the WHS Unit or the Facilities Management Division (FMD) to arrange a competent person to assess any suspected ACM.

5.2.1 Exposure Standards

Exposure standards set out the airborne concentrations of asbestos, which should not damage the health of workers. The exposure standards for asbestos are:

- | | |
|-------------------------------|---|
| ▪ Amosite (brown asbestos) | 0.1 f/mL (Fibres per millilitre of air) |
| ▪ Crocidolite (blue asbestos) | 0.1 f/mL |
| ▪ Chrysotile (white asbestos) | 0.1 f/mL |

Any situations or areas which exceed the asbestos exposure standard are to be controlled to eliminate or minimise risk of exposure.

5.3 Control Measures

Control measures required for work involving exposure to ACMs are determined from the risk assessment process. Control measures are to be developed in accordance of the hierarchy of controls as set out in the [WHS Risk Management Guidelines](#). Controlling risks associated to asbestos exposure may include the following:

Removing asbestos

Refer to Section 8 Asbestos Removal.

Enclosing asbestos

When removal is not reasonably practicable then the preferred alternative is enclosure. Generally enclosure requires the creation of a structure built around the asbestos so that it is completely covered to prevent exposure of the asbestos to air and other substances.

Encapsulation and sealing asbestos

If the asbestos cannot be removed or enclosed, then encapsulation or sealing is the next appropriate control measure. Encapsulation helps protect the asbestos from mechanical damage, increases the length of serviceability of the product and may also be used to prevent the release of airborne asbestos during the removal process. Sealing is the process of covering the surface of the material with a protective coating over the asbestos to prevent exposure to airborne asbestos.

Tools and equipment

Section 6.4 of the [How to Manage and Control Asbestos in the Workplace Code of Practice](#) specifies that certain equipment must not be used on asbestos. Manually operated hand tools should be used wherever possible. Where this is not appropriate then low speed battery powered tools should be used in conjunction with suitable dust controls.

Safe work practices

Safe work practices may include:

- Wetting asbestos; wetting agents, such as detergent water to minimise the generation of airborne asbestos fibres;
- The use of thickened substances, pastes and gels to cover the surfaces of asbestos being wired on;
- Shadow vacuuming; and,
- Performing the task in controlled environment.

Personal protective equipment

Should be used in combination with other control measures. Refer to the UOW [PPE Guidelines](#) for more information.

Laundering of clothing

It is recommended that disposable coveralls are used as protective clothing unless it is not reasonably practicable to do so. When non-disposable protective clothing is used, the contaminated clothing must be laundered in a suitable laundering facility that is equipped to launder asbestos-contaminated clothing. Contaminated protective clothing must not be laundered in homes. Any clothing worn under coveralls must be disposed of or suitably bagged for laundering as asbestos-contaminated clothing.

Clean up

Asbestos waste needs to be properly disposed of and tools and workers need to be decontaminated.

6 Asbestos Register

The University is required to maintain an accurate register of asbestos and ACM. The [Asbestos Register](#) is available to the public on the UOW website and includes the following information:

- Details of any asbestos or ACM that has been identified or is likely to be present at the workplace from time to time including: the date on which the asbestos or ACM was identified and the location, type and condition of the asbestos.
- Details of areas where no asbestos or ACM is identified at the workplace if it is known that no asbestos or ACM is identified or is likely to be present from time to time at the workplace.

Further information regarding identified or removed asbestos or ACM may be referenced from the Asbestos Register to the UOW records management system including:

- Results of analysis that has confirmed a material in a workplace is/is not an ACM;
- The outcomes of the risk assessments, including any reviewed or revised risk assessments;
- The results and risk assessment of any air monitoring for airborne asbestos fibres; and,
- Photographs or drawings to visually show the location of the asbestos or ACM in the workplace.

A copy of the Asbestos Register is to be provided to workers (including contractors) before carrying out work where:

- Work being carried out or is about to be carried out and that work involves a risk of exposure to airborne asbestos, and/or
- Demolition or refurbishment of a structure constructed or installed before 31 December 2003.

A copy of the Asbestos Register is to be provided to the person assuming management or control of the work place if UOW is relinquishing management and control of the workplace.

The Asbestos Register is reviewed and revised when asbestos is identified or controlled (removed, sealed etc). As a minimum the information listed in the Asbestos Register should be reviewed every 5 years to ensure that it is reflecting the current condition of the asbestos or ACM. In addition to this the Asbestos Register will be reviewed and revised when:

- The Asbestos Management Plan is reviewed;
- Further asbestos or ACM is identified at the workplace; or,
- Asbestos is removed from or disturbed, sealed or enclosed at the workplace.

The local area responsible for managing areas containing asbestos or ACM should systematically drive the review process. This could take place in the form of an Asbestos Management Plan or local area maintenance system.

