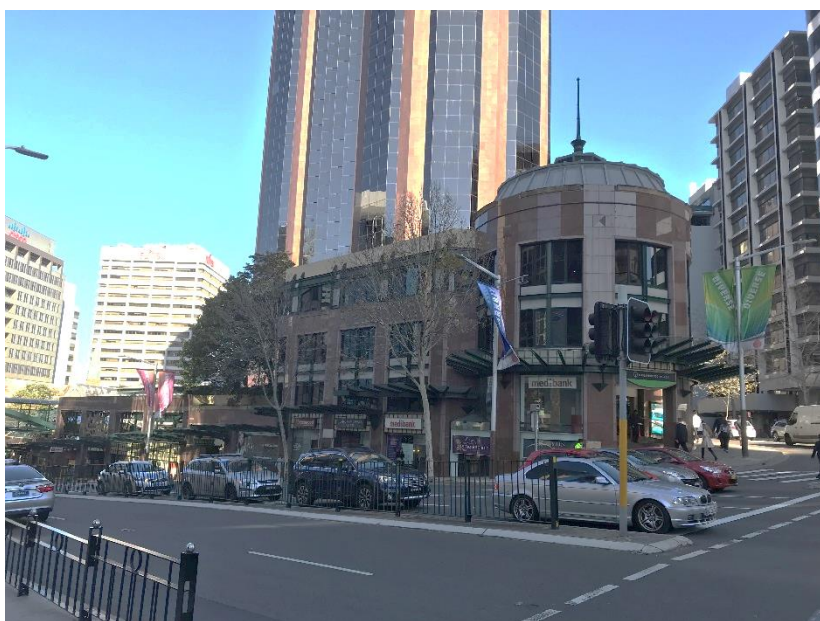


Asbestos & Hazardous Materials Management Plan

Mirvac



Greenwood Plaza &
101-103 Miller Street
North Sydney NSW

December 2020

Asbestos & Hazardous Materials Management Plan

Report For	Mirvac
Address	36 Blue Street (Greenwood Plaza) & 101-103 Miller Street, North Sydney NSW 2060

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Document Revision Record

File Name	Prepared By	Reviewed By	Issue No.	Issue Date
Mirvac HMMP Greenwood Plaza, North Sydney NSW Dec 20	David Bembrick Senior Consultant	Bernard Day General Manager	1	11/12/20

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1. Introduction

Exposure to certain hazardous materials has been linked with respiratory and other diseases and some hazardous materials are known or suspected human carcinogens. The identification of the hazards associated with hazardous materials, the evaluation of the risk they pose to persons and the implementation of appropriate controls to minimise that risk is an important part of overall health and safety risk management in the workplace.

This document is designed to assist the owners and managing agents/tenants of Greenwood Plaza (36 Blue Street) & 101-103 Miller Street, North Sydney NSW in fulfilling their general obligation to ensure the health and safety of employees, contractors, visitors and others accessing the site. This document has been specifically developed to assist in the management of asbestos and hazardous materials that are present/assumed to be present at the site.

The hazardous materials to be managed by this plan are as follows:

- Asbestos-containing materials (ACM);
- Synthetic Mineral Fibre (SMF)
- Polychlorinated Biphenyl (PCBs)
- Lead Paint

2. Asbestos

2.1 What is Asbestos?

Asbestos is a natural mineral found throughout Australia and the world. There are three main types of asbestos used commercially in Australia - Chrysotile (white asbestos), Amosite (brown asbestos) and Crocidolite (blue asbestos).

Asbestos minerals have separable long fibres that are strong and flexible enough to be spun and woven and are heat resistant. Because of these characteristics, asbestos has been historically used in over 3,000 manufactured goods, mostly in building materials, friction products, heat-resistant fabrics, gaskets, and coatings.

These building products were used extensively in Australia up until the late 1980's and continued to be used in some products until 2003, when its use was fully banned in Australia.

3. Why manage Asbestos?

3.1 Health Risks

Asbestos is a known carcinogen that affects the lungs, and breathing in high levels of asbestos fibres over time can lead to a number of diseases and cancers. This document aids in ensuring that asbestos-containing materials (ACMs) are managed in such a way that they do not become damaged and increase the risk of exposure.

3.2 Legislative Requirements

The following legislation and industry standard documentation applies to the management of asbestos in NSW:

- *NSW Work Health and Safety Act 2011 (WHS ACT)*
- *NSW Work Health and Safety Regulation 2017 (WHS Regulation)*
- *SafeWork NSW Code of Practice: How to Manage & Control Asbestos in the Workplace, 2019.*
- *SafeWork NSW Code of Practice: How to Safely Remove Asbestos, 2019.*

4. Asbestos Materials Register

The Asbestos / Hazardous Materials Register details the location, description, status, condition, risk and control recommendations of ACM at the property located at Greenwood Plaza & 101-103 Miller Street, North Sydney NSW at the time of the inspection.

