Marsh

Shire of Mundaring

Asbestos Management Plan

Mundaring Visitor Centre & HHS Museum –
7250 Great Eastern Highway,
Mundaring WA 6073

7 February 2024

Contents

Executive Summary

Marsh was contracted by the Shire of Mundaring (Shire) to review and assess Shire owned buildings and assets for the presence of asbestos and where identified, develop registers for those buildings, assess the risks that the ACM poses and develop an Asbestos Management Plan. The asbestos registers and management plan were completed in accordance with the *Work Health and Safety (General) Regulations 2022.*

The asbestos assessments were completed by Katherine Kempin (Senior People Risk Consultant (WHS) – Marsh Advisory), in 2024.

This asbestos management plan (AMP) has been developed to assist the Shire with the safe and effective management of asbestos containing material (ACM) within their buildings and assets whilst complying with Work Health Safety legislation and applicable codes of practice.

Definitions

Asbestos Containing Material (ACM) – any material, object, product or debris that contains asbestos.

Asbestos Management Plan (AMP) – ascertains how asbestos or ACM is identified at the workplace will be managed e.g. what, when and how it is going to be done.

Competent person – means a person possessing adequate qualifications, such as suitable training, and sufficient knowledge, experience and skill, for the safe performance of the specific work.

Friable asbestos – means 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.

In situ – means fixed or installed in its original position, not having been moved.

Non-friable asbestos – means material containing asbestos that is not friable asbestos, including material containing asbestos fibres reinforced with a bonding compound (Note: Non-friable asbestos may become friable asbestos through deterioration).

Legislative Requirements

As a person conduction a business or undertaking (PCBU), the Shire of Mundaring has a responsibility to maintain a safe working environment under the provisions of:

- *Chapter 3 of the Work Health and Safety (General) Regulations 2022* (*WHS Regulations*), which requires a PCBU to identify hazards at a workplace, assess the risk of harm to a person from each hazard and to take steps to reduce the risk.
- *Chapter 8, Part 8.3* (*WHS Regulations*) specifically requires a PCBU to appropriate manage ACM through clearly identifying the presence and location of asbestos in Shire own assets, risk assess the likelihood of harm, implement effective control measures, and effectively communicate asbestos hazards to workers and others.

Government Policy

The long-term aim is for all buildings occupied or controlled by government agencies to be free of asbestos containing material (ACM).

Whilst working towards this goal, agencies have an obligation to identify and manage ACM in assets to meet the work health and safety requirements.

ACM in sound condition, left undisturbed, presents negligible risk to building occupants and the general community. Therefore, removal of asbestos may not be immediately necessary but should take into consideration immediate health risks and a safe work method statement (SWMS) must be completed prior to demolition, partial demolition, renovation or refurbishment if these works are likely to disturb ACM.

Remaining ACM should be regularly inspected, and actions taken to minimise health risks, where practicable.

All work conducted on ACM must be undertaken in such a manner as to minimise health risks.

Background Information

Asbestos is a naturally occurring mineral rock made up of strong fibres that have fire, heat and chemical resistant properties.

While asbestos is now banned from use, it was a component of thousands of different products used in the community and industry from the 1940s until the late 1980s. Some uses of chrysotile asbestos products, mainly friction materials and gaskets continued until 31 December 2003.

Asbestos can pose a risk if fibres of a respirable size become airborne, are inhaled, and reach deep into the lungs in sufficient quantities. These respirable fibres are a major health hazard and can cause serious asbestos-related diseases that can take decades to become apparent.

The lack of immediate health effects has often meant that victims are unaware of the dangers they are exposed to, which means that exposure to the hazard can continue over a long period causing serious health effects.

Due to the health risks associated with asbestos, it is essential that exposure is effectively managed. Working on or near damaged asbestos-containing materials (ACM) without appropriate control measures in place increases the risk of exposure to airborne asbestos fibres.

Exposure to asbestos fibres is known to cause mesothelioma, asbestosis and lung cancer.

Method

Asbestos Assessments

Access to Shire buildings and assets was arranged with Shire representatives. Marsh conducted a visual assessment of Shire buildings to identify the presence, condition and potential for disturbance of ACM outside buildings and inside where access was possible with a focus on the specific locations (internal and external walls, flooring, roofs, ceilings, eaves, fascia's and fencing).