7 Health and Air Monitoring

Health and air monitoring is required for workers carrying out licensed asbestos removal work or other ongoing asbestos related work at a workplace and who are at risk of exposure to asbestos when carrying out the work.

Health and air monitoring must also be undertaken when a worker is at risk of exposure due to work that is not licensed asbestos removal work. The need for health and air monitoring of these workers should be determined on the basis of the potential for exposure, frequency of potential exposure and duration of the work being undertaken.

Consideration must be given to the worker's demographic, medical and occupational history and records of the worker's personal exposure. The health and air monitoring must include a physical

examination of the worker with emphasis on the respiratory system, including standardised respiratory function tests, unless another form of health and air monitoring is recommended by a registered medical practitioner.

Workers must be informed of any health and air monitoring requirements before the worker carries out work that may expose them to asbestos.

Further information is contained in the University's [Air and Health Monitoring Guidelines](#).

7.1 National Asbestos Register

The Australian Government has created a National Asbestos Exposure Register to record the details of members of the Australian community who think they may have been exposed to asbestos or ACM. The [National Asbestos Exposure Register](#) is managed by the [Asbestos Safety and Eradication Agency](#).

If a worker think you may have been exposed to asbestos containing materials you can register your details by completing the [National Asbestos Exposure Register Form](#) and:

- Emailing it to: enquiries@asbestossafety.gov.au, or
- Print and fax to: (02) 6204 2029.

8 Asbestos Removal

Any work commissioned by the University that involves the removal of asbestos must be carried out only by a licensed asbestos removalist unless specified in the WHS Regulation that a licence is not required. There are two types of asbestos removal licences: Class A and Class B. The type of licence required will depend on the type and quantity of asbestos or ACM that is being removed at a workplace. The following table has been taken from the [How to Safely Remove Asbestos Code of Practice](#).

Type of licence	What asbestos can be removed?
Class A	Can remove any amount or quantity of asbestos or ACM, including: <ul style="list-style-type: none"> ▪ any amount of friable asbestos or ACM ▪ any amount of ACD. ▪ any amount of non-friable asbestos or ACM.
Class B	Can remove: <ul style="list-style-type: none"> ▪ Any amount of non-friable asbestos or ACM. <i>Note: A Class B licence is required for removal of more than 10 m² (square metres) of non-friable asbestos or ACM but the licence holder can also remove up to 10 m² of non-friable asbestos or ACM.</i> ▪ ACD associated with the removal of non-friable asbestos or ACM. <i>Note: A Class B licence is required for removal of ACD associated with the removal of more than 10 m² of non-friable asbestos or ACM but the licence holder can also remove ACD associated with removal of up to 10m² of non-friable asbestos or ACM.</i>
No licence required	Can remove: <ul style="list-style-type: none"> ▪ up to 10 m² of non-friable asbestos or ACM ▪ ACD that is: <ul style="list-style-type: none"> ○ associated with the removal of less than 10 m² of non-friable asbestos or ACM ○ not associated with the removal of friable or non-friable asbestos and is only a minor contamination.

8.1 Duties for Asbestos Removal Work That Does Not Require a Licence

Any worker at the University who is required to undertake asbestos removal work that does not require a licence must be trained in the identification, safe handling and suitable control measures for asbestos and ACM. An asbestos awareness course or the non-friable removal unit of competency is considered to be appropriate training. Suitable training can be identified in the University's [WHS Training Guidelines](#)

Anyone conducting asbestos removal work that does not require a licence is required to:

- Obtain a copy of the UOW Asbestos Register.
- Conduct a risk assessment for the work to be undertaken.
- Implement appropriate risk controls which may include:
 - Ensure signage and barricades have been erected to indicate and delineate the asbestos work area.
 - Use a wet method when removing asbestos where practicable.
 - Ensure correct tools, equipment and PPE is used.
 - Ensure decontamination facilities are available.
 - Contain and label asbestos waste and dispose of it as soon as reasonable practicable.
 - Ensure that PPE and clothing used in asbestos removal work and contaminated with asbestos is handled in accordance with the WHS Regulation.

An Asbestos Management Plan is not mandatory for this type of work. However, it can be beneficial in managing health and safety and is recommended by the University.

8.2 Clearance Certificates

Before an area can be re-occupied after asbestos removal, a clearance inspection must be performed. Clearance monitoring is a mandatory requirement for all friable asbestos removal works and is recommended for bonded ACM removal works particularly when the bonded ACM is located internally or near sensitive receptors such as air intakes. The complete removal of all ACM must be verified with a written clearance certificate. The clearance certificate must include details of a satisfactory clearance inspection conducted by the independent competent person. If clearance air monitoring has been conducted, the results of the air monitoring must be included as part of the clearance certificate.