HAZARDOUS MATERIALS REGISTER															
Site Details				Building Details								Audit Details			
Full Address: 36 Blue Street and 101-103 Miller Street, North Sydney NSW 2060				Building Name: Greenwood Plaza		Number of Levels: 3		Survey Date: 08-04-2019							
Property ID: 004				Est. Building Size: 4000m²		Est. Building Age: 1991		Inspected By: Anthony Gordon							
Client Name: Mirvac Asset Management				Roof Type: Concrete		Construction Type: Brick and Concrete		Company: Greencap							
Location - Item Description	Hazard Type	Sample No.	Item Status	Photo No.	Est. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Reinspect Date	Control Priority	Control Recommendation	Record Of Works Undertaken	
Greenwood Plaza - Interior & Exterior - All Levels															
All areas - Throughout	None														
No Lead Paint or PCB's suspected due to the building being a post circa 1990 construction.															
Greenwood Plaza - Interior - Level One															
Centre Management Kitchen - Above sink	SMF		Presumed Positive	J160624-004-P foto060	1 Unltd	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.		
Hot Water Heater - Insulation Material															
Centre Management Offices - Ceiling	SMF		Positive	J160624-004-P foto066	250 m²	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.		
Ceiling Tiles - Compressed Ceiling Tiles				J160624-004-P foto067											
				J160624-004-P foto068											
				J160624-004-P foto069											
Centre Management Offices - Ceiling Space	SMF		Presumed Positive	J160624-004-P foto071	4 Unltd	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.		
Flexible Ductwork Insulation - Insulation Material															
Meter Cupboards - Wall	None			J160624-004-P foto068											
Electrical Distribution Board - Compressed Bituminous Electrical Panel - Non Suspect															
Storage Areas - Ceiling	SMF		Presumed Positive	J160624-004-P foto053	2 Unltd	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.		
Ductwork Insulation - Insulation Material															
Walkways - Ceiling	SMF		Presumed Positive	J160624-004-P foto052	2 Unltd	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.		
Ductwork Insulation - Insulation Material															
Greenwood Plaza - Interior - Level Seven															
Lift Motor Room - Wall	Asbestos	Not Sampled	Presumed Positive	J160624-004-P foto059	1 Unltd	Good	Non Friable	Low	Low	Suspect	26/03/2024	P4	Confirm status, maintain in current condition and incorporate into a HMMP. Remove by licensed asbestos contractor prior to demolition or refurbishment.		
Electrical Distribution Board - Internal Components															
HAZARDOUS MATERIAL RISK ASSESSMENT															
GREENWOOD PLAZA AND 101-103 MILLER STREET, NORTH SYDNEY NSW 2060															
08-04-2019 C107721-J160624-004-V1															
© 2019 GREENCAP															
PAGE 8 OF 44															

4.1 Asbestos/Hazardous Materials Register - How to use:

Review the asbestos materials register to confirm where asbestos items have been identified and their current condition. A control recommendation is made for each ACM. The page immediately prior to the Register details how to use the report (see p7 of the Hazardous Materials Risk Assessment report).

This register must be made available to contractors, visitors and trades people that visit the site to conduct work BEFORE they start any works.

Refer to Hazardous Materials Risk Assessment report for the site (Greencap Ref: C107721:J160624:004:V1, April 2019).

5. Requirements

The following tasks **MUST** be undertaken to meet legislative requirements for asbestos management:

5.1 Site Controllers/Management Plan Controller

- Keep a current copy of the Asbestos Register on site.
- Ensure all contractors working at the site have read the site's Asbestos Register.
- Re-inspect all identified asbestos items to determine if condition status has changed (Minimum every 5 years or when materials have been removed/disturbed).
- Maintain ACMs as per the control recommendations shown on the register.
- Carry out an asbestos refurbishment / demolition risk assessment if refurbishment or demolition works are planned.
- Inform occupants when asbestos removal works occur.
- Engage an appropriately licensed asbestos contractor to conduct asbestos removal works prior to renovations that may impact on the material.

5.1.1 Labelling

- Confirmed/suspected ACMs should be labelled to warn people not to damage the material. It is noted some asbestos materials have been labelled on site.



Example label that could be used on ACM that is not labelled on site

5.1.2 Priority Remediation Works

- Review the recommendations provided against each item in the Asbestos Register.
 - Items with a **P1** or **P2** Priority Action Rating require attention within the next 3-6 months. Any works on these items should be conducted by a Licensed Asbestos Removal Contractor (refer to Section 7 for further details).
 - Items with a P3 or P4 Priority Action Rating need to be maintained in good condition.

It is noted that at the time of preparing this Management Plan the following P1/P2 items were present at Greenwood Plaza & 101-103 Miller Street, North Sydney NSW:

- Nil

5.1.3 *Record Keeping*

- Maintain records of any maintenance or service work conducted on asbestos materials, including any clearance certificates for removed items.

5.1.4 *Training*

- Site personnel that may come into contact with ACM should be provided with Asbestos Awareness training to inform them how to work safely alongside asbestos materials by instructing them of the health risks associated with asbestos, their roles and responsibilities and procedures to minimise the risks from asbestos.

5.2 *Site Occupants*

- Site Occupants must notify the Site Controller/Management Plan Controller of any proposed refurbishment, demolition or maintenance works that are likely to involve the disturbance or removal of confirmed/suspected ACM.
- Site Occupants must notify the Site Controller/Management Plan Controller if ACMs are in poor condition or if there are suspected ACMs encountered not identified in the register.