Where some areas were partially inaccessible, the external areas of these assets were assessed as thoroughly as possible. These inaccessible areas should be treated as if they possibly contain ACM and relevant precautions should be taken in the event of maintenance, renovation or demolition work. Areas that were inaccessible have been identified on the asbestos registers.

Asbestos Registers and Risk Assessment

An asbestos register and risk assessments were developed based on the assessments for each asset identifying the location, condition, potential for disturbance and analysis of associated risk of ACM. The level of risk was assessed using the risk matrix below in accordance with guidelines developed by the Department of Communities Housing.

Asbestos Risk Matrix

ASBESTOS CONTAINING MATERIAL RISK ASSESSMENT MATRIX				
CONDITION OF MATERIAL	POOR	**Risk Ranking 6** Unsealed or coating damaged. Severely weathered. *Low probability of disturbance.*	**Risk Ranking 3** Unsealed or coating damaged. Severely weathered. *Medium probability of disturbance*.	**Risk Ranking 1** Unsealed or coating damaged. Severely weathered. *High probability of disturbance.*
	FAIR	**Risk Ranking 8** Unsealed or coating deteriorated. Moderately weathered. *Low probability of disturbance.*	**Risk Ranking 5** Unsealed or coating deteriorated. Moderately weathered. *Medium probability of disturbance.*	**Risk Ranking 2** Unsealed or coating deteriorated. Moderately weathered. *High probability of disturbance.*
	GOOD	**Risk Ranking 9** Sealed and coating in good condition. Unweathered. Surface sound and well bound. *Low probability of disturbance.*	**Risk Ranking 7** Sealed and coating in good condition. Unweathered. Surface sound and well bound. *Medium probability of disturbance*.	**Risk Ranking 4** Sealed and coating in good condition. Unweathered. Surface sound and well bound. *High probability of disturbance.*
		LOW	**MEDIUM**	**HIGH**
		PROBABILITY OF DISTURBANCE		

Asbestos Risk Control Matrix			
Risk Rating	**Action**	**Priority**	**Timeframe**
1 – 3	Consider safe removal of ACM and replace with non-ACM product	High	Immediately - Based on practicability
4 – 6	Consider enclosing the ACM through non-ACM disturbance measures	Medium	Within 6 months - Based on practicability
7 – 12	Consider sealing the ACM appropriately	Low	Within 6 months – Based on practicability
13 – 15	Monitor and review the ACM's condition	Very Low	Between 1 – 5 years
All	Consider safely sampling the ACM for verification	Low	Anytime
All	Signify ACM present (signage)	Immediate	Within one week of identification
Any	Other:	Based on practicability	Anytime

Control Measures

As per *WHS reg.35 & 36*, as well as supporting *Codes of Practice,* control measures should reflect the hierarchy of controls. A combination of the following controls may be required to adequately manage ACM:

1. Elimination – removal is the preferred method of control.
2. Isolation – enclosure and / or sealing of the ACM.
3. Engineering controls.
4. Administration – safe work method statements, signage etc. and
5. Personal Protective Equipment (PPE).

The control measures set out in the Asbestos Risk Control Matrix include:

- Consider safe removal of ACM and replace with non-ACM product. Removal of ACM must be considered in relation to the practicability to do this. Consideration is given to the current condition and likelihood for deterioration of the ACM. Is it in the budget / can it be put in the budget for future removal? What temporary measures need to be implemented until removal?
- The removal of asbestos is performed by suitably licensed and competent persons and under controlled conditions. Removal is the preferred measure to eradicate buildings with ACM from the Shire.
- Consider enclosing the ACM through non-ACM disturbance measures. Enclosing ACM involves installing a barrier between the ACM and other areas. This can prevent further physical damage to the exposed ACM. The installation of an enclosure should be conducted without disturbing the ACM.

- Consider sealing the ACM appropriately. Sealing refers to the coating of the outer surface of ACM with some sort of sealant compound that usually penetrates the substrate and hardens the material.