It is the responsibility of the UOW Officer who has engaged the services of a clearance inspection to obtain a copy of a clearance certificate. The clearance certificate is to be sent to the WHS Unit so that the Asbestos Register can be updated.

8.3 Asbestos Management Plan

When a qualified asbestos removal worker has been engaged to perform ACM removal works, the controller of the local workplace is required to inform the removal worker that an Asbestos Management Plan must be completed before asbestos removal work commences. The Asbestos Management Plan will need to outline as a minimum:

- The identification of asbestos and ACM. For example, a reference or link to the Asbestos Register for the workplace and the locations of signs and labels.
- Decisions and reasons for the decisions about the management of asbestos at the workplace. For example, safe work procedures and control measures.
- Procedures for detailing accidents, incidents or emergencies of asbestos at the workplace.
- Workers carrying out work involving asbestos. For example, consultation, information and training responsibilities.

A record of the Asbestos Management Plan is to be passed on to the WHS Unit.

Asbestos removal work that can be completed by a person who does not hold a Class A or Class B asbestos removal licence in accordance with WHS legislation is to be conducted in accordance with the UOW Asbestos Management Plan.

9 Monitoring and Review

All areas or equipment with asbestos or ACM *in situ* should be assessed by a competent person to determine the appropriate inspection periods to ensure risk controls are effective. Inspection periods are to be identified on the Asbestos Register and organised by the Division/Faculty responsible for the area.

Air monitoring for asbestos exposure may be required as result of the assessment and should be conducted by a competent person in accordance with [Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition \[NOHSC:3003\(2005\)\]](#)

10 Record Keeping

Records of any person who is trained in identification and safe handling of, and suitable control measures for, asbestos and ACM, other than licence holders, must be kept for 5 years after the worker ceases working for the University.

Health and air monitoring reports must be kept as a confidential record for at least 40 years after the record is made and identified as a formal record for the particular worker.

11 Incident and Emergency Procedures

Any incident involving asbestos or ACM that could result in risks to health and safety are to be reported in accordance with the University's [Incident Management and Reporting Guidelines](#).

If emergency asbestos work is required (for example if a building, structure or plant is structurally unsound or a collapse of the building, structure or plant is imminent) a procedure needs to be developed before work commences. The procedure needs to outline how the risk of exposure to asbestos will be minimised. Safe Work NSW must be notified of the emergency work immediately after the University becomes aware of it.

12 Consultation

The WHS Act requires the University to consult, so far as is reasonably practicable with workers who carry out work who are (or are likely to be) directly affected by a work health and safety matter. Consultation on health and safety risks arising from work involving asbestos or ACM needs to comply with the University's [WHS Consultation Statement](#).

13 Review

In order to ensure that these guidelines continue to be effective and applicable to the University, it will be reviewed regularly by the WHS Unit in consultation with the WHS Committee. Conditions which might warrant a review of the guidelines on a more frequent basis would include:

- reported hazards or injuries
- non-conforming systems
- WHS Committee concern.

Following the completion of any review, the guideline will be revised/updated in order to correct any deficiencies. These changes will be communicated via the WHS Committee.

14 Related Documents

- [Asbestos Register](#)
- [Air and Health Monitoring Guidelines](#)
- [Incident Management and Reporting Guidelines](#)
- [Legislative Compliance Guidelines](#)
- [Personal Protective Equipment Guidelines](#)
- [Risk Management Guideline](#)

15 Referenced Documents

- [NSW Work Health and Safety Act 2011](#)
- [NSW Work Health and Safety Regulation 2011](#)
- [How to Manage and Control Asbestos in the Workplace Code of Practice](#)
- [How to Safely Remove Asbestos Code of Practice](#)
- [Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition \[NOHSC:3003\(2005\)\]](#)

16 Version Control Table

Version Control	Date Released	Approved By	Amendment
1	April 1990	WHS Manager	New document created
2	August 2000	WHS Manager	Document updated to reflect current requirements
3	February 2006	WHS Manager	Document updated to reflect current requirements
4	March 2008	WHS Manager	Document updated to reflect current requirements
5	March 2009	WHS Manager	Document updated to include pre job check and planning.
6	August 2010	WHS Manager	Document updated to incorporate the Personnel name change to Human Resources Division.
7	March 2012	WHS Manager	Rebrand
8	May 2012	WHS Manager	Updated in accordance with NSW WHS Act & Regulation
9	March 2013	WHS Manager	WHS Unit name change
10	September 2013	WHS Manager	Inclusion of information on National Asbestos Register
11	December 2013	WHS Manager	Updated with feedback from Clare Atkinson.
12	November 2016	WHS Manager	Scheduled review. Rebrand. Updated names and hyperlinks for National Asbestos Register.