5.3 *Site Contractors*

- Contractors must read and understand the Asbestos Register and Asbestos Management Plan prior to undertaking works on site.
- Contractors must supply a Safe Work Method Statement (SWMS) prior to conducting any maintenance works on/near ACMs.
- Contractors must ensure proper safety procedures are followed and works are conducted in accordance with all relevant legislative requirements and best industry practice.
- Contractors must notify the Site Controller/Management Plan Controller if ACMs are in poor condition or if there are suspected asbestos materials encountered not identified in the register.

6. Managing ACMs identified on site

A range of measures are available for the control of asbestos risks. The selection of the appropriate control measures are based on the assessed risk for each specific location (noted in the asbestos register).

These measures include:

- Leave and maintain in existing condition.
- Repair and maintain in good condition.
- Encapsulation using adhesive, mastic or providing a barrier such as a box enclosure or steel cladding.
- Removal by approved methods under controlled conditions.
- Labelling of asbestos materials that are to remain in situ to ensure that the materials are not damaged inadvertently by maintenance contractors etc.

7. Refurbishment / Demolition Works

7.1 General

The existing Asbestos Register is designed to satisfy legislative requirements for workplaces and is not suitable to be used for demolition or refurbishment purposes. Asbestos materials, which may be concealed within inaccessible areas/voids may not have been located during previous non-invasive investigations.

As per Clause 452 of the NSW *WHS Regulation, 2017* if demolition or refurbishment works are likely to take place, a more intrusive / *Destructive Survey* is required in accordance with the requirements of Australian Standard *AS 2601: The Demolition of Structures*.

7.2 Asbestos Removal Works

If asbestos materials are likely to be disturbed or require removal as part of demolition or refurbishment works, removal works must be conducted in accordance with the *Code of Practice: How to Safely Remove Asbestos* (SafeWork Australia, 2016).

7.2.1 Licensed Asbestos Removal Contractor (LARC)

There are specific laws that require asbestos materials to be removed or remediated by an appropriately Licensed Asbestos Removal Contractor:

- Friable asbestos material work must be undertaken by Contractors that hold a Class A asbestos removal license. All friable asbestos works must include asbestos fibre air monitoring and the use of a licensed asbestos assessor (refer to below for more information).
- Non-friable asbestos material work over 10m² must be undertaken by Contractors that hold a Class B (or Class A) license. Even for works involving materials under 10m², it is recommended that a licensed asbestos removal contractor be engaged in line with industry best practice.

The asbestos removal contractor must prepare an Asbestos Removal Control Plan, detailing the proposed work methodologies to be used to safely and effectively remove, enclose or encapsulate the ACMs. SafeWork NSW must be notified at least 5 days prior to planned works.

7.3 Visual Clearance Inspections

An independent asbestos / occupational hygiene consultant must inspect the removal/remedial works and issue a Clearance Certificate for each work area. This verifies that the works have been undertaken safely and completely. A licensed asbestos assessor must conduct these works for friable remedial works.

7.4 Asbestos Fibre Air Monitoring

Asbestos fibre air monitoring must be conducted during all works involving friable asbestos materials. The Site Controller/Management Plan Controller may also require asbestos fibre air monitoring during the removal of, or work on, non-friable asbestos products such as asbestos cement sheeting and vinyl floor tiles. The requirements for air monitoring must be established prior to commencement of works.

All asbestos fibre air monitoring must be conducted in accordance with the *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres* [NOHSC: 3003 (2005)] and analysed by a NATA accredited laboratory. A licensed asbestos assessor must conduct these works for friable remedial works.

8. Types of Asbestos Material

ACM can be classified into two main groups, Friable and Non-Friable.

Friable ACM are materials that can be crumbled, pulverised or reduced to powder by hand pressure when dry. These materials are considered higher risk as they are more readily damaged, thereby possibly releasing airborne fibres.

The following Friable ACMs were identified/suspected on site:

Type of Friable Material	Location
Nil	-

Non-friable ACM are often referred to as 'bonded', where asbestos is bound in a matrix such as Portland cement (e.g. fibre cement sheeting) or various resin/binders (e.g. Mastic). These materials are considered lower risk, unless they are in a damaged state or are mechanically abraded such as in drilling or grinding the material.

The following Non-friable ACM were identified/suspected to be present on site:

Type of Non-friable Material	Location
Fibre cement	Greenwood Plaza, Level 7, Plant Room & Switch Room – Ceiling & Infill Panels Greenwood Plaza, Roof Level – Fascia & Gable Ends Soffit
Electrical Backing Board	Greenwood Plaza, Level 7, Lift Motor Room 101 Miller Street, Ground Level, Sprinkler Valve Room 101 Miller Street, Basement Level, Security Office 101 Miller Street, Level 8, DCC Plant Room & Lift Motor Room
Gaskets	101 Miller Street, Level 8, Chiller Room

Suspected materials should be confirmed prior to works that may impact on them.

Further information on asbestos materials identified on site are outlined on the following pages.

8.1 Non-Friable Materials

8.1.1 Fibre Cement Sheeting

Asbestos cement (AC) products were the most common type of asbestos containing material utilised throughout Australia up until the mid-1980's. Typical products included corrugated roofing, flat sheeting for use on walls, eaves and ceilings. Moulded products such as guttering, down pipes, toilet cisterns and telephone pits were also common. Thicker compressed cement sheeting was often used as flooring and as stall dividers in bathrooms. These AC products typically contain between 5–15% of asbestos by weight, with chrysotile asbestos the main type of asbestos present (however can contain all three main commercial types of asbestos).