- Monitor and review the ACM's condition. This involves leaving the ACM in its current condition as it is sealed and in good condition and the surface is sound and well bound. The ACM will need to be inspected at regular intervals no greater than once every 5 years to ensure that there is no further deterioration or at the request of a Health and Safety Representative.

- Consider safe sampling the ACM for verification. This can be conducted at any time. The Environmental Health Officer may take a sample and have it sent to a NATA accredited laboratory for testing which will confirm if ACM is present and the type of controls necessary.

- Signify ACM present. Signage (labels) shall be erected in all buildings where ACM is suspected or confirmed in accordance with legislative requirements. The sign / label should be located near the ACM without causing any deterioration to the ACM.

Asbestos Management Plan (AMP)

The AMP has been developed to assist the Shire with control of the premises to comply with legislative requirements and to prevent exposure to airborne asbestos fibres while ACM remains in the workplace.

Roles and Responsibilities

The CEO, or their delegated authority, is appointed as the "Responsible Officer" to ensure the effective implementation of the AMP. This person would be responsible for:

- Providing advice on asbestos issues.
- Developing and implementing the awareness of asbestos to workers.
- Ensuring workers are informed of their roles and responsibilities and of the risk control measures associated with ACM.
- Ensuring regular inspections of assets.
- Maintaining the Asbestos Register(s).
- Recording incidents or hazards.
- Reviewing and updating the AMP accordingly.

All other Shire workers are responsible for:

- Advising the Responsible Officer when contractors or tradespeople are on site.
- Ensuring precautions are taken to keep people clear of ACM being repaired, removed or upgraded.
- Reporting all incidents or potential hazards associated with ACM to the Responsible Officer.
- Complying with policies, procedures and instructions of the AMP.

Contractors and tradespeople are responsible for:

- Ensuring their workers and sub-contractors are aware of their responsibilities.
- Reporting to the Responsible Officer prior to commencing work on sites with ACM.

- Complying with procedures of the AMP and as stipulated in contracts or other relevant guidance documents.
- Reporting all incidents or potential hazards to the Responsible Officer.

Awareness and Training

Awareness and training regarding ACM, including general awareness, hazards associated, and relevant procedures should be conducted for all appropriate personnel.

Workers and contractors should be informed of the health risks associated with exposure to airborne asbestos fibres. ACM training given to workers shall cover the following:

- The health risks of ACM.
- The types of materials, uses and likely occurrence of asbestos in buildings and plant.
- The general procedures to be followed to deal with an emergency (e.g. an uncontrolled release of asbestos dust in the workplace).
- How to control the risks associated with ACM.
- Health surveillance.

And to relevant personnel:

- Assessing the risk and planning work.
- The correct use of control measures (PPE and safe work methods) and how these can reduce the risk of exposure to ACM and limiting exposure and the spread of asbestos fibres in the work area.
- Assessing exposure and air monitoring.
- Exposure standards, and
- Maintenance and control measures.

Emergencies and Incidents

Emergencies

In an emergency where the health of personnel is at an imminent risk from an unexpected event (e.g. earthquake or collapse of a structure which contains ACM), the following procedure shall be followed:

- Evacuate all personnel.
- Seal off or isolate the area where possible.
- Advise the Responsible Officer.
- Restrict access to the area.
- Determine “clean up” or other remedial action.
- Conduct air monitoring (where applicable).
- Responsible Officer to authorise re-occupancy following clearance by the appropriate authority or competent person, and
- Record (document) the incident and update the asbestos register if required.

Incidents

Other incidents may occur, such as, a contractor unknowing drilling or cutting into ACM. In this situation the following procedure shall be followed:

- Consult the asbestos register.
- Advise the Responsible Officer.
- Isolate the area where required.
- Determine “clean up” or other remedial action.
- Restrict access to the area where required.
- Conduct air monitoring if required.
- Responsible Officer to authorise re-occupancy following clearance by the appropriate authority or competent person; and
- Record (document) the incident and update the asbestos register if required.

Maintenance

The following procedure shall be followed in the event of planned maintenance on ACM where material is accessible, stable, and unlikely to become airborne:

- Refer to asbestos register.
- Advise all personnel and restrict access to the work area.
- Erect warning signs of the work being conducted.
- Implement control measures e.g. enclosing, sealing, removal or leave it as is.
- Update asbestos register.

On-site Maintenance Work

The following is a list of typical maintenance and service tasks that may disturb ACM and may only be performed after a risk assessment is completed and control measures have been implemented to minimise exposure to airborne fibres:

- Drilling of ACM.
- Sealing, painting, coating where sanding is required of ACM.
- Cleaning leaf litter from gutters of non-sealed ACM.
- Replacement of electrical components affixed to switch boards made of ACM.
- Inspection of in situ asbestos friction materials or seals.

When a project involves a team of more than one worker, the leader of the team will be responsible for ensuring that team members are individually aware of ACM procedures when working with ACM.

Workers engaged to remove ACM must hold the relevant Asbestos Removalist License as required. The Responsible Officer should be advised immediately of any incidents when non-compliance with the AMP may have or has occurred.

Engaging Contractors

When engaging a contractor to carry out additions or repairs in areas where ACM has been identified the Responsible Officer shall:

- Advise the contractor of the asbestos register which records the presence and condition of ACM.
- Endeavour to advise all personnel likely to be affected by the work before the work involving ACM commences.
- ACM related work should be conducted outside of business hours to reduce the risk to personnel.

Supervision of contractors is required to ensure that ACM work practices are complied with including:

- Signs and barricades are erected.
- Specific safe work procedures are followed.
- Correct handling of in situ ACM.
- Clean up of work areas.
- Correct disposal practices.

Record Keeping

Asbestos Register

The asbestos register has been developed to provide information on ACM in Shire assets to ensure these assets are not inadvertently disturbed to cause a risk of harm to the health of workers including contractors, occupants or others.

The asbestos register must be maintained by the Responsible Officer.

The asbestos register, including risk assessments, shall be regularly reviewed when:

- The risk assessment indicates the timeframe for reassessment.
- The AMP is reviewed.
- Further ACM is identified.
- Asbestos is removed from, disturbed, sealed or enclosed.
- Requested by a health and safety representative.
- The register is no longer adequate for effectively managing ACM, or
- Scheduled no later than once every 5 years.

Asbestos Management Records

The Responsible Officer is responsible for maintaining a record of all asbestos management related activities, such as:

- Inspections.
- Hazard reports.
- Incident reports.
- Maintenance reports, including any repairs or replacements.

This includes ensuring documents are maintained, such as:

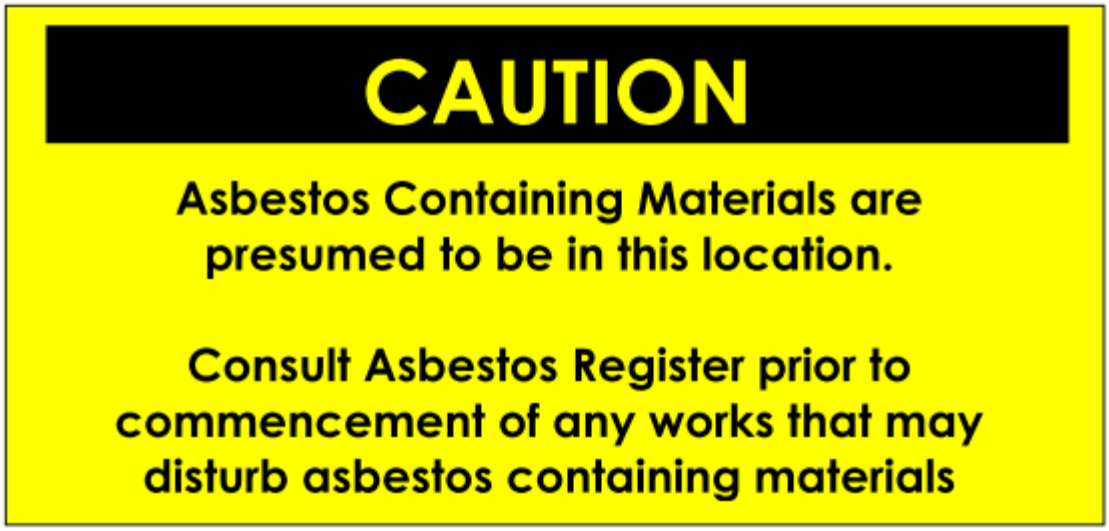
- The AMP.
- Risk assessments (part of the asbestos register).
- Sampling records should sampling be required.
- Air monitoring records should air monitoring be required.
- Name and details of contractors.
- Name and details of ACM consultants.
- Name and details of licensed asbestos removalists.
- Copies of asbestos removalist licenses.
- Copies of contractor’s liability insurance noting the inclusion of cover for the removal of ACM.
- Details of refurbishments and removal/demolition works.