AC products are comprised of Portland cement, sand, binders and various combinations of both asbestos and non-asbestos fibres. The asbestos is tightly bound or encapsulated within the cement matrix of the products. In general, the asbestos fibres cannot be released to become airborne in significant quantities unless the cement matrix is disturbed or disrupted as in the case of mechanically abrading AC products with power saws, sanders, drills etc.

The situation is complicated by the weathering that occurs in these products when they are exposed to the elements. The surface of the AC products exposed to the weather will be degraded over time. This occurs very slowly and is usually associated with the growth of lichen on the surface of the products.

Find below example photos of the asbestos containing fibre cement products identified on site:



Greenwood Plaza, Level 7, Switch Room – Infill Panels fibre cement suspected to contain asbestos



Greenwood Plaza, Roof Level – Fascia fibre cement suspected to contain asbestos

The asbestos containing fibre cement products identified on site were in a stable condition and do not represent an increased health risk in their current condition and location.

8.1.2 *Asbestos Electrical Bituminous Backing boards*

Electrical backing boards in older switchboards and electrical cupboards installed before the mid 1980's often contain asbestos in the form of bundled Chrysotile (white asbestos) fibres in compressed bitumen. These boards are commonly found as a mounting for electrical meters or as a hinged panel mounting for fuses and switchgear and may be sometimes labelled as Zelemite, Lebah or Ausbestos and are mostly black in colour.

This form of asbestos product is considered non-friable, and the release of fibres is highly unlikely unless the matrix is disturbed say by cutting or drilling with power tools etc.

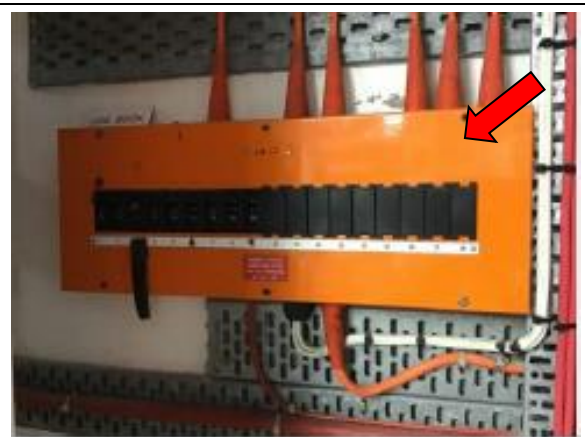
The NSW Electrical Industry Asbestos Awareness Committee (EIACC) in conjunction with SafeWork NSW have produced a number of guidelines for identifying and working on electrical meter panels/backing boards. Guidelines for working on such materials are documented in the SafeWork NSW *Code of Practice: How to Manage and Control Asbestos in the Workplace*, 2019, Appendix G: Safe Work Practice 5, and are available from the SafeWork NSW website (www.safework.nsw.gov.au).

As with all contractors working on site, it is recommended that electricians attending site be made aware of the presence of the backing board.

See below photos of asbestos-containing electrical backing boards identified on-site:



Greenwood Plaza, Level 7, Lift Motor Room – electrical backing board suspected to contain asbestos



101 Miller Street, Ground Level, Sprinkler Valve Room – electrical backing board suspected to contain asbestos

The electrical backing boards identified on site do not represent an increased health risk in their current condition and location.

8.1.3 Asbestos Gaskets

Asbestos was a common constituent used to make gaskets for commercial and industrial settings. Asbestos fibres were mixed with a binding material and compressed to form a sheet, which was then cut into various shapes and sizes to form gaskets and heat seals.

Asbestos gaskets were commonly used on pipes and boilers and in between joints in ships, vehicles, planes and operating plant. When used in between pipe joints as a gasket the contents of the pipe are prevented from leaking out. Asbestos was commonly used as a component of this product because it provided resistance to high temperatures, as well as durability and flexibility.

Gaskets were one of the last materials in Australia that used asbestos as a constituent. Buildings constructed up until 2004 may contain asbestos gaskets in plant such as generators, compressors, boilers and valves. Imported equipment after this date may still contain asbestos in gaskets, as shown by some cars being imported from China in recent years.

Gaskets are generally considered a non-friable product, however they can degrade over time or be affected by heat/corrosion and become more friable.

See below photographs of the asbestos gaskets identified on site:



101 Miller Street, Level 8, Chiller Room – pipework gaskets throughout confirmed to contain asbestos

These materials should be replaced with non-asbestos alternatives during regular maintenance if they would be impacted upon. In most cases it is considered safe to leave them in-situ and remove them when decommissioning the item of plant.

9. Emergency Procedure - Accidental Asbestos Disturbance

As there are some asbestos containing materials on site, from time to time there may be disturbances of these materials. Typically disturbances occur by:

- Maintenance activities – e.g. replacing duct work with asbestos mastic, drilling holes through asbestos cored fire doors
- Accidental disturbances – e.g. reversing trucks into an awning or wall, forklifts moving product damages a wall
- Natural causes – e.g. hailstorm damaging asbestos cement roof, falling tree onto a gutter, heavy rains dislodging buried asbestos cement fragments or general degradation of installed asbestos.

Based on an assessment of Greenwood Plaza & 101-103 Miller Street, North Sydney NSW the most likely disturbance scenarios are likely to be (but not limited to):

- Maintenance activities – contractors undertaking maintenance activities and disturbing asbestos materials (e.g. electricians working on electrical boards, mechanical services contractors working on chiller pipework).

For all issues with regards to damaged/suspected asbestos materials on site, please call the Senior Facility Manager for the site, Trent Middleton.

Trent Middleton Contact Details
Mob: 0466 518 372



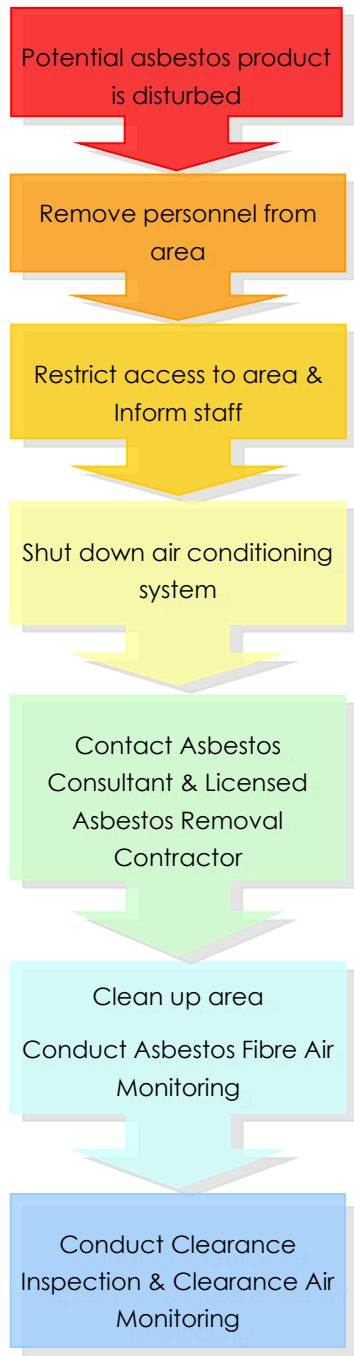
The site Facility Manager has the contacts and experience to arrange testing of suspect materials, temporary isolation of materials and organise asbestos removals/clean-ups as required.

The procedure for dealing with accidental disturbance of asbestos materials is outlined on the following page.

Asbestos & Hazardous Materials Management Plan

Greenwood Plaza & 101-103 Miller Street, North Sydney NSW

In the event that an activity causes the accidental disturbance of asbestos materials (i.e. an unplanned disturbance), the following steps should be carried out:



Step	Who	Steps/Notes
1	Site Controller/ Management Plan Controller	Remove personnel from areas considered to be at risk in relation to asbestos exposure. Go to Step 2
2	Site Controller/ Management Plan Controller	Access to the area should be controlled and sign posted to prevent unauthorised persons entering the affected area. Inform appropriate personnel. Go to Step 3
3	Site Controller/ Management Plan Controller	Any air conditioning systems should be shut-off / temporarily modified to prevent the distribution of fibres from the area to other areas in the building (if relevant). Go to Step 4
4	Site Controller/ Management Plan Controller, Asbestos Consultant & Licensed Asbestos Removal Contractor	Contact an <u>Asbestos Consultant</u> to confirm the presence of ACMs and to advise on appropriate control strategies. Following advice from the Asbestos Consultant, engage a <u>Licensed Asbestos Removal Contractor</u> to undertake asbestos clean up works. - Friable ACM – Class A contractor required - Non Friable ACM – Class A/B contractor required Go to Step 5
5	Asbestos Consultant	Asbestos fibre air monitoring may be required outside the area of the asbestos contamination whilst clean-up works are being conducted to monitor airborne asbestos fibre concentrations (where applicable). Go to Step 6
6	Asbestos Consultant & Site Controller/ Management Plan Controller	Clearance inspection undertaken by asbestos consultant to verify removal works have been completed to standard. Only when air monitoring results are <0.01 fibres/ml and a clearance certificate has been issued, shall personnel be allowed to reoccupy the affected area.

10. Synthetic Mineral Fibres (SMF)

Synthetic mineral fibre (SMF) is a generic term used to collectively describe a number of amorphous (non-crystalline) fibrous materials, commonly referred to as “Man Made Mineral Fibres” (MMMMF).

10.1 Types of Synthetic Mineral Fibre Materials

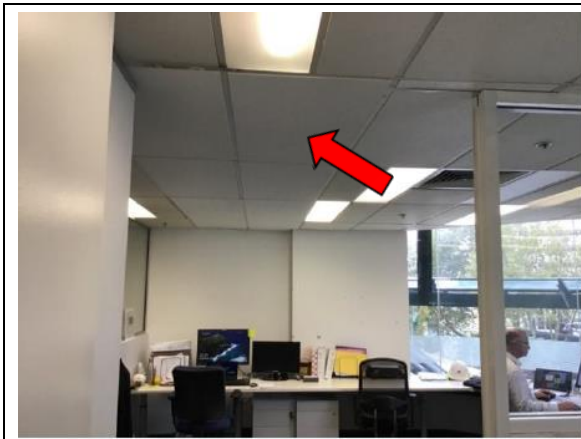
SMF materials include fibreglass, rockwool and ceramic fibre based products. These products are used in a number of areas throughout buildings. These materials are generally used as insulation within ceilings and walls, as well as heating hot water pipework and associated mechanical equipment.