Labelling

Labelling of ACM is a requirement under the *WHS reg.424*. An ACM hazard may not be immediately identifiable to all persons who may occupy or work within a building therefore information relating to this risk must be accessible.

Strategic placement of labels or signs is required to provide information to persons who may have to carry out work on assets with ACM or for those who simply occupy or work within those buildings.

An example of appropriate labelling is shown below:



These labels are used to advise personnel in the building that ACM has been identified and that an asbestos register exists and should be consulted prior to any disturbance.

Air Monitoring Procedures

Air monitoring may be used as a tool in assessing the risk of ACM, however air monitoring in isolation may not provide enough information to assess the risk.

Air monitoring may only be undertaken with the approval of the Responsible Officer. All air monitoring results should be documented and provided to the Responsible Officer for record keeping.

Securing the Work Area

Where minor work being carried out does not involve disturbing ACM, the Responsible Officer will need to determine that the work activities will not pose a risk to the health of personnel in those areas.

Where work activities involve the use of power tools and/or hazardous substances it is generally undesirable for workers and visitors to be present in the work area.

Where work involves the removal of ACM or has the potential to disturb ACM, the proposed work area must be isolated through the establishment of a ten-metre buffer zone and the Responsible Officer should arrange for the work to be conducted outside the normal business hours. All appropriate personnel must be advised of the work.

Completion of Works

Upon completion of works in an area where ACM has been identified and the nature of the material could lead to a contaminated airborne environment or where a licensed removalist has been engaged to remove ACM, a clearance inspection will be conducted by a competent Licensed Asbestos Assessor (LAA) and a clearance certificate obtained. The LAA will be independent from the workplace and may use methods such as visual inspections or use air monitoring to verify that the area is safe before the workplace is re-occupied.

Where non-friable sheets of less than 10sqms have been removed a visual inspection by the Responsible Officer is required to ensure all safe work procedures were followed.

Personal Protective Equipment (PPE)

PPE should only be used where other more effective control measures are not practicable. All PPE that cannot be decontaminated should be disposed of as asbestos waste.

Coveralls

Disposable coveralls may be disposed of as asbestos waste. Clothes worn underneath coveralls should be thoroughly vacuumed using a vacuum cleaner with high efficiency particulate air (HEPA) filters to ensure fibres do not stay on clothes and are taken into the home.

Footwear

Pull on boots are preferred as they cannot let any fibres in the way lace up boots can through the eyelets of the laces.

Respirators

Respiratory equipment should remain on until all disposable PPE have been removed bagged and work clothes have been vacuumed. Respirators should not be worn around the neck when not in use or left anywhere where it may accumulate dust. Re-useable respirators should be cleaned after use in accordance with manufacturer's instructions. Class P3 filters should be used with respirators.

Personal Decontamination

Asbestos fibres should not be transported outside the workplace. Ensure all disposable PPE are placed and sealed in a plastic bag and disposed with other asbestos waste.

Disposal of Asbestos Containing Material

ACM waste must be disposed of in accordance with the requirements of the *Health (Asbestos) Regulations 1992*.

All asbestos material and waste must be separated from other waste and shall be either placed in polythene sheets 200 micron (µm) thick wrapped and sealed or placed in 200 micron (µm) thick polythene bags which are then sealed.

NOTE: All wrappings or containers containing asbestos waste shall be clearly labelled or marked with the words **"Caution Asbestos"** in letters no less than 50 millimetre high.