SMF materials are classified as bonded and unbonded materials.

Unbonded SMF material includes loose fill fibreglass or rockwool dry wall or ceiling insulation, and sprayed rockwool to structural steel and acoustic finishes etc.

Bonded SMF insulation materials include sectional fibreglass and rockwool pipe insulation; ceiling batts, duct blankets (lined and unlined with mesh/foil), dry wall batts insulation and acoustic mineral fibre ceiling tiles etc.

See below photographs of the SMF materials identified on site:



Example of bonded SMF material – compressed SMF ceiling tiles throughout office areas



Throughout Building – SMF insulation to pipework



Plant Rooms – SMF insulation to ceiling (behind sarking)



Example of SMF internal insulation in hot water heaters on site

The SMF material identified on site does not represent an increased risk in their current position and condition.

The provision of engineering controls, greater attention to plant cleanliness, in particular within plant rooms and air handling units, and the containment of waste material will help achieve the lowest workable exposure levels of SMF. Additionally, the use of binders or work practices which reduce the liberation of fibres and the provision of appropriate personal protective equipment can help reduce Synthetic Mineral Fibre levels to personnel and the environment.

10.2 Management of Synthetic Mineral Fibre

In all cases, it is essential that SMF materials be handled appropriately to control dust and debris, as they are irritating to the skin and mucous membranes. SMF fibres are generally thick and will scratch and puncture the skin causing rashes and irritation to the skin, nose and eye if exposed to high levels of dust and debris.

Protective eyewear therefore should be worn if handling SMF materials above the head, i.e. entering ceiling cavities.

10.3 Handling and Disposal of SMF Materials

Caution is required when handling SMF products in order to minimise airborne SMF fibre levels. It is recommended that the following code of practice be closely adhered to when handling such materials:

National Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)]

Essentially, SMF materials should be handled in such a way as to minimise dust and disturbance of the materials. Where SMF materials are installed or removed, then suitable controls and appropriate personal protection are to be provided. Consultation should be sought with regard to appropriate procedures prior to the handling of such materials.

11. Polychlorinated BiPhenyls (PCBs)

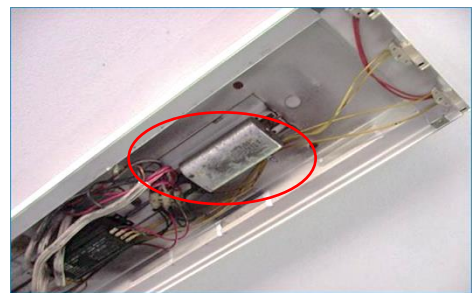
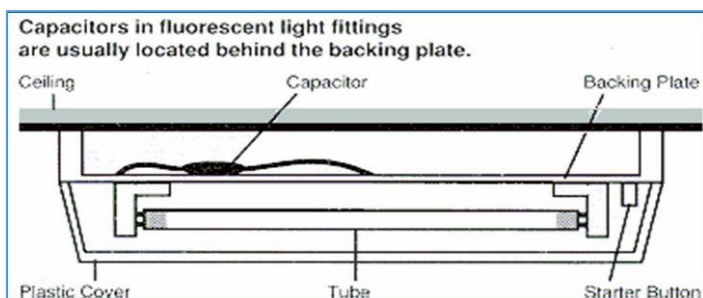
Polychlorinated Biphenyls (PCBs) are a group of chlorinated organic compounds. PCBs are very stable chemicals with good insulating properties that resist change over time. It is these properties that led to the commercial usefulness as dielectric fluids in transformers and capacitors.

PCBs vary in appearance depending on the level of chlorination, ranging from a clear or yellowish viscous liquid to a sticky hard resin. They are fire resistant and very good insulators. *Identification of PCB-Containing Capacitors – Australian & New Zealand Environment and Conservation Council (ANZECC), 1997* is used as a reference for identification of PCB-containing capacitors.

PCBs are amongst a broader group of harmful persistent organic pollutants (POPs) that are toxic, persist in the environment and animals, bioaccumulate through the food chain and pose a risk of causing adverse effects to human health and the environment.

11.1 Main uses of PCBs

The major use of PCBs has been as an insulating fluid inside transformers and capacitors. These transformers and capacitors range in size but generally are encased within a cylindrical or rectangular metal casing. PCBs will generally only be found in capacitors made before the late 1970's.



Metallised capacitor behind fluorescent tubes & backing plate

Importation of PCBs in Australia was banned in 1976. However, they are still present extensively in transformers and capacitors in electrical equipment manufactured prior to this date.

11.2 Summary of Findings

No PCB containing capacitors associated with the light fittings and electrical equipment (eg; lift controller cabinets) were identified during the Hazardous Materials Survey undertaken by Greencap in 2019.

PCBs have also been used as coolants and lubricants in hydraulic fluids, additives in paint, carbonless copy paper, plasticisers and dye carriers.