When the removal of large amounts of asbestos is involved, the material may be placed directly into disposal bins or skips that have been lined with polythene, 200 microns thick, and are to be used exclusively for that purpose. Material which may potentially contain asbestos fibres such as debris from gutters and drains which accept discharge from asbestos cement roofs must be placed in polythene bags and sealed. Disposable PPE and some materials and tools used in asbestos related jobs are to be treated as asbestos waste.

All asbestos waste shall be removed from the worksite and disposed of as soon as is practicable.

Documentation should also be supplied to any principal contractor to demonstrate that any asbestos waste has been disposed of to an approved site and in an approved manner.

Appendix A – Asbestos Site Register

Shire of Mundaring Asbestos Register

Date of Inspection	Address	Suburb	LGIS Ref.	Asset No.	ACM Location	ACM Amount (m2)	ACM Presumed	ACM Condition	ACM Liable to damage or deterioration?	ACM Risk Level	Control Measures Recommended	Comments	Testing Required	Testing Conducted	Site Inspection Attachment	Inspected by	Remediation to be Implemented	Remediation Completed Before	Responsible Person	Re-assess Prior to
7/02/2024	Mundaring Visitor Centre & HHS Museum, 7250 Great Eastern Highway WA 6073	Mundaring	991005 BDNA2B	991005 BDNA2B	Entrance Ceiling Panels	4	YES	Intact, not friable	No, if undisturbed	LOW	Monitor and review for wear and damages	Removal by a licenced asbestos contractor during refurbishment or demolition	Yes, before disturbed	No	Yes	Katherine Kempin, Monika Thomas	Monitor in place	N/A	CEO	7/02/2029

Appendix B - Asbestos Maintenance Log

Shire of Mundaring Asbestos Register of Works												
Address	**Property File Ref**	**ACM Location**	**ACM Presumed**	**ACM Condition**	**ACM Liable to damage or deterioration?**	**ACM Risk Level**	**Date**	**Contract or Name**	**Proposed Works**	**Training Provided**	**Code of Practice Provided**	**Sign Off Document Attachments**

Appendix C - Property Risk Assessment

ACM Inspection

Mundaring Visitor Centre & HHS Museum **Complete**

Document No.	991005BDNA2B
Site Inspection for Asbestos Containing Materials	Mundaring Visitor Centre & HHS Museum
Client / Site	Shire of Mundaring

Photo 1

Photo 2

Conducted on	07.02.2024 14:33 AWST
Prepared by	Katherine Kempin
Location	7250 Great Eastern Hwy Mundaring WA 6073 Australia (-31.902043983977624, 116.16667193256606)

Personnel

Monika Thomas

Inspection of location and presumed Asbestos Containing Materials

Assessment of location and presumed or known/ tested ACM

Location 1

Date and time of Inspection	07.02.2024 14:33 AWST

Describe location of the ACM/Presumed ACM

Entrance Ceiling Panels

Assumed ACM

Photo 3

Photo 4

Asbestos Containing Material	ACM suspected
Material type	Hardiflex sheeting
Condition	Good
Details on Condition:	Sealed and intact
Quantity sqm (apx)	4
Friable or Non-Friable	Non-Friable
Is this an inaccessible area?	Only accessed by maintenance staff / contractors

Actions for consideration:

Consider safe removal & replace with non ACM	Monitor and Review the ACM's condition	Consider safely sampling the ACM for verification
		Signify ACM present

Other details:

Monitor and review for wear and damages
Removal by a licenced asbestos contractor during refurbishment or demolition

Additional comments:

State Corrective Action Reference

Acknowledgements

Inspected by (Name)

Katherine Kempin
19.03.2024 14:13 AWST

Inspected by (Name)

Monika Thomas
19.03.2024 14:13 AWST

Media summary

Photo 1

Photo 2

Photo 3

Photo 4

Appendix D - References

Work Health and Safety Act 2020
Work Health and Safety (General) Regulations 2022
Code of Practice: How to manage and control asbestos in the workplace – Safe Work Australia
[NOHSC:2018 (2005)] Code of Practice for the Management and Control of Asbestos in Workplaces
[NOHSC:2002 (2005)] Code of Practice for the Safe Removal of Asbestos 2nd Edition
Health (Asbestos) Regulations 1992

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