11.3 Management of PCB Materials

The management of PCBs is outlined in the policy document issued by ANZECC *Polychlorinated Biphenyls Management Plan, revised April 2003*. This plan sets out timelines for the eventual phase out and replacement of PCBs within workplaces in Australia.

The Environmental Protection Authority has deemed Polychlorinated Biphenyls to be a prescribed waste. Proper procedures must be undertaken when disposing of items containing PCBs. Registered waste disposal companies are licensed to dispose of PCB material.

Not all materials containing PCBs are required to be removed. The management strategy depends on the priority of the area in which the material is located and the classification of the PCB containing material. The PCB concentration classifies a material as one of the following:

- PCB Free – materials and wastes are defined for the purposes of the PCB Management Plan as those materials or wastes containing PCBs at concentrations of 2 mg/kg or less.
- Scheduled PCB materials and wastes containing PCBs at levels greater than or equal to either 50mg/kg or 50g.
- Non-Scheduled PCB materials or waste containing PCBs at concentration levels between those defined above.
- Small equipment items likely to contain PCB material found in households and commercial buildings.

In accordance with the ANZECC PCB Management Plan (2003), PCBs in light fittings on site should be removed and disposed at the end of their life time or when major refurbishment works are being conducted in the area where the items are located.

12. Lead Paint

12.1 Background Information

In December 2017, Standards Australia has adopted a significantly lower lead content limit from 1% to 0.1% for the definition of lead paint.

Lead paint, as defined by the Australian/New Zealand Standard AS/NZS 4361.2: 2017 *Guide to hazardous paint management; Part 2: Lead paint in residential, public and commercial buildings* is "a paint film that contains greater than 0.1% lead by mass in the dry film."

Paint with lead pigment was manufactured up until the late 1960's, and in 1969 the National Health and Medical Research Council's Uniform Paint Standard was amended to restrict lead content in domestic paint. Paint manufactured for non-industrial use since 1970's contain less than 1% lead. However, it is possible that industrial paints containing a higher lead concentration may have been applied to residential, public and commercial buildings.

Since 1997, paints have been manufactured with less than 0.1% lead by mass and this limit has been adopted by Standards Australia for the definition of lead-containing paint.

12.2 Summary of Findings

No suspected lead containing paint was identified during the Hazardous Materials Survey. However, as the building was constructed prior to 1997 there is a chance that there may be present in older layers of paint on site and further investigation may be required.

12.3 Management of Lead Paint

The options available for the management of lead painted surfaces include:

- Report and Document;
- Stabilise the paint;
- Carrying out lead paint & lead dust abatement (removal); &
- A combination of these options.

12.3.1 Report and Document

This is only appropriate for painted surfaces that are generally inaccessible and are in sound condition and will not be disturbed during any refurbishments of the site. The presence of lead paint, even under existing non-lead painted surfaces should be documented and recorded and regular inspection conducted for evidence of deterioration.

12.3.2 Lead Paint Stabilisation

The easiest option in dealing with lead painted surfaces is to over-paint using a lead free paint. This can only be done effectively where the existing lead paint is in good condition and does not require extensive preparation for re-painting.

12.3.3 *Lead Paint Removal*

In the event that some surfaces are in poor condition and over-painting is not appropriate, the lead paint will need to be removed. Any lead paint & lead dust removal must be carried out with the appropriate guidelines for lead risk work. Lead processes involving such activities with lead paint will require:

- Enclosure to prevent escape of lead bearing dusts;
- Adequate signage around work area;
- Appropriate personal protective equipment;
- Personal hygiene – no smoking, washing of hands prior to eating etc.;
- Removal of lead paint via wet sanding or chemical stripping;
- Vacuuming of all surfaces (with a HEPA filter fitted) within and including the enclosure to remove all remaining traces of lead paint;
- Decontamination;
- Clearance testing via surface soil or dust sampling; &
- Medical surveillance of lead workers (Blood tests).

For all Lead Risk Work, the engaged contractor will have to notify the regulator 7 days prior to start of works. Any work processes involving lead paint must be undertaken in a manner to ensure that no worker is exposed to lead at concentrations above the Occupational Exposure Standard (OES) of 0.15mg/m³ over an eight-hour day. Furthermore the levels should not exceed 0.03mg/m³ at the boundary of the regulated area, i.e. boundary of area surrounding a lead paint worksite where it can be reasonably expected not to exceed the OES.

In a lead abatement operation, it is recommended that a certified lead abatement contractor be engaged.

13. Action Plan

Based upon the results of the Asbestos and Hazardous Material Survey Report, the following is a summarised Work / Action Plan for managing the asbestos and hazardous materials on site:

High Priority Action Required	Material	Condition	Due for Completion	Date Complete
Nil				

Medium Priority Action Required	Material	Condition	Due for Completion	Date Complete
Nil				

Low Priority Action Required	Material	Condition	Due for Completion	Date Complete
Label asbestos materials	Asbestos materials that are not currently labelled	-	April 2021	
Re-Inspection of ACM	All ACM	-	April 2024 or post asbestos removal works	
Update Asbestos Register	All ACM	-	April 2024 or post asbestos removal works	
Update Asbestos Management Plan	All ACM	-	April 2024 or post asbestos removal works	
Intrusive Asbestos/ Hazardous Materials Assessment	All ACM	-	Prior refurbishment	

14. Useful Contacts

Contact Name	Role	Contact Details
SafeWork NSW	Regulators	92-100 Donnison Street Gosford NSW 2250 Ph: 13 10 50 www.safework.nsw.gov.au/
North Sydney Council	Local Consent Authority	200 Miller Street North Sydney, NSW 2060 Ph: 02 9936 8100 www.northsydney.nsw.gov.au/
RiskTech Compliance Attn: David Bembrick (Senior Consultant)	Asbestos Consultants	Level 5, 3 Rider Boulevard Rhodes NSW 2138 Ph: 02 8745 2003; 0419 715 441 www.risktech.com.au

14.1 List of Asbestos Removal Contractors

A selection of Class A contractors are listed below – these companies can remove friable and non-friable asbestos. They are listed in alphabetical order.

Contractor	Contact	Contact Details
GBAR Australia Asbestos Removals	Michael Coric (State Manager) Mob: 0416 729 634	8/110 Bourke Road Alexandria NSW 2015 Ph: 02 9319 3787 clint@gbar.net.au www.asbestosremovals.net.au
Pure Contracting	Colm Burke (Project Manager) Mob: 0422 022 440	4/31-33 Nyrang Street Lidcombe NSW 2141 Ph: 02 8016 2400 colm.burke@purecontracting.com.au www.purecontracting.com.au
Ross Mitchell & Associates	Stephen Hickey (Project Manager) Mob: 0411 674 120	Unit 27, 6 -20 Braidwood Street South Strathfield NSW 2136 Ph: 1300 798 808 stephen@rossmitchell.com.au www.rossmitchell.com.au

14.2 Asbestos Waste Disposal

Airborne asbestos is a health hazard. Illegal dumping of asbestos may lead to increased exposure of individuals to asbestos fibres. Waste transporters are required to report the movement of more than 100 kilograms of asbestos waste or more than 10 m² of asbestos sheeting within NSW. WasteLocate has been developed in consultation with industry to facilitate compliance with the new requirements.

To ensure asbestos waste ends up in the right place, new monitoring requirements are now in force.

Asbestos transporters and facilities receiving asbestos waste must report the movement of this waste to the EPA. To help industry meet their legal obligations the EPA has developed an easy to use online tool, WasteLocate. If you are involved with the transport or disposal of asbestos waste in NSW, or arranging the transport of asbestos waste in NSW, you need to register for WasteLocate.

WasteLocate web page:

www.wastelocate.epa.nsw.gov.au/register

14.2.1 Waste disposal sites

The following Sydney Metropolitan waste disposal sites accept asbestos waste:

Suburb	Address	Phone
Blaxland	Blaxland Waste Management Facility Attunga Road, Blaxland (Note: Waste generated in local government only)	02 4780 5000
Eastern Creek	Genesis Xero Waste – Landfill and Recycling Honeycomb Drive, Eastern Creek (off Wonderland Drive) NSW 2774	02 9832 3333
Horsley Park	Horsley Park Waste Management Facility 716-56 Wallgrove Road, Horsley Park NSW 2175	02 9620 1944
Kemps Creek	Elizabeth Drive Landfill Kemps Creek 1725 Elizabeth Drive, Kemps Creek NSW 2178	1300 651 116
Lucas Heights	Lucas Heights Waste Management Centre New Illawarra Road, Lucas Heights NSW 2234	1300 651 116
Spring Farm	Jacks Gully Waste and Recycling Centre 275 Richardson Road, Spring Farm NSW 2750	1300 651 116
Terrey Hills	Kimbriki Recycling and Waste Disposal Centre Kimbriki Road, Terrey Hills NSW 2234	02 9486 3512
Wetherill Park	Wetherill Park Resource Recovery Facility 20 Davis Road, Wetherill Park NSW 2164	1300 651 116

Up to date as per NSW EPA, Dec 2020

15. Further Information

The following are government information pages with lots of practical guides and information on Asbestos:

SafeWork NSW Asbestos Information page:

www.safework.nsw.gov.au/health-and-safety/safety-topics-a-z/asbestos

Australian Government Asbestos Safety and Eradication Agency

www.asbestossafety.gov.au/

Asbestos Education Committee

www.asbestosawareness.com.au

North Sydney Council Asbestos Information

[www.northsydney.nsw.gov.au/Waste Environment/Environmental Protection/General Information/Asbestos](http://www.northsydney.nsw.gov.au/Waste_Environment/Environmental_Protection/General_Information/Asbestos)

16. Records Section

It is recommended that the following information be filed in this Section:

- Records of re-inspections and review of the Asbestos / Hazardous Materials Management Plan;
- Reports of asbestos/hazardous materials removal and clean-up works;
- Clearance certification and air monitoring reports;
- Reports of inspections by an asbestos materials consultant/hygienist;
- Reports of accidental damage and clean-up procedures;
- Details of licensed asbestos materials removal contractors;
- Details of staff and tenant briefings/training;
- Details of contractor inductions;
- Asbestos/hazardous materials scope of works, work outlines, procedures and specifications; &
- Waste Disposal Dockets resulting from Asbestos Removal Works.